CONSUMER INFORMATION RESPONSIBILITIES OF THE FEDERAL GOVERNMENT

68060789

1732

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON GOVERNMENT OPERATIONS HOUSE OF REPRESENTATIVES

NINETIETH CONGRESS

SECOND SESSION

JUNE 27, 28, AND JULY 25, 1967

Printed for the use of the Committee on Government Operations

GOVERNMENT DEPOSITORY

PROPERTY OF RUTGERS, THE STATE UNIVERSITY

COLLEGE OF SOUTH JERSEY LIBRARY
CAMDEN, N. J. 08102

MAR 271968



GOV. DOC

674/7

452812

U.S. GOVERNMENT PRINTING OFFICE WASHINGTON: 1968

88-533

COMMITTEE ON GOVERNMENT OPERATIONS

WILLIAM L. DAWSON, Illinois, Chairman

CHET HOLLFIELD, California JACK BROOKS, Texas L. H. FOUNTAIN, North Carolina PORTER HARDY, Jr., Virginia JOHN A. BLATNIK, Minnesota ROBERT E. JONES, Alabama EDWARD A. GARMATZ, Maryland JOHN E. MOSS, California DANTE B. FASCELL, Florida HENRY S. REUSS, Wisconsin JOHN S. MONAGAN, Connecticut TORBERT H. MACDONALD, Massachusetts WILLIAM O. COWGER, Kentucky J. EDWARD ROUSH, Indiana WILLIAM S. MOORHEAD, Pennsylvania CORNELIUS E. GALLAGHER, New Jersey WILLIAM J. RANDALL, Missouri BENJAMIN S. ROSENTHAL, New York JIM WRIGHT, Texas FERNAND J. ST GERMAIN, Rhode Island

FLORENCE P. DWYER, New Jersey OGDEN R. REID, New York FRANK HORTON, New York DONALD RUMSFELD, Illinois JOHN N. ERLENBORN, Illinois JOHN W. WYDLER, New York CLARENCE J. BROWN, JR., Ohio JACK EDWARDS, Alabama GUY VANDER JAGT, Michigan JOHN T. MYERS, Indiana FLETCHER THOMPSON, Georgia MARGARET M. HECKLER, Massachusetts GILBERT GUDE, Maryland PAUL N. McCLOSKEY, Jr., California

CHRISTINE RAY DAVIS, Staff Director JAMES A. LANIGAN, General Counsel MILES Q. ROMNEY, Associate General Counsel J. P. CARLSON, Minority Counsel WILLIAM H. COPENHAVER, Minority Professional Staff THOMAS A. SMITH, Minority Professional Staff

SPECIAL STUDIES SUBCOMMITTEE

WILLIAM L. DAWSON, Illinois, Chairman

PORTER HARDY, Jr., Virginia CORNELIUS E. GALLAGHER, New Jersey JOHN T. MYERS, Indiana BENJAMIN'S. ROSENTHAL, New York

JOHN W. WYDLER, New York WILLIAM O. COWGER, Kentucky

LOUIS I. FREED, Staff Administrator JACOB N. WASSERMAN, Counsel JOHAN T. BENSON, Professional Staff

Je ar is SPECIAL INQUIRY ON CONSUMER REPRESENTATION IN THE FEDERAL GOVERNMENT BENJAMIN S. ROSENTHAL, New York, Chairman

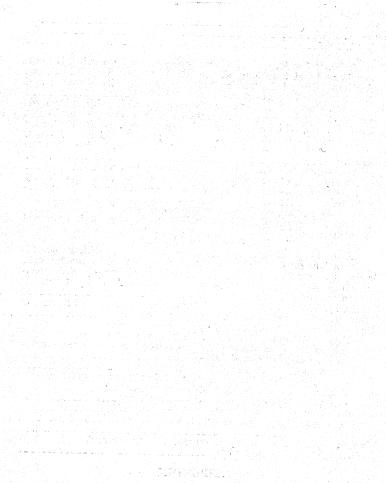
> PETER S. BARASH, Professional Staff Member in Charge I. WARREN HARRISON, Professional Staff DOLORES FEL'DOTTO, Clerk

(TT)

¹ Succeeded Hon. Robert Dole of Kansas Jan. 30, 1968.

CONTENTS

Hearings held on— June 27, 1967 June 28, 1967 July 25, 1967
June 27, 1967
June 28, 1967
July 25, 1967
Statement of— General Supply Service General
Abersfeller, Heinz A., Commissioner, Teddata by George W. Ritter, Services Administration; accompanied by George W. Ritter, and
Assistant Commissioner for Indianated Division
Charles Travis, Director, Standards Division Brady, Dr. Dorothy S., professor of economics, University of Pennsylvania (former member, President's Consumer Advisory Council) vania (former member, President's Consumer Advisory Council) Validational Bureau
vania (former member, Freshdering Standards, National Bureau
Jensen, M. W., Manager, Engineering Standards, Department of Commerce; accompanied by Allen J. of Standards, Department of Commerce; Assistant to the
of Standards, Department of Commerce, accompanies of Standards, Department of Commerce, accompanies to the Farrar, Bureau Legal Adviser; and C. N. Coates, Assistant to the
Director Congumore Union
Ross, Arthur M., Commissioner of Labor Standards, and Living Con- Arnold Chase, Assistant Commissioner for Prices and Living Con-
11/1
ditions
Abersfeller, Heinz A., Commissioner, Federal Supply Service, General
vania (former member, Hesident's Consumer
Statement of Standards National Bureau of
Statement of Jensen, M. W., Manager, Engineering Standards, National Bureau of Jensen, M. W., Manager, Engineering Standards, National Bureau of
Standards, Department of Commictor: Standards, Department of Commictor: Standards, Morris, technical director, Consumers Union: Report to Senator Warren G. Magnuson from Consumers Union Report to Senator Warren G. Magnuson from Consumers Union
Report to Senator Warren G. Magnuson Hom Combanaceptable on products tested and rates so hazardous as to be unacceptable
for the 10-year period 1956-66
at 1 Other Council on Consumer Allans, platement of
Estimated retail food prices by entires, may reverse Index Mailing list for distribution of the Consumer Price Index
The William Depresentative in Congress Iroll the Duale
of New York: Statement of
APPENDIX
Exhibit 1.—Collection of abstracts of Federal specifications for various
consumer-type products
Exhibit 2.—Qualified products list
consumer-type products
Exhibit 4.—Resilient floor coverings



CONSUMER INFORMATION RESPONSIBILITIES OF THE FEDERAL GOVERNMENT

TUESDAY, JUNE 27, 1967

House of Representatives, SPECIAL STUDIES SUBCOMMITTEE OF THE COMMITTEE ON GOVERNMENT OPERATIONS, Washington, D.C.

The subcommittee met at 10 a.m. in room 2203, Rayburn House Of-

fice Building, Hon. Benjamin S. Rosenthal presiding. Present: Representatives Benjamin S. Rosenthal, John W. Wydler,

Staff present: James A. Lanigan, general counsel, full committee; and John T. Myers. Peter Barash, legal assistant; I. Warren Harrison, legal assistant; and

William H. Copenhaver, minority counsel. Mr. ROSENTHAL. The subcommittee will come to order. This marks the first hearing during the 90th Congress of the Special Inquiry on Consumer Representation in the Federal Government of the House Committee on Government Operations. We are particularly indebted to Chairman Dawson for constituting this subcommittee and taking a lead in the area of consumer responsibility and consumer needs. The consumer inquiry, which is functioning through the Special Studies subcommittee, is charged with examining the extent to which Federal departments and agencies are carrying out their responsi-

bilities to protect the American consumer.

It is difficult to conceive of a more vital aspect of this responsibility than the dissemination of product information in the Government's possession which is of potential use to consumers. In a recent report to the President entitled "Consumer Issues '66" the Consumer Advisory Council concluded that the consumer needs much more information about products if he is to buy wisely in today's complex marketplace. It is difficult to challenge the validity of that conclusion. Moreover, this need was recognized by President Johnson in 1964 when he directed his Committee on Consumer Interests to develop as promptly as possible effective ways of reaching more homes and more families—particularly low income families—with information to help them get the most for their money. The President's committee found after extensive study that certain Federal agencies possess vast amounts of information on the performance characteristics and price stability of consumer-type products which could be of enormous benefit to the consumer, if systematically and properly disseminated.

The Federal Government, because of its considerable experience in procuring consumer-type items for Federal use and its position of leadership in the field of scientific and technological research, may

be uniquely qualified to advance the cause of consumers and the efficiency of the marketplace. It now provides consumers with useful information on a broad range of subjects including infant care, nutrition, credit guides, family food budgeting, health frauds, house planning aids, and insect control, to name but a few. But very little information is available from Federal sources which relates directly to the consumer's essential function and responsibility of purchasing safe products and getting the most for their money. We intend, therefore, to examine the nature and extent of product information now in the possession of the Federal Government, its potential usefulness to consumers, and the feasibility of having the Federal Government expand its consumer information activities to include safety, performance, and price information on consumer-type products.

We do not advocate a program whereby any Federal agency would undertake to tell the American consumer that one brand product is superior to another or what he should or should not buy. Nor are we unmindful of the fact that in purchasing consumer-type products, the Federal Government's requirements are sometimes different from those of the average consumer. We do believe, however, that the Government's needs and those of private consumers are sufficiently parallel and the consumer's role is so important to the success of our free enterprise economy, that a governmental program calling for the systematic screening and release of product information is more than

Our first witness this morning is Mr. Morris Kaplan, technical di-

rector of Consumers Union.

Mr. Wydler. Mr. Chairman, I have a short statement which I would like to put in for the record. I don't have to read it at this time. I would just like to comment on some of the possible offshoots of these hearings and I want to say I fully support them because it would be an important service to the people of the country if we could determine to what extent information presently available within the Government could be made available to the general public and to aid them in the efficient management of their income.

Of course, there are certain—and I mention these before the hearing starts because I would like some of the witnesses to think about it and possibly direct some of their testimony to it—certain serious problems arising from this. In particular, there might be some legal implications, for example, in the Government making statements available to the general public as to the safety of a particular item because if that information was made public and the item proved unsafe or someone was injured in using it, we might find we established a new form of liability for the Government.

This is something to think about. Somebody would then claim he had been misled by the Government into believing this item was safe for a particular use. These are the types of things we will have to think about when we talk about making available information that the Government has, or having the Government express an opinion.

Inevitably, it seems to me, when the Government makes information available, by the very size and stature of the Government, people are impressed by that information. For example, if there were 10 competing products and the Government issued a report about one of them and stated that it thought it was a good product it would seem to me it would give that product a tremendous market advantage and that

too indicates a tremendous and serious problem that might result from

this type of dissemination of information. Finally, it seems to me that as in all Federal matters once we start down this road of making information that is already available within the Government, making that available generally, you are going to enter into a situation in which there are going to be increasing calls not only to make more information available but to start to obtain information to make available and very possibly you could start an entire new Federal program of an information-gathering type and dissemination-type and then the question arises really how far the Government is going to go into the marketplace and make decisions for the

So with these thoughts in my mind as to some of the problems we might have as well as some of the benefits, I am looking forward to

listening to the testimony with great interest.

(Statement of Hon. John W. Wydler follows:)

STATEMENT OF HON. JOHN W. WYDLER, A REPRESENTATIVE IN CONGRESS FROM THE

The American economy is founded upon the system of free enterprise. Through this freedom of the marketplace, the Nation's economy has grown to unparalleled

For this system to work, two conditions are required. Producers must be relaheights in wealth and vitality. tively free to enter the market and to compete without undue hindrance. And, consumers must be sufficiently informed and alert to purchase the myriad of goods and services offered for sale at the lowest price and at the highest quality.

Today, there is concern that many segments of the marketplace are becoming unduly concentrated, that a few large companies—frequently of a conglomerate nature—are gaining too much control, and that entry by potential competitors is being shut off. To some extent this seems to be occurring. In fact, it has been going on for some time in some lines of industry. But, on the whole, the prospections of the second of the s tive purchaser continues to have a wide variety of products to choose from in most instances. In fact, as barriers to international trade ease, as product substitution increases, and as means of financing new businesses—especially small businesses—improve, competition may, in many respects, be on the rise.

To an increasing extent, the consumer seems to be buying blind. Increased technological innovation of products, proliferation of new, and frequently exotic products, expanded reliance upon advertising as a form of competitionthese and other factors have caused consumers to know less and less about

This breakdown in consumer information can have the effect of undermining more and more. the operation and effectiveness of the free enterprise system. If consumers are not intelligently informed or lack the means of obtaining accurate information. about products and services, they can be induced or forced by necessity to purchase items of higher price, lower quality, or of lesser utility than comparable items. If this continues over a long enough period, competition among producers is damaged and the marketplace is given over to a concentrated group of wishand-dream merchants.

In the affluent society of today, this problem is becoming increasingly acute. As individuals acquire greater disposable income, their aspirations and desires rise. With such a rise, less attention is given to conserving resources and to meeting only utilitarian needs. As a result, this heightened desire to consume causes a disregard for caution and careful buying practices. "Let the buyer beware" no longer is as meaningful a restraint on the consumers' buying habits

For those who are in a reasonably sound financial condition, the purchase of inferior or overpriced goods or services generally is not too serious. But, for those in the poverty strata of society, misguided and uninformed buying practices can have serious consequences. And, even in our affluent society, this can have serious consequences since it is estimated that between 20 and 35 million persons fall below the poverty line. Buying without knowledge can, for the poor, lead to deprivation, loss of employment, ill-health, despair, and violence.

For these many reasons, then, it seems essential that we do all we can to assist the citizen in becoming an intelligent and knowledgeable consumer.

Many private institutions, organizations, and individuals are endeavoring to properly inform consumers. But, lack of resources means that their efforts can only have limited effect. Government has also undertaken some programs to protect and inform the consumer, but so far results have been minimal. The Federal Government, in particular, with its multitude of programs affecting the consumer has done less than is necessary to help the consumer. This is especially

I do not mean or imply that the Federal Government should engage in the wholesale regulation of business. To do so would only destroy the free enterprise system that has made the Nation strong. Nor do I intend that the Federal Government should treat consumers as adolescents who must be sheltered and guarded. This can only lead to welfare statism and a loss of freedom and dignity. What I do believe is that we in the Government can do more to assist the consumer in becoming a better informed and more intelligent purchaser. And, we can do this without conferring any greater authority upon the Government or taking away any independence of action from producers.

Today, the Federal agencies engage in many activities which have been conferred upon them by Congress. Some of these activities are undertaken as a part of running the Government such as purchasing goods and services. Others are undertaken to assist or protect citizens such as establishing rates or preventing the sale of flammable products.

The problem is, however, that so many activities are engaged in, by so many different agencies, each surrounded by walls of expertise and procedure, that the consuming public receives little usable information which may be profitable for their own purchasing needs.

I, therefore, welcome these hearings in order that we might be able to determine what areas and types of information are presently being obtained by agencies of the Government which, if released in layman's language, might assist the citizen in becoming a better consumer. If the consumer can become better informed, he will be in a better position to make a wiser and freer choice in his purchases. This, to me, is the essence of our market economy.

Mr. Rosenthal. Mr. Kaplan.

STATEMENT OF MORRIS KAPLAN, TECHNICAL DIRECTOR, CONSUMERS UNION

Mr. KAPLAN. My name is Morris Kaplan. I am technical director of Consumers Union of the United States, a nonprofit membership organization, incorporated under the laws of the State of New York in 1936. We publish the monthly magazine, Consumer Reports, and have a circulation approaching one and a quarter million copies per month. Our purposes are "to provide consumers with information and counsel on consumer goods and services * * * to give information and assistance on all matters relating to the expenditure of the family income * * * and to initiate and to cooperate with individual and group efforts seeking to create and maintain decent living standards."

I am grateful to the committee for the opportunity you have offered me to present my views on the desirability of making available to the American consumer product information in the possession of the Federal Government. So that you may place these views in the proper perspective, it may help you to know that I have been technical director at Consumers Union since 1946; that before that I spent 16 years in the Federal civil service doing research for the Navy Department and administering and working in laboratories of the Bureau of Customs, Alcohol Tax Unit and happily in the "dear, dead days beyond recall," the Bureau of Prohibition. One consequence of these associations was contact with the work of a number of Government organizations, both directly and through their publications.

It would seem that 5 years after President Kennedy's consumer message to Congress, it would hardly be necessary to argue the consumer's need for information. It is true that some progress has been made to guarantee the consumer's right "to be protected against the marketing of goods hazardous to health or life." But more, much more, remains to be done. The market still has many hazardous electrical and mechanical products against which the consumer has no protection.

In connection with Senator Magnuson's investigation of this subject, we prepared a list of products which we found presented hazards.

This list will be submitted for your information.

(The list referred to follows:)

REPORT TO SENATOR WARREN G. MAGNUSON FROM CONSUMERS UNION ON PRODUCTS TESTED AND RATED SO HAZARDOUS AS TO BE UNACCEPTABLE FOR

		2 3 3 4 5 A	ED NOT ACCEPT	again a second	Other	Total
Year	Electrica	Electrical hazards		Fire	Othor)
	Electronic	Аррианоо		Security of the second	26	35
	STATE OF THE SHAPE	9	. 3		20	28
)56	3	8	8			33
)57	12	21	3	/usu		51
058	9	17	31	<u>-</u>	34	4/
959	3	- 8		8	10	34 27
960	<u>ō</u>	4	4			40
961	16		4 15		. 3	6
962	1	21	10		. 2	54
963		4	ā	7	8	21
964		14	10		. 1	
965	4	6	. 10		8/	376
966		110	103	20	-04	100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total	56	113	As .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
FLECT	Product			Hazard		February 1956.
ELECTI	Product RONIC PRODUCTS	Б.	kcessive leakage do	Hazard current		February 1956. November 1956. August 1957. September 1957
ELECTI TV sets (2) AM-FM table radio Portable phonogra	Product RONIC PRODUCTS s (2) phs (7)	E)	do			
Portable phonograp	ons (/)		do			June 1958.
Portable phonograp	ons (/)		do			June 1958.
Portable phonograf Home intercoms (1 Hobby kits (4) AM clock radio (1) AM table radios (4))	n house cur-	d0 d0 d0			June 1958. Do. July 1958.
Portable phonograf Home intercoms (1 Hobby kits (4) AM clock radio (1) AM table radios (4))	n house cur-	d0 d0 d0			June 1958. Do. July 1958. January 1959. February 1959.
Portable phonograf Home intercoms (1 Hobby kits (4) AM clock radio (1) AM table radios (4))	n house cur-	d0 d0 d0			June 1958. Do. July 1958. January 1959. February 1959. May 1961.
Portable phonograf Home intercoms (1 Hobby kits (4) AM clock radio (1) AM table radios (4))	n house cur-	d0 d0 d0			June 1958. Do. July 1958. January 1959. February 1959. May 1961.
Portable phonogral Home intercoms (1 Hobby kits (4)— AM clock radio (1) AM table radios (4 AM portable radio rent). TV set (1)————————————————————————————————————))) s (4) (when used o	n-house-cur-				June 1958. Do. July 1958. January 1959. February 1959. May 1961. August 1961. January 1962.
Portable phonogral Home intercoms (I Hobby kits (4) AM clock radio (1) AM table radios (AM) Portable radios (TV) TV set (1) Radio kits (2) Table radios, AM- Table radios, AM- Table radios, AM	ons (/)	n house cur				June 1958. Do. July 1958. January 1959. February 1959. May 1961. August 1961. January 1962. March 1962.
Portable phonogral Home intercoms (1 Hobby kits (4)	ns (/)	n house cur-				June 1958. Do. July 1958. January 1959. February 1959. May 1961. August 1961. January 1962. March 1962. Do. Luca 1962
Portable phonogral Home intercoms (I Hobby kits (4) AM clock radio (1) AM portable radios (AM portable radio rent) TV set (1) Radio kits (2) Table radios, AM. TV set (1)))s (4) (when used o	n house cur-	do			June 1958. Jon. July 1958. January 1959. February 1959. May 1961. August 1961. January 1962. March 1962. June 1962. Soutember 196
Portable phonogral Home intercoms (I Hobby kits (4) AM clock radio (1) AM portable radios (AM portable radio rent) TV set (1) Radio kits (2) Table radios, AM. TV set (1)))s (4) (when used o	n house cur-	do			June 1958. Do. July 1958. January 1959. February 1959. May 1961. August 1961. January 1962. March 1962. Do. June 1962. September 1962. October 1962.
Portable phonogral Home intercoms (I Hobby kits (4) AM clock radio (1) AM portable radios AM portable radios rent) TV set (1) Radio kits (2) Table radios, AM. TV set (1)))s (4) (when used o	n house cur-		77.20		June 1958. June 1958. July 1958. January 1959. February 1961. August 1961. January 1962. March 1962. June 1962. September 196 October 1962. November 196
Portable phonogram Home intercoms (I Hobby kits (4) AM clock radio (1) AM table radios (4 AM portable radio rent). TV set (1) Radio kits (2) Table radios, AM Table radios, AM TV set (1) Do Home intercoms (Portable phonogr	ons (7)	n house cur-				June 1958. Jo. July 1958. January 1959. February 1959. May 1961. August 1961. January 1962. March 1962. Do. June 1962. September 1960. November 1962. November 1960.
Portable phonogral Home intercoms (1 Hobby kits (4) AM clock radio (1) AM table radios (4 AM portable radios rent). TV set (1) Radio kits (2) Table radios, AM Table radios, AM Tv set (1) Do Home intercoms (1) Portable phonogratero amplifiers TV set (1)	ons (7)	n house cur-		112.0		June 1958. July 1958. January 1959. February 1959. May 1961. January 1962. March 1962. September 196 October 1962. November 196 Do. Anril 1963.
Portable phonogral Home intercoms (1 Hobby kits (4) AM clock radio (1) AM table radios (4 AM portable radios rent). TV set (1) Radio kits (2) Table radios, AM Table radios, AM Tv set (1) Do Home intercoms (1) Portable phonogratero amplifiers TV set (1)	ons (7)	n house cur-		112.0		June 1958. July 1958. January 1959. February 1959. May 1961. January 1962. March 1962. September 196 October 1962. November 196 Do. Anril 1963.
Portable phonogral Home intercoms (1 Hobby kits (4) AM clock radio (1) AM table radios (4 AM portable radio rent). TV set (1) Radio kits (2) Table radios, AM Table radios, AM Tv set (1) Do Home intercoms (Portable phonogratero amplifiers TV set (1)	ons (7)	n house cur-		112.0		June 1958. June 1958. July 1958. January 1959. February 1959. May 1961. January 1962. March 1962. Do. June 1962. September 196 October 1962. November 1962. April 1963.
Home intercoms (1 Hobby kits (4). AM clock radio (1) AM table radios (4 AM portable radio rent). TV set (1). Radio kits (2). Table radios, AM Table radios, AM Table radios, AM Tv set (1) Do Home intercoms (Portable phonogr Stereo amplifiers TV set (1)	ons (7)	n house cur-		112.0		June 1958. June 1958. July 1958. January 1959. February 1959. May 1961. January 1962. March 1962. Do. June 1962. September 196 October 1962. November 1962. April 1963.

PRODUCTS RATED NOT ACCEPTABLE—Continued ELECTRICAL HAZARD—Continued

- Charles State Line	Product	Hazard	Issue
APPLIANCES,	TOYS, AND TOOLS		
Toasters (3) Clothes dryer (1) Waffle irons (2)		실어질 많다면 많이 하는 사람들은 경기를 보세고 있다.	nichten in i
Clothes dryer (1)		Inadequate strain relief	
Waffle irons (2) Waffle iron (1)		Inadequate strain relief Long terminal pins	- May 1956.
Waffle Iron (1) Blenders (4)		Long terminal pins Work insulation Liquid entered base	- July 1957.
Blenders (4) Coffeemakers (3) Coffeemaker (1)		Worm insulation	- September 195
Correemakers (3)			► Do:
Coffeemaker (1) Frying pans (2) Frying pan (1)		Excessive leakage current	November 100
rying pans (2)		Liquid entering base Long terminal pins	- January 1958.
Frying pan (1) Toasters (7)			- Do.
loasters (7)		Excessive leakage current	- May 1958.
Toasters (7) Frying pans (2) Frying pan (1) Griddle (1)			Do.
Criddle (1)		Long terminal pins Excessive leakage current Long terminal pins	December 1958.
Griddles (1)		Excessive leakage current	. Do.
Saucenan (1)		Long terminal pins	Do.
Vanorizer (1)		Long terminal pins Excessive leakage current Long terminal pins	Do.
Griddles (2) Griddles (2) Saucepan (1) Vaporizer (1) Do Tabletop oven (1)		Long terminal pins	
Do Oven (1)		Long terminal age current	January 1959.
			Do. April 1959
Do		Excessive leakage current	Do.
Food mixers (4)		dodo	May 1959.
Coffeemaker 715		do	June 1959.
Coffeemakers (5)		do	November 1959
Sanders (2)		Long terminal pins Excessive leakage current	December 1959.
		Inadequate strain rollet	Do. 1909.
TV set (1)		Excessive leakage current Inadequate strain relief and excessive leakage current.	January 1960.
ravel iron (1)		Excessive leakage current	
Portable heaters (4)		do	March 1960. June 1960.
Portable heater (1)		do	June 1960.
Blender (1) Outdoor grilles		do	October 1960.
Dobumide		Liquid entered base	Do.
Clothes direct (1)		No grounding provision	November 1960.
Outdoor grilles Dehumidifier (1) Clothes dryers (2) Dish drier (1)		- I liadequate strain relief Liquid entered base - No grounding provision Exposed terminal.	June 1961.
Dish drier (1) Steam cooker (1) Lectric toothbrush (1) Toasters (4)			July 1961.
lectric toothbrush (1)		Liquid ontersage current	August 1961.
Coasters (4)		Excessive leaf-	September 1961. May 1962.
Toasters (4) lectric toothbrush (1) aporizers (5)		Inadequate etrale current	Do.
aporizers (5)		Excessive leakage and Teller	une 1962.
mmersible water heater	~	Excessive leakage current Liquid entered base Excessive leakage current Inadequate strain relief Excessive leakage current - do - do - do	lugust 1962.
rectric toothbrush (1)————————————————————————————————————	·/	00	anuary 1062
rollers (6)		do	ebruary 1963
roilers (5)		do	ebruary 1963. une 1963.
arage door opener (1)		Long terminal pins	uly 1963.
air dryer (1)		Pinched wire	Do.
ign-oven range (1)		Excessive leakage current	ugust 1963.
rollers (6). rollers (5). arage door opener (1). air dryer (1). gh-oven range (1). ying pans (2). umldifier (1). Do. Do. Doller (1).			ovember 1963.
ectric toy (1)	~~~~~	Excessive leakage current IV	arch 1964
undilier (T)		do	ine 1964.
Do oiler (1)		madequate strain relief	ovember 1964.
chen rango (2)		Exposed terminal	nuary 1965.
Chen ranges (4)		Exposed terminal	Do.
rtable heaters (2)		Taposed fellillial	oril 1965. ptember 1965. tober 1965.
table heater (1)		do Se Excessive leakage current Oc	breningi 1965.
nders (1)		Exposed terminal	t. 1965.
lls (3)		Excessive leakage current	Do.
iting pads (3)		Excessive leakage current Oc Exposed terminal Oc Excessive leakage current No	vember 1965.
Do oiler (1)		Pinched wire Ju Excessive leakage current Oc	v 1966
		Oc.	ober 1966.
	Rica		
	MEC	HANICAL HAZARD	
tric fans (3)			
n maura /C)		Inadequately guarded blades July High discharge Jun Rearward discharge Jun Chunks thrown out	. Auditoria
mowers, rotary (3)		High discharge July	1956.
waste disposers (2)		Rearward dischargeJun	9 1957.
mowers (5) mowers, rotary (3) waste disposers (2) ic-bag toy (1) mowers (19) mowers (6)		Chunks thrown out	Do.
mowers (19) mowers (6) mowers (4) mowers (2) attachments (4)		Exposed blade Aug	ust 1959.
mowers (6)			Do.
mowere (2)		High discharge July	1960.
ttachmente (4)		nose blode	Do.
ars (4)	L	No guard under his in a second	Do.
arser washing machines fic fan (1)	R	oose blade	Do
ic fan (1)	1)	Rigid axles Febr	uary 1961.
orush >1		nodo-u-til	h 1961.
arm sauce (2)		nadequately guarded blades May	1962.
mowor (1)	L	nadequately guarded blades	1962.
		ould be started inadvertently Augu	2391 12
nowore (E)	U		1002.
nowers (5)	<u>H</u>	igh discharge Nove	nber 1962
er washing machines ic fan (1) rorush (1) arm saws (2) mower (1) mowers (5) mowers (9)	H E)	kposed blade July 1	nber 1962

PRODUCTS RATED NOT ACCEPTABLE—Continued MECHANICAL HAZARD—Continued

	MECHANICAL HAZARD—Continued	The state of the s
	Hazard	Issue
Product		
PPLIANCES, TOYS, AND TOOL	S—Con. High discharge	June 1965.
PARIMICES, 10.01	High discharge	
awn mowers (4)	Rearwald dischargo	υυ.
awn mowers (4)awn mowers (10)	Exposed blade	νο
awn mowers (10)awn mowers (5)	Poor hangle	Movettiner 1909.
awn mowers (5)	inadvertent start	
Riender (1)	Chunks thrown out	June 1900.
ood waste disposers (3) awn mower (1)	Exposed blade	υο.
SMIL HIGHEL (T)		99.
Do	User in path of discharge	July 1966. October 1966.
Do	Top may blow oil	October 1900.
Garden sprayers (2)Seat belt retractors (2)	Frayed seat pens-1111-	
- Carlotte Control of the Control of	FIRE HAZARD	
	No thermostat	June 1960. October 1960.
Travel irons (3) Portable heaters (2)	No thermostat Failed drape test	October 1960.
Travel irons (3)	Falled drape test	
Portable fleaters (2)	Flammable	lanuary 1964.
Carnets	Flammano	January 1964. May 1964.
Paint removers (8) Masonry waterproofer	do	October 1964.
Masonry waterprooferBaby blankets	action	October 1965.
Baby blankets Regular blankets Portable heaters (7)	Failed drape test	
	OTHER HAZARDS	
and the second s		May 1956. February 1960.
Auto seat belts		October 1961.
Auto seat beits.	**************************************	August 1963.
Auto seat belts (10)		November 1963.
Auto seat belts (10) Oven cleaners (2)	Pressurized and alkaline Sharp points	November 1964.
		February 1965.
Children's sleds (1) Electric toys (2) Oven cleaner (1)	Pressurized and alkaline	August 1965.
Oven cleaner (1)		
Bubble bath	Corrosive chemical	October 1965.
Slip preventive (1)	Hot surfaces	Do. 1965
Portable heater (1)	Unsafe "safety"	November 1965
Shutoni (1)	Inadequate caution labelet	February 1900.
Chemistry Sola (7)	Silary Cyco	
Stuffed toys	Deatening	
Toy gun (1)	Poisonous	
Oven cleaner (1) Bubble bath Slip preventive (1) Portable heater (1) Shotgun (1) Chemistry sets (4) Stuffed toys Toy gun (1) Beads Beads	Hot surfaces Unsafe "safety" Inadequate caution labels Sharp "eyes"	November 1 February 19 June 1966.

Mr. Kaplan. It is also true that some advances have been made in giving the consumer "the facts he needs to make an informed choice"the Government Printing Office's Consumer Information Catalog lists some of the evidence. But it might be noted parenthetically that the progress has been uneven. In some agencies, in fact, there has been retrogression under the pressure of producer groups who feel that consumer information is not the Government's business.

The National Bureau of Standards used to be far more active in the 1930's in this area than it now is. The Home Economics Branch of the U.S. Department of Agriculture, which used to publish very helpful material on houshold appliances, clothing and textiles, and other consumer products, had its wings clipped to the stubs a few years ago. On the other hand the same Department of Agriculture now publishes a very useful newsletter called Service which contains much valuable information for consumers.

Mr. ROSENTHAL. You say they had their wings clipped. Can you tell us when and by whom or anything beyond that bald statement?

Mr. Kaplan. The appropriations were seriously cut and also the views of the then Secretary of Agriculture were that this kind of activity is unsuitable for a Government agency. I believe these views became prominent as a result of some serious criticism both from producers and Members of Congress.

Perhaps I should also add parenthetically that all of this testimony was prepared under very great pressure of time and a lot of the details weren't possible to obtain in the short time available. However, if the committee has any questions, I would be glad to try to get the details.

I think it would be useful and interesting to compare what is done in the Government now with the need and with the potential. With our burgeoning technology consumer products are becoming increasingly complex in manufacturing. Consumer products from foods and clothing consisting almost entirely of synthetic materials, to electric drills and washing machines and color television sets that use solid state components, modern-day producers are taking advantage of our electronic and space-age technology. In such a marketplace the consumer is an innocent babe in the woods. He couldn't make a rational choice to save his life or even his economic well-being. The very fact that many products last a long time and that the state of the art changes rapidly makes it impossible for him to build a body of experience to draw on when he has to make his next purchase. The consequences are not

It has been estimated by Professor Oxenfelt of Columbia University School of Business, in a paper entitled "Consumer Knowledge, Its Measurement and Extent" published in the Review of Economics and Statistics, that if consumers purchased products on the basis of objectively determined values, savings of as much as 50 percent could

Perhaps even more important is the role of an informed consumer in acting as a balance wheel to keep a free economy viable. Classical economic theory assumes an informed consumer, rewarding the producer of a better quality, or equal quality but lower priced product and

punishing his less competent competitor.

Mr. Wydler. I can't help wondering, you make quite a bit here about the complicated nature of some of the items that we have to buy today. Of course I agree with you, taking things such as TV sets, yet quite frankly I am more relaxed and at ease when purchasing a television set where I really feel at least I understand the nature of the whole problem than I would be if I had to go in and select oranges or bananas, because there I really don't know how to pick them out and I might find I am much more at a loss to know how you make a good buy or how to use your money most wisely in something as simple as that than I would in something as complicated as the things you mention, such as

I don't think it necessarily relates so much to the complexity of the

products as it does as to the experience of the buyer.

Mr. KAPLAN. Yes. The point I was trying to make is this: In the case of oranges and bananas, the housewife develops over a period of time a vast body of experience. She buys these products repeatedly and after a while a competent housewife will be able to distinguish a good banana from a bad one, a ripe one from an unripe one, one type of orange from another, one that has pits and one that doesn't, one that is juicier and one that is not as juicy.

In the case of a TV set there is a far more difficult problem. The fact of the matter is that it is possible, with all due respect to your confidence, to buy a set which is an absolute lethal hazard. I think that is

something that one ought to be greatly concerned with.

In the list of material we submitted for Senator Magnuson's committee which concerns itself with the problem of product hazards, we list a substantial number of TV sets—substantial number is an exaggeration—we list a few TV sets we found on the market that you might have bought that could have presented a lethal hazard, so if you touched some accessible part of this set inadvertently or if your child with a probing finger touched some accessible part of this set and at the same time was touching a radiator or water pipe of some sort, he could have been electrocuted. This, it seems to me is a matter of great concern.

There is no law in this country which will prohibit a producer from putting such a set on the market. There are such laws in most European countries which prohibit putting such a set on the market. In fact, the producer is required in advance to have his set tested to certify that it

is in fact safe before he is permitted to market that set.

So that in the case of the complex products where the possibility of developing a body of experience doesn't exist, the need it seems to me

Far be it from me to denigrate the importance of teaching newlyis even greater. weds how to buy a good banana and how to buy a good orange. There is much one needs to learn about this. Much of it already exists in Government publications, by the way, which are available to the

I think part of the problem this committee might want to concern itself with is how better to publicize this information, how better to get into the hands of the consumer that information which already exists. The fact that it exists in a GPO catalog is not enough reason to believe that people will read it. The other part of the problem is to put it in language and in a form which would be of interest to people.

I will proceed with the prepared testimony. Without good information about the product, the consumer gives his patronage to the wrong producer. I am now concerning myself with the problem of consumer information as an appropriate balance wheel to insure that a free market works most effectively in a competitive economy. The consumer doesn't have good information, he may reward the wrong producer, namely, the one who produces the inferior product. The reward often goes to the clever advertiser, the ingenious packager, the wily "motivational" researcher, the most seductive credit plan, and not to the most efficient producer of the best product. The consequences to our economy are waste of natural and human resources to the detriment of all.

I do not want to leave the impression that the consumer's need for

information is completely unsatisfied. Much is available.

In addition to the Federal Government information I have already mentioned, the States and even local governments have many programs to help the consumer. Your own committee's studies, published in 1961, provide the most definitive descriptions of these activities. In addition, information is available from private publications such as our own consumer reports, Changing Times, the women's and so-called shelter magazines, the specialized product magazines dealing with photography, "hi-fi" equipment, automobiles, and others. Also disseminated but somewhat more biased, is material from trade organizations like the National Electrical Manufacturers Association, American

Gas Association, and others. Advertising, whose avowed reason for being is to inform consumers about a product or service, fulfills this mission only occasionally, but rarely in a useful way for the consumer.

And the word of mouth sharing of experience, though sometimes extremely effective, also often falls into the "old wives' tale" category, and so a concerned consumer can never really know when to believe it and when not to.

In sum, it seems clear that the gap between the demand for information and the supply of it is large. Every day a new magazine joins the ranks of product information disseminators. Legislators say their mail on consumer problems is heavy and increased Government concern—manifested among other ways in hearings like this—is evident.

Many suggestions have been offered, both long term and short, for reducing the consumer's areas of ignorance about the products he

buys.

And this brings me to the heart of today's inquiry.

Many Government agencies have in their files, as a spin-off from their normal day-to-day activities, a great deal of information that would be directly useful to consumers. It is my belief that a systematic review of the activities of Government agencies for purposes of learning which of them develop information on consumer products by type and/or brand name would reveal a mine of such information which, when tapped, would prove of inestimable value in helping the consumer improve his buying effectiveness. My belief is based on the tip of this iceberg we can see even now from a cursory survey of this kind that has already been done. In Senate Report 2216, "Price of Hearing Aids—Report of the Committee on the Judiciary, 1962," appendix A contains a summary of precedents for Government product testing and publication of comparative and/or evaluatory data on various brands of a product. A portion of this material is submitted as an appendix to my testimony for your ready reference.

I won't take the time to read it here. You will note references to tests and evaluations done by one or another agency of the Federal Government on such important consumer products as hearing aids, batteries, tires, floor waxes, lamps, various building materials, washing machines, detergents, home freezers, and others. The Senate study makes clear that these are only examples. The shortness of notice of this hearing today has not allowed me to search the files at Consumers Union for additional examples they may contain. From memory, however, subject to check of detail, I can add that the Bureau of Fisheries of the U.S. Department of Agriculture does tests on frozen fish products in consumer packages, at the behest of the producer and keeps the information for the use of the producer but does not make it available to consumers even when asked to do so by Consumers Union, and that the U.S. Department of Agriculture has information on the effectiveness and toxicity of insecticides, that the Federal Drug Administration tests such important consumer products as clinical thermometers and condoms, that the laboratories of the quartermaster evaluate many consumer items of clothing and textiles, the Navy laboratories used to evaluate paints, detergents, and other consumer products and the General Services Administration and/or the National Bureau of Standards test many consumer products including tires, seat belts, brake fluids (seat belts and brake fluids have been transferred to the new Department of Transportation and I have no idea what they will do about that) auto antifreezes, batteries, and others.

Would a search of the regulatory agencies reveal information on the comparative performance of companies whose activities they regulate—information that would be of great value to prospective patrons of those companies? For example, is there information on the accident records of various transportation companies, railroad companies, air-lines, bus companies, and so forth? Do Government agencies have information on companies, by name, similar to the dossiers maintained by better business bureaus, of regular and persistent infractions of laws or regulations?

My conclusion is that there is enough evidence to show that the agencies of the Federal Government now have and are presently equipped to get vast amounts of information which, if made available in proper form, would be of untold value to consumers and to the Nation. Proper form will, of course, depend on the subject and the kind and amount of information available. My experience in advising consumers tells me that the more specific the information the more

useful it can be.

The best information describes the characteristics that the consumer needs to know for the brands and models he encounters in the marketplace, in simple enough form to make his choice easy and intelligent. And there are a number of products about which we already know the

Government has enough information to do just this.

Another form involves less specific, more general information about types or categories of products. For example, gas versus electrical appliances, AM versus FM radio, alkyd oil paint versus water-soluble paints for interior and exterior use. Much of the consumer information now disseminated by the Federal Government is of this kind. But there is much more buried in the files of various agencies who don't think in terms of making it available to consumers or who don't recognize it as useful to consumers. There is also the care, maintenance. safety-in-use kind of information, sometimes disseminated to consumers by Federal agencies, but often not.

Because the information is at hand in a public document, it is possible, and I think useful, to examine in somewhat more detail what could be done in the case of one important consumer product to help the consumer by giving him information now obtained regularly by one Government agency. I refer to hearing aids and to the Senate report

on the prices of hearing aids previously mentioned. Dr. Causey, a consultant to the Veterans' Administration, described

The Veterans' Administration issues more than 5,000 hearing aids every year. the VA testing program: In the existing program, the Veterans' Administration submits to the National Bureau of Standards all makes and models of hearing aids obtained for testing purposes. The National Bureau of Standards tests each instrument for a number of electroacoustic factors and transmits the results to the Veterans' Administration. Upon receipt, these data are subjected to statistical and comparative analysis. In the hearing-aid test program, no attempt has been made to set up specifications. Actual performance is emphasized in order that we may take advantage of the hearing aid industry's continuing research and development activities toward providing better hearing for those individuals having hearing deficiencies. Only clinically acceptable hearing aids will be considered for these tests. Clini-

cally unacceptability will be based on poor physical characteristics as related to use in a clinic situation or poor physical characteristics of an instrument as

The raw scores obtained in each test item are treated and assigned weighing related to its use by the wearer. factors determined by a group of nationally recognized audiologists and physicists serving the Veterans' Administration on a consultant basis.

Weighted scores obtained by the three hearing aids of each model are averaged for each test. The average score represents the performance of that model on each of the individual tests. The average weighted score on each of the tests are summed to give the measure of total performance achieved by the hearing aid model. This score is designated as the "quality point score."

The committee report, summarizing some of the testimony, says:

The VA tests are designed so that a point score of 100 will be the average performance of the total group. Hearing aids tested by the VA are broken down into three groups on the basis of power: mild, moderate, and strong. This classificatory scheme is generally accepted throughout the industry. The 64 hearing aids tested by VA in 1961 showed the following quality spread:

Power group	Quality point score of Quality point score of lowest quality aid tested highest quality aid tested
Mild Moderate	ingliest quality aid tested
Strong	54 10 130
1 This score resulted from penalties assessed by VA for	$\frac{140}{120}$

1 This score resulted from penalties assessed by VA for lack of quality uniformity. The next highest score in the moderate group was 66.

Mr. Kaplan. The table indicates that the mild hearing aids they tested varied in quality from a low of 54 to a high of 130.

The moderate hearing aids varied from a quality point score of zero, which was assigned to some brands because of penalties for lack of quality control, to a quality point score of 140.

The strong power group hearing aids varied from 61 to 128.

In the mild category, the category in which the greatest number of hearing aids are sold to the general public, one hearing aid tested nearly 21/2 times better than another in terms of quality performance. The report draws this conclusion:

An ordinary citizen possessed of the information available to the VA, as a result of its testing program, would be in a much better position to get the best buy for his dollar. He would be an informed consumer.

Yet, this information is not now available to hearing aid consumers * * *. The success of the VA program in increasing the level of knowledge about hearing aid quality and thereby substantially reducing prices, suggest the possibility that information could be made available to the general public so they, too, can enjoy the social and economic advantages of being well informed about hearing aids currently on the market.

I agree. It is clear that the brand and model information now available and kept up to date in the files of the VA requires only simple processing to improve the lot of hundreds of thousands of hard-of-hearing people and provide audiologists with information they need to permit them to prescribe intelligently. The potential savings to the consumer, typically among the older members of the population and often the poorer ones, are also detailed in the report

I emphasize that the hearing aids material is an example of what we know is available in the files of the Federal agencies for many other consumer products. The need for getting it to the consumer is great, the wherewithal for many products is available, and the benefits to the individual consumer and to the Nation are large. All it

As a committee of the Nation's legislators you will know how to muster this will. Should the Freedom of Information Act, to become effective next week, be interpreted or amended to allow such information as I have been discussing to be made public? Should your committee ask the Federal agencies why they are not making this information public in line with the expressed conviction of two Presidents that the consumer has a right to be informed? Should your committee supplement your 1961 report on "Consumer Protection Activities of Federal Departments and Agencies" with another that lists product information now available, being obtained, or capable of being obtained with existing staff, expertise, and facilities that would be of benefit to consumers if made public in suitable form?

There is precedent in the activities of other nations for the government to accept responsibility for getting information to the consumer

about products and services not otherwise available.

The Scandinavian countries publish brand name information based on tests in government laboratories. Many European countries require prior approval of a production safety before it may be marketed.

England's Consumer Council is nearing completion of its interesting Tel-Tag program to inform consumers about the important proper-

ties of a product by means of a label on the product.

The International Standards Organization (ISO), and the IEC, (International Electrotechnical Commission) have undertaken a broad

program dealing with consumer goods. There is a new and growing concern about the problems of the consumer. I hope our Government can find a way to increase its concern and I hope these comments have contributed a little toward making that possible.

Mr. ROSENTHAL. Your full statement together with the appendix

will be printed at this point in the record.

(The information referred to above follows:)

PREPARED STATEMENT OF MORRIS KAPLAN, TECHNICAL DIRECTOR, CONSUMERS UNION

My name is Morris Kaplan. I am technical director of Consumers Union of the United States, a nonprofit membership organization, incorporated under the laws of the State of New York in 1936. We publish the monthly magazine, Consumer Reports, and have a circulation approaching one and a quarter million copies per month. Our purposes are "to provide consumers with information and counper month." sel on consumer goods and services * * * to give information and assistance on all matters relating to the expenditure of the family income * * * and to initiate and to cooperate with individual and group efforts seeking to create and main-

I am grateful to the committee for the opportunity you have offered me to tain decent living standards." present my views on the desirability of making available to the American consumer product information in the possession of the Federal Government. So that you may place these views in proper perspective, it may help you to know that I have been technical director at Consumers Union since 1946; that before that I spent 16 years in the Federal civil service doing research for the Navy Department and administering and working in laboratories of the Bureau of Customs, Alcohol Tax Unit and, happily, in the "dear, dead days beyond recall," the Bureau of Prohibition. One consequence of these aggregations of Prohibition. One consequence of these associations was contact with the work of a number of Government organizations, both directly and through their publications.

It would seem that 5 years after President Kennedy's consumer message to Congress it would hardly be necessary to argue the consumer's need for information. It is true that some progress has been made to guarantee the consumer's right "to be protected against the marketing of goods hazardous to health or life." But more, much more, remains to be done. The market still has many hazardous electrical and mechanical products against which the consumer has no

It is also true that some advances have been made in giving the consumer "the facts he needs to make an informed choice"—the Government Printing Office's

Consumer Information Catalog lists some of the evidence. Consumer products from foods and clothing consisting almost entirely of synthetic materials to electric drills and washing machines and color television sets that use solid-state components, modern-day producers are taking advantage of our electronic and space age technology. In such a marketplace the consumer is an innocent babe in the woods. He couldn't make a rational choice to save his life or even his economic well-being. The very fact that products last a long time and that the state of the art changes rapidly makes it impossible for him to build a body of experience to draw on when he has to make his next purchase. The consequences are not inconsequential. It has been estimated that if consumers purchased products on the basis of objectively determined values, savings of as much as 50 percent could

Perhaps even more important is the role of an informed consumer in acting as a balance wheel to keep a free economy viable. Classical economic theory assumes an informed consumer, rewarding the producer of a better quality or equal quality but lower priced product and punishing his less competent competitor. Without good information about the product the consumer gives his patronage to the wrong producer. The reward goes to the clever advertiser, the ingenious packager, the wily "motivational" researcher, the most seductive credit plan and not to the most efficient producer of the best product. The consequences to our economy are waste of natural and human resources to the detriment of all.

I do not want to leave the impression that the consumer's need for information is completely unsatisfied. Much is available. Your own committee's studies, published in 1961, provide the most definitive descriptions of these activities. In addition, information is available from private publications such as our own Changing Times, the women's and so-called shelter magazines, the specialized product magazines dealing with photography, "hi-fi" equipment, automobiles, and others. Also disseminated but somewhat more biased is material from trade organizations like the National Electrical Manufacturers Association, American Gas Association, and others. Advertising, whose avowed reason for being is to inform consumers about a product or service, fulfills this mission only occasionally, but rarely in a useful way for the consumer.

And the word-of-mouth sharing of experience, though sometimes extremely effective, also often falls into the "old wives' tale" category—so a concerned con-

sumer can never really know when to believe it and when not to.

In sum, it seems clear that the gap between the demand for information and supply of it is large. Every day a new magazine joins the ranks of product information disseminators. Legislators say that their mail on consumer problems is heavy and increased Government concern—manifested, among other

Many suggestions have been offered, both long term and short, for reducing the consumer's areas of ignorance about the products he buys.

And this brings me to the heart of today's inquiry. Many Government agencies have in their files, as a spinoff from their normal day-to-day activities, a great deal of information that would be directly useful to consumers. It is my belief that a systematic review of the activities of Government agencies for purposes of learning which of them develop information on consumer products by type and/or brand name would reveal a mine of such information which, when tapped, would prove of inestimable value in helping the consumer improve his buying effectiveness. My belief is based on the tip of this iceberg we can see even now from a cursory survey of this kind that has already been done. In Senate Report 2216, "Price of Hearing Aids—Report of the Committee on the Judiciary, 1962," appendix A contains a "Summary of Precedents for Government Product Testing and Publication of Comparative and/or Evaluation of Compa uatory Data on Various Brands of a Product." A portion of this material is submitted as an appendix to my testimony for your ready reference.

You will note references to tests and evaluations done by one or another agency of the Federal Government on such important consumer products as hearing aids, batteries, tires, floor waxes, lamps, various building materials, washing machines, detergents, home freezers, and others. The Senate study makes clear that these are only examples. The shortness of notice of this hearing today has not allowed me to search the files of Consumers Union exhaustively for any additional examples it may contain. From memory, however, subject to check of detail, I can add that the Bureau of Fisheries of the U.S. Department of Interior does tests on frozen fish products in consumer packages, that the U.S. Department of Agriculture has information on the effectiveness and toxicity of insecticides, that the Food and Drug Administration tests such important consumer products as clinical thermometers and condoms, that the laboratories of

the Quartermaster evaluate many consumer items of clothing and textiles, the Navy laboratories used to evaluate paints, detergents, and other consumer products, and the General Services Administration and/or the National Bureau of Standards test many consumer products, including tires, seatbelts, brake fluids,

Would a search of the regulatory agencies reveal information on the competiand auto antifreezes. tive performance of companies whose activities they regulate—information that would be of great value to prospective patrons of those companies? For example, is there information in the accident records of various transportation companies, railroad companies, airlines, bus companies, and so forth? Do Government agencies have information on companies, by name, similar to the dossiers maintained by Better Business Bureaus, of regular and persistent infractions of laws or

My conclusion is that there is enough evidence to show that the agencies of the Federal Government now have and are presently equipped to get vast amounts of information which, if made available in proper form, would be of untold value to consumers and to the Nation. Proper form will, of course, depend on the subject and the kind and amount of information available. My experience in advising consumers tells me that the more specific the information the more useful it can be. Thus, the best information describes the characteristics that the consumer needs to know for the brands and models he encounters in the marketplace, in simple enough form to make his choice easy and intelligent. And there are a number of products about which we already know the Government has enough information to do just this. Another form involves less specific, more general information about types or categories of products (for example, gas versus electrical appliances, AM versus FM radio, alkyd oil paint versus watersoluble paints for interior and exterior use). Much of the consumer information now disseminated by the Federal Government is of this kind. But there is much more buried in the files of various agencies who don't think in terms of making it available to consumers or who don't recognize it as useful to consumers. There is also the care, maintenance, safety-in-use kind of information, sometimes disseminated to consumers by Federal agencies, but often not.

Because the information is at hand in a public document it is possible, and I think useful, to examine in somewhat more detail what could be done in the case of one important consumer product to help the consumer with information now obtained regularly by one Government agency. I refer to hearing aids and to the Senate report on the prices of hearing aids previously mentioned.

Dr. Causey, a consultant to the Veterans' Administration, described the VA

"The Veterans' Administration issues more than 5,000 hearing aids every year * * * In the existing program, the Veterans' Administration submits to the National Bureau of Standards all makes and models of hearing aids obtained for testing purposes * * * The National Bureau of Standards tests each instrument for a number of electroacoustic factors and transmits the results to the Veterans' Administration. Upon receipt, these data are subjected to statistical and comparative analysis * * * In the hearing-aid test program, no attempt has been made to set up specifications. Actual performance is emphasized in order that we may take advantage of the hearing-aid industry's continuing research and development activities toward providing better hearing for those

"Only clinically acceptable hearing aids will be considered for these tests. individuals having hearing deficiencies. Clinical unacceptability will be based on poor physical characteristics as related to use in a clinic situation or poor physical characteristics of an instrument as

related to its use by the wearer.

"The raw scores obtained in each test item are treated and assigned weighting factors determined by a group of nationally recognized audiologists and physicists

serving the Veterans' Administration on a consultant basis.

"Weighted scores obtained by the three hearing aids of each model are averaged for each test. The average score represents the performance of that model on each of the individual tests. The average weighted scores on each of the tests are summed to give the measure of total performance achieved by the hearing aid model. This score is designated as the 'quality point score.'"

The committee report, summarizing some of the testimony, says: "The VA tests are designed so that a point score of 100 will be the average

performance of the total group.

"Hearing aids tested by the VA are broken down into three groups on the basis of power; mild, moderate, and strong. This classificatory scheme is generally accepted throughout the industry." The report draws this conclusion:

"An ordinary citizen, possessed of the information available to the VA as a result of its testing program, would be in a much better position to get the best buy for his dollar. He would be an informed consumer.

Yet, this information is not now available to hearing aid consumers * * * the success of the VA program in increasing the level of knowledge about hearing aid quality and thereby substantially reducing prices, suggest the possibility that information could be made available to the general public so they, too, can enjoy the social and economic advantages of being well informed about hearing aids

I agree. It is clear that the brand and model information now available and kept up-to-date in the files of the VA requires only simple processing to improve the lot of hundreds of thousands of hard-of-hearing people and provide audiologists with information they need to permit them to prescribe intelligently. The potential savings to the consumer, typically among the older members of the population and often the poorer ones, are also detailed in the report and are vast.

I emphasize that the hearing aids material is an example of what we know is available in the files of the Federal agencies for many other consumer products. The need for getting it to the consumer is great, the wherewithal for many products is available and the benefits to the individual consumer and to the Nation

As a committee of the Nation's legislators you will know how to muster this will. Should the Freedom of Information Act, to become effective next week, be interpreted or amended to allow such information as I have been discussing to be made public? Should your committee ask the Federal agencies why they are not making this information public in line with the expressed conviction of two Presidents that the consumer has a right to be informed? Should your committee supplement your 1961 report on Consumer Protection Activities of Federal Departments and Agencies with another that lists product information now available, being obtained, or capable of being obtained with existing staff, expertise, and facilities that would be of benefit to consumers if made public in suitable

The consumer needs your help. You have it in your power to give it to him at almost no cost. I hope you will.

APPENDIX.—PRICES OF HEARING AIDS, REPORT OF THE COMMITTEE ON THE JUDICIARY,

Persons interviewed were asked to identify areas in which results of tests performed by the Federal Government were published in such a way as to indicate the commercial brands tested. They were also asked to identify areas in which comparative evaluation of commercial products was done.

The following are the types of activities identified and examples of the products involved:

UNPUBLISHED TEST RESULTS

1. Comparative tests of different brands of a product. Examples:

(a) Hearing aids, done by the National Bureau of Standards for VA. (b) Batteries, done by NBS for VA and the Coast Guard.
(c) Tires, done by NBS for the FBI.

(d) Qualified products list testing.

Qualified products list testing (QPL) is done by GSA, and by NBS on behalf of GSA, on products for which no method has been devised for establishing a minimum standard. Included in this list of 38 products are oil filters, cellophane tape, flashlights, solder, paints, popup toasters, and other diverse products.

In the case of hearing aids, VA does its own comparative evaluation of the

In the case of batteries, test results are correlated to a minimum standard of performance. In addition, batteries are ranked on the basis of test performance. In the case of tires, the different brands were both ranked and evaluated by NBS.

2. Tests done for the purpose of establishing minimum quality standards. GSA does such tests for a great variety of products, and commissions such tests from NBS, other Government agencies, and private testing organizations.

The U.S. Department of Commerce does such testing, in conjunction with industry, for the purpose of establishing commodity standards. These commodity standards have been established in 450 different industries. They are done at the request of the industry in question. An example is the commodity standard

Both GSA and USDC publish the standards established, but not the results of for the clinical thermometer industry.

In the case of GSA, standards are sometimes set so that the only product which meets them is the one which tests highest. In such a case, the standard the tests done in the process of setting the standard.

itself constitutes an implied endorsement of a particular product. 3. Coded results of comparative tests. In a few cases where QPL testing cannot be done entirely in the laboratory, GSA codes the results of tests in such a way as to disguise brand names so that the impartiality of field testers will not be influenced. be influenced. An example is floor waxes.

4. Testing to determine which brands of a particular product conform to estab-

lished minimum standards. Example:

(a) Lamps, tested by NBS.

PUBLISHED TEST RESULTS

1. Comparative tests in which brands are indicated by code number, but A. In popular publications described in such a way as to be easily identifiable by an informed reader. Examples:

(a) Numerous NBS bulletins on the acoustical and fire resistance properties

of building materials.

2. Comparative tests of particular brands of products, done at the request of industry, the expenses of testing being paid by industry. Example:

(a) Various tests on building materials done by NBS.

3. Comparative tests of the properties of a particular product, where the different brands tested are identified by brand and manufacturer. Example: (a) Tests on various properties of safety eyeglasses, done by NBS.

4. Test of a single brand, not done at the industry's request, the results of which give an implied endorsement to the product tested. Examples:

(a) Teflon, tested as a coating on plow blades by USDA.

Testing solely for consumer purposes, where the test results are not made (b) Sevin, tested as an apple thinner by USDA.

public. Example:

(a) The Consumer Research Division of USDA tests consumer products, e.g., washing machines, detergents, and home freezers. Informative booklets on what to look for when buying are published, but test results are not given in any form. However, implied endorsements are sometimes made.

1. Testing solely for consumer purposes. Results of USDA's consumer tests B. In trade and technical publications (described in (a)5, above) are sometimes made available in trade publications with the results coded. Particular brands are easily identified by informed

2. Tests of a particular brand, not done at the request of industry. Actual

(a) Nicarbazin (Merck), prevents coccidiosis in chickens.

3. Comparative tests of branded products, not done at industry's request. endorsement given. Example:

(a) Six anticoccidial compounds, tested by USDA. Examples:

(b) Preventatives of Eimeria tennella in chickens, tested by USDA.

(c) Anthelmintics for swine, tested by USDA.

Do you think that the Federal Government or any individual agencies have made any effort to disseminate the information they have

Mr. Kaplan. Yes. I tried to indicate that some of the agencies do this. The U.S. Department of Agriculture has a history of working in this area. It started originally with an effort to make this information available to farmers, but clearly there are some kind of goods that farmers use that are used equally by nonfarming people, so this information has been published, is being published. The Newsletter service which I referred to in my testimony is one such form but there

Mr. ROSENTHAL. I think you indicated in your direct report that Agriculture used to do some testing and do some distributing of information, but they have suspended that.

What did they do that they no longer do?

Mr. Kaplan. It used to be the practice—perhaps I have an example of one such publication. I did not bring them all but I brought one to show what used to be done. Excuse me, I didn't bring that one. It used to be a practice of the group which at that time was called the Home Economics Branch of the U.S. Department of Agriculture to test such products as refrigerators, washing machines, detergents, various items of clothing.

Mr. ROSENTHAL. They did this presumably for the information of

the farmer?

Mr. Kaplan. Yes, presumably for the information of farmers, but it was published more widely and the information included test results on particular brands of those products which were published in coded form, brand A, B, C, and D. Anybody knowledgeable in the field could easily pick out the Frigidaire from the General Electric machine but most consumers had no such way of finding this out. The object here was to make it possible for consumers to buy somewhat more intelligently; such information as the kind of agitator and the amount of water consumed and things of this sort were described in the publications so consumers who read this would be able to ask intelligent questions in the marketplace about products they were considering.

This information is by now not being made available at all and not even being obtained to the best of my knowledge and the reason, as I said, was that there was a period a few years ago when criticism from industry which reflected itself ultimately in criticism from Congressmen put enough pressure on the administrator of the agency and also on the budget so that this kind of work was discontinued or at least seriously curtailed.

Mr. ROSENTHAL. When did this suspension take place?

Mr. Kaplan. I don't have the details. My guess would be somewhere around 3, 4, or 5 years ago.

Mr. Rosenthal. I am looking at a list of hazardous electrical products on page 10 of the Senate hearings on establishment of a National Commission on Product Safety and it states that there are potential hazards by way of excessive leakage of current in some of the following items and I will just read them briefly: TV sets, table radios, portable phonographs, home intercoms, hobby kits, clock radios, portable radios, automobile battery chargers, toasters, clothes driers, waffle irons, blenders, coffeemakers, frying pans, griddles, saucepans, vaporizers, and so forth.

There are dozens of others: broilers, garage door openers, hair driers, oven ranges, electric toys. Do you know whether any Federal agency has information relating to safety standards on some of these types of products sold on the open market?

Mr. KAPLAN. It would seem to me that the standards—the criteria for determining whether a product does or does not have an electrical hazard, are available generally in the Federal specifications. Every Federal spec I know that deals with this kind of information requires

that there be no electrical leakage or alternatively that the product

conform to Underwriters Laboratory standards.

The information as to which particular brand conforms or does not conform may or may not be available in the Government files. It would depend on whether the product is on a qualified product list, in which case the Government may very well have tested large numbers of brands on the market and know that some do or some do not conform.

Mr. Rosenthal. Let us take another safety item. I am told that GSA specifications require that many or all electrical appliances purchased for Federal use have an elastic type of cord, a cord that contracts and expands when you pull it away from the product. Presumably this is a safety feature that the housewife would find useful in that a young child or adult could not pull accidentally on a long 3or 4- or 5-foot cord hanging toward the floor.

Mr. Kaplan. No, I am not familiar with that particular specifica-

tion.

Mr. ROSENTHAL. You mentioned very briefly the freedom of information bill reported out of this committee which is going to become law next week. Do you see this as a vehicle for extracting from Government agencies consumer information that they presently possess?

Mr. Kaplan. I see this as a vehicle, but I also see many problems.

I haven't had an opportunity in the time available to read the The bill was passed with many exceptions. interpretation that the Justice Department just published in the form of 47 pages of guidelines to Government agencies so I am not quite sure how effectively it will be possible to pry this kind of information out by means of the Freedom of Information Act. I can say that it is my wish, my hope, that it would be possible to use that act and if the act as finally interpreted by the courts turns out not to be suitable for this purpose that Congress will amend the act to make it suitable for this purpose. It seems to me that this kind of information, as I said throughout my testimony, is vital, important, available, and should be

Mr. ROSENTHAL. Well, for example, one of the exceptions in the act made available to people at large. is that trade secrets cannot be made public. You do not find anything inconsistent between the exclusion of trade secrets and disclosure of

Mr. Kaplan. None at all. I believe that the information about the product safety information? characteristics of a product, which information is obtainable in the course of ordinary testing by anybody who has laboratory facilities available, does not constitute a trade secret. It is not a secret if it is readily obtainable through such means. I would argue that no information that the Government has that was obtained confidentially from manufacturers should be made public. But any information it could obtain in its own laboratories and information that it does obtain in its own laboratories would not in my view be considered under that

Mr. ROSENTHAL. In other words, what you are saying is that if the exception as a trade secret. Government goes out in the open market and buys products and tests them, that that information could be made available. Confidential income taxes or something along those lines certainly could not be made

public.

Mr. Kaplan. Yes, that would be my view. Every so often the Government asks manufacturers to submit information on a confidential basis. Perhaps in Food and Drug certain formulas are made available

The understanding is that this information would not be made available publicly or to its competitors.

One might question the propriety of the Government's having to obtain information in that way. Perhaps it would be possible for the Government to obtain information by straightforward testing of the product. But in any case, as things now stand, information is sometimes obtained that way and I would not argue that that information should be made available.

Mr. Rosenthal. Would you speculate as to the number of products which any agency of the Federal Government has test information on today that they could make available and that would be useful

Mr. KAPLAN. It would be pure speculation on the basis of the Senate committee's brief survey and on the basis of some of the additional things I know from my own experience. I would say they would probably run into the dozens of such products where the information already exists in files. The publication put out by the Department of Agriculture 2 years ago called Consumers All, their annual yearbook, contains a great deal of general information. There is more of that kind of information available in other agencies as well except the other agencies do not have a tradition of thinking in terms of consumer information and therefore do not put it out.

Mr. Rosenthal. Does any agency have a tradition of thinking in terms of consumer information?

Mr. Kaplan. To some degree the Department of Agriculture does and has; but this is only to a limited degree.

Mr. Rosenthal. One last question. Take ballpoint pens. I would assume that GSA or some Government agency does make tests to find out all of the useful performance characteristics of ballpoint pens. Would you assume that too? Or do you know that to be so?

Mr. Kaplan. I believe that the Federal Government probably has a specification on ballpoint pens. In that specification they list the characteristics that they consider to be important in the purchase of such an item. It would be my belief that those characteristics would be as valid for an ordinary consumer as they are for the Government.

Mr. Rosenthal. Let me read a letter I received, which I think sup-

ports the position you take. A lady wrote to me as follows:

In these days of trouble my complaint may sound trivial but I believe it warrants investigation. The

And she names the company—produces a 19 cent pen named— I will leave the name out—

As a teacher I see children frequently using these pens. Unfortunately very often a perfectly good pen begins to leak for no apparent reason. As a result clothing is ruined and of course the pen is thrown away without giving the consumer

Recently I had such a pen in the pocket of my brandnew suit and it leaked. My suit jacket has been ruined. I asked the children if they have similar problems and the stories of ruined clothing overwhelmed and saddened me.

A few years ago I wrote to the company and mentioned this problem. They apologized and said they couldn't do anything about this matter. This pen is sold nationally and I am sure a million dollars worth of clothing is damaged

If this problem were restricted to one pen in a million, I would overlook the matter as an unfortunate incident. However, this happens every day in my school. I am enclosing a sample of such pen. I would appreciate it if you could refer it to some committee that concerns itself with consumer protection and ask for some action to be taken against -

and so forth.

I would assume that the Federal Government and we will ask this of GSA—conducts tests on pens like this. Assuming they have performance information available relating to leakage, do you think it is their responsibility to tell the general public about it?

Mr. KAPLAN. I would think that it is their responsibility or if it isn't, it should be made their responsibility to make available any con-

sumer information they have that would be useful.

The GSA would better be able to talk to this point than I, but it is my understanding that ballpoint pens would be bought on contract and bids and under those circumstances, the GSA would specify that the pens that they will ultimately accept must conform to certain specifications and one of the specifications would include leakage, that is the absence of leakage.

The people who bid on this contract would then have to demonstrate that products they are to deliver will in fact conform to that specifica-

tion, but only those who are awarded the contract. So the GSA might not have information on this particular pen if the producer of it knows that it would never conform to GSA require-

ments and so he might never submit a bid for this purpose.

So GSA information on what is important in the ballpoint pen would be extremely valid but how a consumer could use this information for example if GSA said a ballpoint pen should not leak, this wouldn't help the consumer very much except that he might ask the seller does this ballpoint pen leak and the seller wouldn't know.

So that kind of information—what the required properties are—may not be particularly helpful. That is the kind of information that the Government has mostly been publishing. Sometimes it is helpful. Sometimes it is possible to look at a product to determine whether or

Mr. Rosenthal. By looking at a ballpoint pen in a candy store, you not it meets the requirements.

Mr. KAPLAN. This is an example of the kind of product where the can't tell if it will leak. only way you could tell whether the product would be good or bad

would be to test these products and report on them.

The same is true of hearing aids. There is no way to tell by looking at a hearing aid how well it will perform. But the Government in the case of hearing aids already has information about this, having tested large numbers of them and there they don't have to say to the purchaser of a hearing aid "ask the dealer this question or that question." They merely have to look at the list and decide for themselves which one of these would meet their requirements because the information is now available.

Mr. Wydler. Mr. Kaplan. I found your testimony very interesting. I have used the Consumer Reports in my own life and I found it very helpful. I hope they are right. That is the only thing I don't know. I don't know how you judgeMr. KAPLAN. It is our hope also.

Mr. Wydler. I don't know how you judge which product is the best, because that would probably be the next problem we have here. I am curious. Has your consumers Union, through the Consumers Reports, ever been sued by people for the information that you have Mr. Kaplan. Yes.

Mr. Wydler. Is this frequent?

Mr. KAPLAN. No, very infrequent. During the 21 years that I have been working for Consumers Union we have been sued some three or four times. The suits have never gotten to trial.

During pretrial examination when we disclosed the evidence that we had on the basis of which we published our reports—the suit was either dropped or it was possible to agree with the producer that some face-saving statement in the magazine—face saving for him, in the two or three instances that I remember, would meet his needs.

Mr. Wydler. These were suits then, as I understand it, by manufacturers. I am thinking of suits by individuals, consumers who had relied on the information and ratings that you had supplied and who felt that they had been misled or misdirected and were suing you for misleading them or giving them poor information.

Mr. KAPLAN. No, we never had such a suit. Mr. WYDLER. Not even any such suit instigated?

Mr. Wydler. My wife has been after me a lot recently and maybe this will give me the perfect opportunity to solve this problem for her concerning the question of TV color sets and the possible radiation hazard that they have on people. Will you tell me what we know about this? She keeps asking me questions about this and says she read things that are very serious and is quite concerned, yet nobody in the Government seems to be doing anything about it.

I am wondering what the seriousness of this problem might be. Mr. Kaplan. Well, it isn't strictly true nobody in the Government is doing anything about it.

Mr. WYDLER. Not quickly.

Mr. KAPLAN. If you are referring specifically to the one instance, to the General Electric sets which were recently—in which General Electric announced it had one chassis which was causing some trouble and it was having it repaired, if you refer specifically to that, then General

The Public Health Service has done some testing to establish the seriousness of this hazard and found it not a very serious hazard except under very, very remote use conditions. It applied to a limited number of sets—we published a piece on this in the current issue—it applied to a limited number of sets. It applied only in a downward direction. Sets which were resting on the floor caused no problem at all because the penetration was very very little, an inch or so, and it

Sets off the floor might present a minor problem for children or pets who put their feet under the set and thereby would be exposed to some of this but only a minor problem.

It was for that reason, I think very commendably, that General Electric announced it was going to have each one of these sets repaired,

but the Public Health Service was concerned and interested and con-

Mr. Wydler. Are we talking about radiation from the set? sulted in this matter.

Mr. KAPLAN. Yes. I assumed that is what you were referring to. It has been in the news during the last month or so and a number of Congressmen have been very upset. What upsets me about the whole situation is not the particular hazard, which was very minor, but the fact that such a hazard could in fact occur in products that left the

The radiation problems with television sets have been known for many years. The Federal Communications Commission has set standplant. ards and limits on this. Almost every set—in fact every set we have tested with the exception of General Electric's, conformed with these

I wonder, and I guess we are all human and this could happen, I wonder how it would happen in a matter of this sort that a set designed requirements. in a company as large and as reputable as General Electric could get past the inspectors, the testers, the people whose responsibility it would be to review to see that all such matters were taken care of.

Mr. Wydler. This is most interesting to me because I happen to have a General Electric color television set and I happen to have a dog

whose favorite sleeping place is underneath the set. Mr. KAPLAN. I must add at once that it applies to a limited number of specified sets, sets that were manufactured—I don't remember the details. I think up to—well, from January to June of 1967, but I am not quite sure that that is the precise date. There is a limited period during which these sets were produced.

Mr. Wydler. My set is 3 or 4 years old.
Mr. Kaplan. I think you have nothing to concern yourself with.

Mr. Wydler. I was worried about the dog. (Laughter.)

Mr. Wydler. You mentioned earlier that some of the TV sets were lethal weapons. Was this what you were referring to?

Mr. Kaplan. No. This was not one of the things. I want to make that completely along What we are applied to the things. that completely clear. What we are concerned about is that in the course of our testing we found sets which by any reasonable criterion

They would not meet the Underwriters Laboratories requirements do not meet safety requirements. for safety. What I mean by that is this: It is possible in the course of the normal use of this set to touch a portion of it and if, at the same time, you are touching any kind of ground—by ground I mean a metal radiator, a register of some sort, water pipe of some sort if you are touching that portion of the set and a ground simultaneously then either the full-line current, the 115 volts would be flowing through you are portion of the line surrent will be flowing through you, or a portion of the line current will be flowing through you. The full-line current can kill you. We have found a few such sets. No manufacturer decides to manufacture such a set. He is not in the market of

killing people.

We think this most often occurs as a result of an accident, a blob of solder falls in the wrong place, a wire which is not properly dressed

touches something that it was not designed to touch. When this occurs, some parts of the set become electrically live and we who buy our products in the open market in the same way as you buy them, we walk into a store and pick it up and have it delivered, not to Consumers Union but to a shopper's home who then delivers it to the Consumers Union. We have found a number of such products, not only television sets but the list which Congressman Rosenthal was referring to which present this kind of hazard.

Mr. Wydler. Just so I have it clear in my mind, when you say someplace you might touch, do you mean someplace in the front of the set?

Mr. Kaplan. It could be in the front or back of the set, an exposed

For instance, some sets are so designed that the knobs come off without any trouble and if you have children you will know that this is not an uncommon phenomenon. When the knobs come off, the touching of the knob, the metal shaft, may be such a place.

A properly designed set keeps that knob properly insulated. An improperly designed set or carelessly put together set will sometimes

What concerns me is not that an occasional accident occurs in the factory which will permit such a set to get out, but that the manufacturer doesn't routinely institute a procedure which would check every single set before it leaves the factory to insure that no such accident has occurred. It is possible to do that at almost no cost, completely automatically. A big bulb can go on or a great big bell can go on or the set can automatically be pushed off the assembly line if it has any such current leakage. I am talking about lethal hazards.

In addition to that, it is a much more common phenomenon, and here producers very often design this into the set, to produce shock generating equipment, equipment which will produce a shock. I am not now referring to a tingle, I am referring to a quite substantial

Mr. Wydler. I have bought some of those.

Mr. Kaplan. Anybody who wants to subject himself to 3 milliamperes of current will realize what I am talking about. He will never buy another such set again.

As I said yesterday to the Electronics Industry Association, perhaps even if one of those fellows bought one of these sets he would start to scream to his legislators that there ought to be a law to prevent such a set being on the market. In European countries, there is.

Mr. Wydler. We are discussing here the possibility of turning over this Government information to consumers generally.

You, for instance, in your testimony gave us these examples of the different ratings that the Government has made on hearing aids and how they have rated them and so forth. It is all very interesting, but the point is, it is not really of too much use to consumers without some

For example, it might not be very significant to find out that one hearing aid is somewhat better than another if you knew that one cost twice as much as the other. That would certainly be practically an indispensible part of the rating information, wouldn't it?

Mr. Kaplan. Let me make this clear: Whenever I discuss this kind of problem, the first reaction is everything is fine. The consumer doesn't really need this information.

The second reaction is he needs much more than you can give him. What I am saying is I think that the integration of price and quality and service and all of the other things that a consumer buys when he buys a product would be ideal. But short of the ideal, taking existing

information that is available, it would be of great benefit to you to know at least the quality ratings of these products and then for yourself to integrate how much additional quality you are willing to buy

The dollars are always available to you. You can always shop and for how many additional dollars. know what dollar value is associated with what hearing aid. Now, if you have that information and if in addition you have the quality information on the hearing aid, it would allow each consumer to decide for himself that this hearing aid is twice as good by this quality index as another and it costs twice as much and I want the best, so I am willing to pay twice as much. Or it costs only one and a half times as much and is a pretty good buy, or it costs four times as much and that extra

Mr. Wydler. Well, I am just saying it would seem to me we will quality isn't worth that much to me. have a struggle if we start to make this information available. We have to draw the line somewhere. We have to draw the rules and regulations somewhere. This is why I raised this whole point. This

immediately seemed to become a problem. The final problem I would like you to touch on is the question of

politics. What will happen with this, politically speaking?

By that I am sure, for instance, if some company happens to be manufacturing a particular item in my district and is rated by the particular Government agency very poorly on something, the first thing that will happen will be they will send me a letter and want to see me and want to know why and how it is that I am allowing the Federal Government to mistreat them and misrepresent their product and so forth and so on and bring on me and every other Congressman involved tremendous pressure to do something about this that will require me and probably every other Congressman involved to go down to the agency and demand at least a review of what they have done and justification and possibly asking them to give you something to try to satisfy the constituent in the form of different wording or some-

I would tend to think this would become almost a commonplace thing of this nature.

Mr. Kaplan. Well, I don't hold myself up as an expert on politics problem, wouldn't it? but I have been around a few years and let me say a few things on

One, pressures on politicians come from a variety of sources. I assume politicians weigh the amount and kind of pressure they are subjected this point.

to and they react in part on who pressures and how hard. Pressure can and should come from consumers as well. So it seems to me that the more discussion there is of this, the more aware con-

sumers become of what it is possible for them to have. I think here Congressmen should take some leadership. The more they become aware of this, the more pressure they will supply for this information as counterpressure to the producers problem of saying this is hurting my business.

The second thing I would like to say about this is that I never in my wildest dreams would have imagined that the Senate and the

House would have passed safety legislation of the kind it did.

If anybody asked me 3 years ago, "Is this possible?" I would have said that it is politically impossible. One couldn't conceive of such a thing happening, practically the largest industry in our Nation being in the state of the state of the state of

subjected to this kind of very stringent and quite good regulation on

safety didn't seem feasible to me. Yet it was possible.

So I assume if it is possible to do it in the auto industry with whatever big pressures they were able to exert on their legislators and others, and this auto industry, as I understand it, constitutes a seventh of our gross national product, it should be possible to do it in the food industry, the television industry, the appliance industry and many, many other areas provided it is done fairly providing it meets the needs of the people. Mr. WYDLER. Thank you.

Mr. Rosenthal. Mr. Myers?

Mr. Myers. Thank you, Mr. Chairman.

Mr. Kaplan, one advantage to going last is most of your questions get answered, but one thing I arrived at, I had pressure at our house for a color TV set. You provide me with more amplification so I guess I will talk my family out of it now.

I have been quite interested also in this Consumers Union and Consumer Reports. Did I understand you, you just go out and purchase a line item from some store someplace?

Mr. KAPLAN. Yes.

Mr. Myers. How could you decide, do you have a board or do you yourself decide how you select these?

Mr. KAPLAN. You mean which product shall we undertake to evaluate? We have a committee in the organization called our operations committee that meets quite regularly and decides what program we shall engage in. We test some 60 or 70 such types of products every year.

Mr. Myers. Does your income come all from the sale of this Con-

sumer Reports?

Mr. KAPLAN. Solely from the sale of our publications. Mostly Consumer Reports. Occasionally we publish a small booklet or book.

Mr. Myers. A Federal agency or someone else may not employ you,

then, to do research for them? Has this ever happened?

Mr. Kaplan. We have received requests from a number of Federal agencies to do this kind of work from time to time. Generally we have turned them down. On rare occasions we have offered our services free of charge because we are a public service organization to help a particular agency where we had a particular expertise and where the amount and time, amount of effort and time involved was not

Our big problem is that we are not prepared to undertake a grant. program and expand our facilities to do this. At least we haven't been up until now. So most of our work is done in terms of our own understanding of consumer needs. That takes up a great deal of time

But there have been recent proposals. As you know, Donald Turner has proposed that perhaps the Government ought to be interested either in supporting Consumers Union with grants of money so it could improve its product testing and disseminate far more widely and more broadly or perhaps the Government itself ought to set up a similar organization.

We have viewed such proposals with interest, but nobody has really made us a concrete offer. I am not quite sure how our board of directors would react to this. Our board of directors are elected nonpaid officials. Elected by the membership. Anybody who joins the organization has the right to be a member.

Mr. Myers. You spoke about the various agencies of the Federal Government having information that the public should have. I don't believe you went into how this information should get to the public. Would it be through your organization or a similar organization? How would you get this information to the public?

Mr. KAPLAN. There are many ways. I wasn't thinking of getting it to the public through our organization. I was hoping the Government would, through its own means, disseminate it by means of some Govern-

Mr. Myers. This would be competition with you, then; wouldn't it? Mr. Kaplan. Oh, yes. Well, let's say supplementary to us because ment publication. there are far more than 60 or 70 products that people are interested in, and we can't get back to the same product as often as we would like, so if the Government did stuff on television we would let them do it and go on to something else. As it happens, we had to do a report on hearing aids which cost us \$25,000 and 6 months of time because the Government information wasn't available, although it was all there in the files and all we did was repeat what the Government had done, and

Mr. Myers. I believe the chairman asked, and I wasn't sure about probably not quite as well. your answer, if you think this is the responsibility of Government to

Mr. Kaplan. Yes, I think it is the responsibility of the Government give this information out or provide it. to help the people in every way it possibly can, and this seems to be an enormous way of helping people.

Mr. Myers. Do you mean as a spinoff or as a direct responsibility

that the Government should go out into research? Mr. Kaplan. I would say both would be my view. Your particular concern at the moment is the possibility of making existing information available and I say there is plenty of that to do. If you got started on that you would have lots of information. It would be my view we ought to go beyond that and develop new information and publish that as

Mr. Myers. You really want the Government, then, to provide this information even though specifications quite often in our Government would be extremely different from that of the general consuming

Mr. KAPLAN. To the extent they are different they shouldn't be public. It could be both extremes.

public. To the extent they are the same, they should be.

Mr. Myers. How will the public accept this? Say a requirement from NASA that some particular radio is going to be used quite different than any general public, but the general public sees NASA use this radio, it must be good. Don't you think there is danger there?

Mr. Kaplan. I have not made myself clear. I am not suggesting that everything the Government buys should be published by brand name. What I am suggesting is that if the Government buys products and has information about products on the market of a kind that will be the same kind of product used in the same way by consumers, then that information should be available.

I am not interested in making the brand of missile information

Mr. Myers. Very few people buy missiles, or specialized radios.

Mr. KAPLAN. Or a whole variety of things that the Government buys that is of no interest to consumers. But I am saying there is a

large body of material that the Government buys that is of direct interest to consumers. It is identical. I use as an example hearing aids and tires and batteries.

Now, it is true the Government may buy truck tires and specialized kinds of tires. That information need not be made available. But the Government also buys ordinary automobile tires of the kind you use on your car. That information should be available. Why not? It knows which tires are better than which. Or, let us put it another way, more simply. It knows the characteristics of certain kinds of tires. It knows some tires will have tread wear twice that of another. That information

It knows that some tires are safe and others are less safe, or safe under certain conditions of use. If you have high-speed driving, perhaps one tire is better than another. That information properly qualified should be made available for people to use in the same way the Government uses it.

Mr. Myers. I don't know anything about tires except that they go flat once in a while, but I am sure there are a lot of differences in tires. Now, a tire they will use at the Indianapolis 500 is fine out there at 100 or 200 miles an hour, but it wouldn't necessarily be good for an Army truck operating in different climates. There is so much difference. How will you arrive at all this?

Mr. Kaplan. Apparently I haven't made myself clear. Let me try again. The Government buys tires, let's say, for the Indianapolis Raceway or for military trucks. It also buys tires for automobiles to be used around the District and to be used in New York and Oklahoma somewhere.

Mr. Myers. At turnpike speeds?

Mr. Kaplan. Ordinary cars to be used for delivering mail, carrying officials from one place to another, to be used in any kind of ordinary Government business. Those uses are not very different from my uses and yours. The requirements of those tires are identical to the requirements you would have for a tire. In fact, we use them in our tests as precise examples of what we think consumers should have in tires. When the Government buys tires for such uses, and they have the information as to the characteristics of those tires, it is my view that that information specified as to the kind of use should be made

Mr. Myers. What worries me is the responsibility of accuracy. What time were you invited to the meeting this morning? Mr. KAPLAN. Ten o'clock.

Mr. Myers. I am on the committee and the Government agency, the committee sent by notice for 10:30. These are one of the things that worries me about the Government doing anything in this area. We are not too accurate.

Mr. ROSENTHAL. You know we ought to have the record straight. When were these notices sent out?

Mr. Barash. Last Friday.

Mr. Rosenthal. They were sent last Friday.

Mr. Myers. At 10:30 a.m., this worries me. Mr. KAPLAN. I make only this point: We can all make mistakes and if we were concerned about the possibility that every action is fraught with the possibility of making a mistake, we would be paralyzed. The fact is that in every single day of our lives we make decisions in spite of the possibility that these decisions could be wrong. I would hope for proper safeguards. We have been in the testing business and putting our necks on the line every single month for 31 years. That is a lot of brands and models over those years. We test thousands every single year. We have the possibility of making a mistake. too.

Mr. Myers. But I hate to lean on the big Government for too much.

This worries me. probably the requirement for a person 85 for a hearing aid would be entirely different from a person of 25, but you mentioned the VA. Last Sunday I spent several hours with Mr. Brickfield who is the Deputy Administrator and Dr. Bounds, who has some responsibility in the medical area, and we spoke of this very thing, not hearing aids, but how they get information that they learn and they gave me numerous examples of how they turn out documents or letters and speeches and other materials go out to all the doctors and numerous writings and they seem to be putting out as much as they know how to get information out of what they have learned; merely apprising, not suggesting they do this, but just saying what they have done.

Mr. Kaplan. The VA does very well with many prosthetic devices. What I am suggesting is, they could do a great deal better in a very simple, direct, effective way. All they need is a directive to do this; that is, publish information they already have by brand and name. They have tested the ABC hearing aid and FGH hearing aid, and XYZ hearing aid. They have information. They tested it in a most reliable way. The industry accepts the methods and the test results. The Government spends hundreds of thousands of dollars based on this information in spite of the possibility of error. This information should also be made available to your constituent who has to spend his \$200 or \$300 or \$400 for a hearing aid and who sometimes buys the one that gets a zero score when he should be buying the one that gets

Mr. Myers. I quite agree with you that the taxpayers are paying for this through our Federal Government and State and local governments and we should offer the experience we have learned. This is true, but what worries me is where we stop. We are not in the endorsing business and this is what we should be very careful we do not get in, the endorsement policy, and it is a very delicate area, it seems to me,

where you stop in responsibility.

This takes me to the same point. Just because it is delicate or difficult is no reason for not starting in this direction, seeing what mistakes we make, pulling back, if necessary. If we take the view it is difficult and therefore let's not start it, we paralyze ourselves to do all kinds of things. It is extremely difficult and nobody knows these difficulties more than I do because I worked in this area a long, long time.

As I say, we put our neck on the line every time we publish. General Electric and Frigidaire and General Motors, and Du Pont and all of the big companies of our country have the opportunity to chop it off every time we say their products are bad. Yet we act this way because we think it is essential to do this. We act as fairly and as well as we

possibly can. Nobody can ever accuse us of not doing the best job one can under these circumstances even though we have made mistakes on occasion.

Mr. Myers. One more question. Do you think the Government should, if we experience a problem, say, with a particular radio of RCA Corp. or XYZ Corp. or any other that the Federal Government should say "This is not a good product," or do you think we should say, "Well, these are the requirements we have learned to be best. A nine-transistor radio is better than a six," for instance.

Mr. KAPLAN. I would say two things. If it is possible to generalize, and in certain areas it is possible, then the Government should do so. The one you gave is not a good example. A nine-transistor radio is not better than a six. The thing to say is precisely that. Don't buy on the basis of the number of transistors. Don't buy on the basis of size. These are things you can say on the basis of a great deal of experience and anybody who has tested radios—and if the GSA buys radios its testers know this and can verify it.

But there are certain other areas where it is possible to generalize. You can say certain things about the characteristics of an AM radio as opposed to FM. I would say that much and where I could not say any more, that would be helpful. I would go beyond that. If I knew that a particular RCA set or GE set or whatever had a certain defi-

Mr. Myers. By brand name? Mr. KAPLAN. I would report the fact. I would say if there is a routine mechanism for doing it, if it is a fair procedure, if you are not seeking out RCA and the system is such that anybody's brand has an equal opportunity of being reported that way, then I see no reason why you should not say it. I again refer to the VA hearing aids as an example of a fair procedure, all the hearing aids are tested, all subjected to the same procedures, they are all subject to the same degree of competence of the Bureau of Standards. What the findings are should be reported. If one turns out to be an electrical hazard or if one turns out to be a hearing aid that would not last more than a week or if one turns out to be completely unsuitable on clinical and medical grounds, then that fact, along with the fact that others do meet

Next week or next month that producer is going to change his product to the point where it now meets the requirements or else he will go out of business. In either case, the general public welfare has been well served. Either he has improved his product or has gone out of business. I submit this is precisely the way things should work. They cannot work that way unless the consumer has the facts. If he does not have the facts, he will buy that very poor hearing aid because

Mr. Myers. Thank you.

Mr. Rosenthal. Thank you very much, Mr. Kaplan. Our next witness is Commissioner H. A. Abersfeller.

Thank you very much for coming here. We appreciate the opportunity to have you appear before the committee. I believe you have a prepared statement and we would appreciate it if you went right

STATEMENT OF COMMISSIONER HEINZ A. ABERSFELLER, FEDERAL SUPPLY SERVICE, GENERAL SERVICES ADMINISTRATION; AC-COMPANIED BY GEORGE W. RITTER, ASSISTANT COMMISSIONER FOR STANDARDS AND QUALITY CONTROL; AND CHARLES TRAVIS, DIRECTOR, STANDARDS DIVISION

Mr. Chairman and members of the subcommittee, I am Heinz A. Mr. ABERSFELLER. Fine, Abersfeller, Commissioner, Federal Supply Service, and I have with me Mr. George W. Ritter, Assistant Commissioner for Standards and Quality Control. On my left, Mr. Charles Travis, Director of our

On behalf of the Administrator of General Services, Lawson B. Standardization Division. Knott, Jr., who has asked me to represent him at this hearing, I wish to express my appreciation for the opportunity afforded by your letter of June 15, 1967, to outline our program for the development of Federal specifications and standards. GSA, in its capacity as a supplier of items to meet the needs of Federal agencies, administers the Federal specifications and standards program, This includes the development and maintenance of Federal specifications and standards for items which we buy and the assignment of responsibility on a project basis to other agencies for the development of Federal specifications and standards commensurate with their technical competence and capacity to perform this function. Approximately 40 percent of the 5,000 existing specifications were developed by GSA. The other 60 percent were developed by other civil agencies and the Department of Defense.

Specifications are generally developed by initially establishing desired performance characteristics. Test methods are then developed by which the stated performance characteristics can be verified. Subsequent to the development of these draft specifications, producers and Government users are consulted, differences, if any, are resolved and the specification is then issued in final form. At this point it is important to point out that Federal specifications are of little or no value to the Federal Government unless accompanied by the ability to test the products involved to assure compliance with the requirements of the specification. Since testing is so essential to Federal procurement we believe that Federal specifications per se are of little or no value to consumers who generally cannot buy the products

This line of reasoning leads to the conclusion that those consumers involved simply to test them. interested in quality rather than price must lean heavily on industry, manufacturers' and dealers' certification of compliance for products, preferably by citing as many do that an item meets or exceeds a Federal specification, an ASTM standard of other specification. We have noted on repeated occasions that manufacturers and distributors rely on this method in guiding the consumer. A good case in point is our recently published specification for safety standards. Automobile manufacturers have advertised that the vehicles they produce meet these standards and of course our testing and inspection procedures have verified this insofar as Government procurements are concerned.

Mr. Chairman, we wish to assure you and members of the committee, that it is our desire to cooperate with this subcommittee in every possible way to the extent of our capabilities and resources. In

fact, if the subcommittee wishes to select a few specific items, we would be pleased to review the applicable specification case folders and provide any available data we have which we feel would be of assistance.

Mr. Chairman, this concludes my prepared statement. My associates and I would be pleased to answer any questions you or members of the subcommittee may have.

Mr. Rosenthal. How many items that the Federal Government purchases and tests would you say are similar items that the private consumer purchases?

Mr. Abersfeller. About a thousand items.

Mr. Rosenthal. And considerable expense and expertise and scientific knowledge goes into the testing of these items before the Government either draws the specifications or makes the purchase?

Mr. Abersfeller. Well, considerable expense goes in at a point in time. It varies. We may test them as an example or provide for test methods after we develop a specification in initial draft stages.

Mr. Rosenthal. Wouldn't it be useful to the American consumer if some of the knowledge and expertise you have were made available to him in some form?

Mr. Abersfeller. We agree that the consumer needs more information. Our problem here is the form that this should take in terms of what we could provide.

As Mr. Kaplan stated, there is no question but what we could set forth for these roughly thousand items the specific requirements a consumer should look for. Unfortunately that, in my view, isn't enough. The consumer must have some assurance by way of certification, his own ability to test or his own book of knowledge of experience to be certain the product he buys does possess the characteristics. It is the form in which this information might take that is dif-

Mr. Rosenthal. In other words you are sympathetic to the program of making the information available. You have trouble deter-

Mr. Abersfeller. Yes. Simply to add on to that whether there is in fact meaningful information which might be made available.

By way of example let me point out that we do pretest, as Mr. Kaplan indicated, such things as antifreeze and other items that we place on qualified-products lists. In the first instance, these are not representative of the total products available. We simply test those which producers submit to us since they must pay a charge for this kind of test and presumably it is only for those that desire to do business with the Federal Government, which is not necessarily all the producers of a given product. These are available to the public. Unfortunately the problem we face is how does the public know they are

We get back again to the GPO catalog and how many people subscribe to that and really have knowledge of its availability. The qualified-product lists are available to anyone who wants a copy. Yet that is not all-encompassing. I can't say as an example of the four or five producers who qualified on antifreeze that they are the only ones with a good product. I am willing to say, of those we have tested,

Mr. Rosenthal. How much would you say that the GSA spends a year on testing consumer-related products such as tires, antifreeze,

Mr. Abersfeller. We don't have a precise figure. I would suspect pencils, pens, things of that type?

in the ball park of three-quarters of a million dollars. Mr. ROSENTHAL. And if we could overcome the doubts as to the type or the method of making this information available, why couldn't we begin a pilot program on some half dozen or a dozen products and let the public have the performance information that

Mr. Abersfeller. Well, again Mr. Chairman the information we have is not as finite as representing that this product or that product is better than the other, except in those instances where we have gone

through testing for a qualified-products list. Certainly there is no objection on our part to making that information available. It is available now. We have roughly a hundred of these

Mr. ROSENTHAL. GSA, for example, finds five antifreezes satisfac-QPL's that could be made available. tory for use in automobiles. What is wrong with making that in-

Mr. Abersfeller. Nothing. It is now available to anyone who formation available? chooses to buy it. It is available under our regular specifications distribution program. In that particular case, in the case of antifreeze, there are four firms that have qualified under antifreeze, ethylene glycol inhibitive type 2.

That information is in the public domain? Mr. Rosenthal.

Mr. Rosenthal. If someone, for example, in the President's Committee on Consumer Interests, wanted to polish the presentation of that up and put it out in a small booklet form for consumers you would make it available?

Mr. Rosenthal. On what other such items do you think this could Mr. Abersfeller, Absolutely.

Mr. ABERSFELLER. We have quite a range of items starting with antifreeze, batteries, sawblades, brushes, blasting caps, material be accomplished?

Let me explain why we have qualified products lists, Mr. Chairman. clamps, and so forth. These are for items for which the normal testing time prior to acceptance is too long for the Government to tolerate doing business with the private sector of the economy, neither can the private sector of the economy stand the length of time it would take to test the item to determine whether it is what we wanted or not.

We set up these lists and the only people who can get a contract on

Government business are represented on those lists.

Mr. Rosenthal. Your agency does have a wealth of material and information that could be of use to the consumer. We are in agreement there.

Mr. Abersfeller. We have certainly the qualified products list

Mr. Rosenthal. Do you know that you are the only agency in the which would be of help, yes. Federal Government with knowledge of use to consumers that has no publication of any kind identified on behalf of the consumer interest? Mr. ABERSFELLER. I didn't know that, but it may well be.

Mr. ROSENTHAL. That fact is contained in the final report of the Interdepartmental Study Group for Consumer Standards, dated

What distresses me particularly is that you probably have more information useful to consumers than anyone else and yet you are the only agency that doesn't seem to have the thrust or the spirit of trying to be of some use to the consumer. I concede that is not your main mission, but as Mr. Kaplan said, there is a spin-off of information available from the work you do that with virtually no cost and only a modest effort could be made available to the general public. Isn't there some way we could start to do that?

Mr. Abersfeller. Mr. Chairman, there very definitely is. This gets to the heart of the point we are talking about. This is setting forth for the GSA such a program which is not now a part of our program. The types of things you talk about certainly are well within the realm of accomplishment. Especially by assembling these QPL's and making them available to consumers in a bound volume of some kind. This takes money and we are not prepared to handle it. If we have the mandate from the Congress to get into this kind of action and are provided with the necessary resources, yes, sir, it can be done.

Mr. Rosenthal. Let me take the area of safety. I am told that in your specifications for electrical appliances, coffeemakers, that you insist the specification require an elastic electrical cord, the kind that pulls back between the socket and appliance. It prevents a dangling 3 or 4 feet of electric cord. The kind of thing youngsters would pull

at if the cord were hanging over the kitchen table.

Why can't we make that important information available to the consumer so he could look for that kind of cord when he buys an elec-

Mr. ABERSFELLER. I don't know that we do that on all of our elec-

trical appliances.

Mr. Travis. There is a standard that applies to all the cords for the appliances. The trend has been toward the retractable type. This doesn't mean there won't be applications for the nonretractable type depending upon the location of the device and its relationship to the outlet in the wall, for example.

Mr. Rosenthal. If the Federal Government without children worries about that, the American housewife should be especially worried about it and she should know that the Federal Government is so concerned that they won't buy anything without a retractable cord and maybe that is a good example for her to follow.

If that information were made available to the public, you would be rendering a service based on information you now have and with little extra cost of any kind.

Mr. ABERSFELLER. In that particular instance and I am not knowledgeable of the background as to why we establish such a standard, but let me say this—I think Mr. Wydler mentioned it earlier—these things don't go unchallenged by the industry. The actions we take have a subtle impact and while this may for some particular reason meet the Federal Government's requirements, I am not prepared to say that straight cords or those without that characteristic are in fact in-

Mr. ROSENTHAL. They may not be inherently unsafe, but the Injury Control Center of the Public Health Service reports that 35,000 persons were injured last year by pulling cords of electrical appliances. That is a matter of public concern. That is a matter we should all think about.

If you are worried only about industry's reaction to that, we don't

Mr. ABERSFELLER. I am not concerned about industry reaction if I have our eye on the ball. am right. I need to have enough research to be certain that we are prov-

ing a point.

Mr. Rosenthal. One and one make two. Thirty-five thousand persons are injured each year by pulling cords of electrical appliances.

GSA doesn't buy anything without a retractable cord and you just look saids and see "The work of the wore look aside and say "we won't tell anybody about it." That doesn't make sense.

Mr. ABERSFELLER. Is it true we don't buy anything that doesn't have

Mr. Travis. I don't have the specifications here. Mr. ABERSFELLER. I don't think that is so, but I will examine it. In a retractable cord? any event, I think we would agree that retractable cords as a general thing at least in logic as I analyze it would be better than cords that weren't retractable, but certainly we could examine this further to determine whether this is in fact something that would be helpful to the consumer, again provided we had the resources to apply to that particular aspect.

(Subsequently the following information was received for the

record:)

GENERAL SERVICES ADMINISTRATION, Washington, D.C., July 21, 1967.

Hon. Benjamin S. Rosenthal, Chairman, Special Inquiry on Consumer Representation in the Federal Govern-Chairman, Special Inquiry on Consumer Representation of Consument Operations ment, Special Studies Subcommittee, Committee on Government Operations,

DEAR MR. ROSENTHAL: In the hearings held by your subcommittee on June 27, 1967, inquiries were made as to the policy of the General Services Administration with regard to the procurement of coiled cords on small electrical appliances and wringer-type washing machines. We are pleased to provide information on both

A review of Federal specifications for small electrical appliances reveals that in no case do we require the use of coiled cords. The specifications require, in of these items for the record. general, that the cords must be a minimum of 6 feet long; be of three conductor construction (the third conductor is the grounding conductor); and be equipped with a standard 125-volt, 15-ampere, 3-prong male plug connector. The cord and the connecter must comply with the applicable standard of the Underwriters'

In connection with the use of coiled cords, our examination revealed that this Laboratories, Inc.

type of cord has never been adopted as standard by the small appliance industry, and its cost is approximately 1½ times that of the standard cord.

As a result of the discussion in the hearings of the requirement that coiled and the result of the discussion in the hearings of the requirement. As a result of the discussion in the nearings of the requirement that coiled cords be used in coffeemakers purchased by the Government, a detailed analysis was made of Federal Specification GG-C-531b under which coffeemakers are purchased. This specification requires the use of an HSJ flexible heater cord with a minimum length of 3½ feet. The HSJ designation of the cord is an Underwriters' code specifying a cord used with appliances containing heating elements writers' code specifying a cord used with appliances containing heating elements and is insulated specially for that purpose. The term "flexible" means not that the cord is coiled cord but is flexible in contrast to rioid conduit the cord is coiled cord but is flexible in contrast to rigid conduit.

With regard to the inquiry on washing machines, Interim Federal Specification 00-W-00860b (GSA-FSS), dated November 10, 1966, covers four types of washing machines; wringer, semiautomatic, automatic, and a combination washer-dryer. Government agencies may requisition any of the types of washing machines covered by the specification which most adequately meet their individual needs.

During fiscal year 1967, the General Services Administration procured 2,355 wringer-type washing machines for delivery to military activities overseas. It is a pleasure to supply this information to your subcommittee.

LAWSON B. KNOTT, Jr., Administrator. Mr. Rosenthal. The mothers of the 35,000 injured children are very unhappy you didn't have the resources to tell them about this. Now, another item, a safety item: Do you know whether GSA specifications permit you to buy wringer-type washing machines?

Mr. Abersfeller. No, I don't. Charles, do you?

Mr. Travis. There was a provision for a wringer washing machine. Again, this is one we don't have a copy of the spec with us.

Mr. ROSENTHAL. Do we have that spec?

Mr. Barash. Not that particular spec.

Mr. Abersfeller. We can examine that and provide it for the record. (Information from the specification concerning only the wringer washing machine follows:)

00-W-0086b (GSA-FSS)

November 10, 1966

SUPERSEDING Int. Fed. Spec. 00-W-00860a (GSA-FSS)

INTERIM FEDERAL SPECIFICATIONS

WASHING MACHINE, HOUSEHOLD LAUNDRY, POWER OPERATED; AND DRYING TUMBLER, HOUSEHOLD LAUNDRY (ELECTRIC OR GAS); AND WASHER-DRYER (COMBINED), HOUSE-

This Interim Federal Specification was developed by the General Services Administration, Federal Supply Service, Standardization Division, Washington, D.C., 20406, based upon currently available technical information. It is recommended that Federal agencies use it in procurement and forward recommendations for changes to the preparing activity at the address shown above. Underwriters Laboratories, Inc. (UL) Standard

UL 560. Home-Laundry Equipment.

(Application for copies should be addressed to the Underwriters Laboratories, Inc., 207 East Ohio Street, Chicago, Ill. 60611).

Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.

3.1 Label of Underwriters Laboratories, Inc.—The contractor shall submit to the contracting agency proof that the machine he proposes to supply under this specification conforms to the requirements of the Underwriters Laboratories, Inc., Standard No. 560. Home Laundry Equipment. The label of the Underwriters Laboratories, Inc., may be accepted as evidence that the machine conforms to this requirement. In lieu of the label, the contractor may submit independent proof, satisfactory to the contracting agency, that the machine conforms to the applicable requirements of the published standard, including methods of tests of the

3.15 Type I, class 1.—The type I, class 1 wringer washing machine (figure 1) shall wash a minimum of 8 pounds of clothes in a single load. The machine shall be equipped with a timer that shall automatically stop the machine when washing is completed. The wringer shall wring the clothes to a damp dry state when put through the wringer after washing is completed. The machine shall be equipped

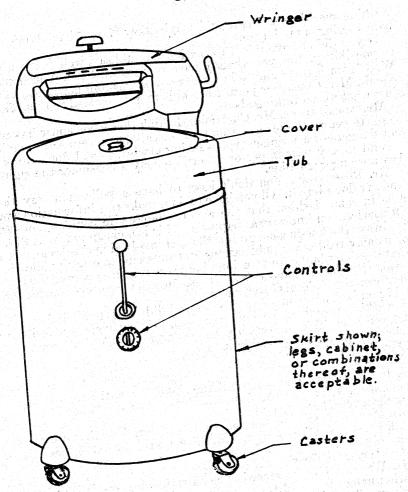


Figure 1. - Type I, class 1 wringer washing machine.

3.15.1. Plumbing requirements.—The wringer washing machine shall be of the type filled manually and shall have a drain outlet from which the tub is to be drained. The drain hose shall comply with 3.14.1. The appliance shall have either a pump or a gravity drain as specified. (See 6.2.)

3.15.1.2. Electrical requirements.—Unless otherwise specified (see 6.2), the wringer washing machine shall operate on 120 volts, 15 amps., 60 cycles, single

3.15.1.3. Cabinet. The wringer washing machine cabinet shall be made of steel and finished as specified in 3.5. The height of the cabinet including wringer when mounted on casters shall not exceed 50 inches.

Mr. Rosenthal. My information is, and I will give you a chance to rebut this if I am wrong, that GSA doesn't permit the purchasing of wringer-type washing machines. I might tell you that last year 100,000 persons were hurt in wringer washing machine accidents. Here is an ad we cut out from a local Washington newspaper only the other day advertising a wringer-type washing machine.

Now, it just seems to me that those 100,000 persons would have been happy to know that their Government doesn't think wringer-type washing machines are safe and maybe they should have known this

If you didn't have this information I would say, well, it is not your responsibility. But you already have this information. You don't let WAC's wash their undies in wringer-type washing machines, so why should Mrs. Consumer permit her kids to get involved in this. This is

Mr. Abersfeller. Mr. Chairman, I think that a consumer has every right to get all the information that is available in terms of the inherent dangers of a wringer-type washing machine, but I don't think we should in any way imply or otherwise deny a consumer the right to buy a wringer machine.

Mr. Rosenthal. You don't have to have a policeman stay there and say don't buy it. All you have to do is make this information available in some fashion that the average housewife could understand. Otherwise, you know what happens? This is a cheap machine, \$79. It is always the low-income groups that get involved in this because some of us may read other publications and subscribe to other publications that say don't buy it and we don't but there is a large part of the population that doesn't have access to these facts. Those people have a right to rely on the Federal Government.

If you had never made these tests and didn't have this information on washing machines, I would say, well, it is not your responsibility. But you have. Take it from me that your specs don't allow you to buy wringer-type washing machines.

Mr. WYDLER. I want to thank you for your statement. It was short and to the point. You were talking about the antifreezes that you recommend. What are the four antifreezes you recommend? Let me hear the names. I am curious.

Mr. Abersfeller. Let me correct one point. Not that we recommend. These are of those we tested, these are the ones acceptable to us.

Mr. Myers. Off the record?

Mr. Wydler. On the record. The fact that we are failing here to mention names is one of the things most significant to me about these hearings. Though we have been talking about consumer products for nearly 2 hours now, we haven't mentioned any by name. We are afraid to mention names. I would like to hear a few mentioned.

Mr. Abersfeller. Manufacturers' designations are Prestone, Union Carbide Corp. These also qualify under their designation of UC300, UC375, and Carbide G109, which are not brand names as Prestone but other formulations. The Olin Organics Division-

Mr. Wydler. Just give me the brand names.

Mr. Abersfeller. Permanent Pyro. Also qualifying under OM7593—B, and Pyro Permanent (1959). Texaco Co. under T-5887, OM75, 93-B, B1410-5. Also under the TX5888, B1496-5. Also under Startex, JB1259-5 and Jefferson Chemical Co. under Jefferson J53.

Mr. Wydler. That wouldn't mean for example that the Gulf Oil Co. doesn't sell some permanent-type antifreeze just as good as those,

MR. ABERSFELLER. You are correct.

Mr. Wydler. Yet if we were to publish those four names as brand names in a publication which had on the front the U.S. seal and inside

said in very careful words what you are saying, it is not a recommendation, it is merely meaning these particular items are qualified, I think most people when they read that would look at the publication, the seal, and read the names and say these are the four best permanenttype antifreezes that are in the country. That would be what most people would almost inevitably come to the conclusion when they read that.

As a result of that, and this is what I am really thinking of, it would mean in effect that every antifreeze manufacturer in the country would have to come to you to be qualified right away because they would want to get their name on that list. They would say we have to do that. They would all be in and you would have a couple of hundred applications the very next day, wouldn't you, to get on that

Mr. ABERSFELLER. Certainly that would be important. There are qualifying list?

Mr. ROSENTHAL. There are eight rather than four. Almost every antifreeze manufacturer in the country is on your list, if not every one. others.

Mr. ABERSFELLER. I don't think so.

Mr. Rosenthal. Anyone we ever heard of is. Mr. Abersfeller. I am talking about antifreezes available for sale. Sometimes they are marketed under other brand names. But Gulf is on

Mr. Wydler. Practically everyone would be forced—not just about there and so is Zerex and Windo. antifreezes but this would become practically the rule of the game. You would have to become a Government-qualified product manufacturer, even if you didn't want to sell to the Government, because you would have to get your name on these lists if they were to be

Mr. Abersfeller. I would agree it carries that connotation. If I may digress to tell you a story supporting that contention, a short time distributed. ago we had some difficulty with a major manufacturer of copying equipment in our negotiation process. We weren't able to get the kind of prices we thought we should have. As a result, in investigation we found nine agencies had contracted independently with this particular firm. So very quietly we thought—at least I sent a letter to each of the nine agencies and explained the circumstances I thought rather clearly and asked them to cancel that contract. So far as we have been able to tell, this letter of mine got in the hands of a New York broker and the stock the next day dropped six points.

Now, there was no implication at all that this product was unsatisfactory. It is quite a satisfactory product. The problem was simply one of price. Yet that letter seemed to have that kind of impact.

This is one of the reasons that we are so deeply concerned about what we publish being proper and right, because the influence of the Federal Government is substantial in the minds of a great many people and its insistence or statement, even by implication, that a particular product does or doesn't have certain characteristics is carried forth I think with some evidence that this is the product to buy.

In our advertising done by contractors that do business with the Federal Government we do not allow any which would indicate a sponsorship or endorsement of the product, primarily because of the reasons that I just mentioned. We don't want to get involved in saying that is the only product which will meet our particular peculiar requirements.

Mr. Wydler. You say about a thousand specifications you have would be of interest to consumers. Yet you only say you have about a hun-Mr. Abersfeller. Qualified products lists.

Mr. Wydler. What are the other 900 items?

Mr. Abersfeller. They range all the way from things that would be used in the household like scouring powder, brooms, brushes, mops, detergents, things of that nature where the testing requirements are not prolonged and can be tested in a relatively short period of time.

Mr. Wydler. Would you have objection to making those 900 public? Mr. Abersfeller. There is no similar information on that. The only information that is available there, and certainly these are available—I underscore this—the information is available to the public in terms of the characteristics which we consider to be important. The consumer has a very difficult, if not impossible, time in my view, as Mr. Kaplan stated, of translating that information, that what he ought to have to what he is going to get from the fellow he deals with.

Mr. Wydler. He would have to go practically into the supermarket with what you had written down as to what you want in a scouring powder and take the can, and if they happen to have the contents on it, compare the two to see whether this was-

Mr. Abersfeller. Unfortuately our terminology isn't that clear to the layman. It is written in rather scientific language and it would take a very learned individual, and with some test equipment, to translate these requirements into what is on the container. In fact, the information is simply not on the container. The information that is in the specification.

For instance, we have one on bananas and oranges, as you mentioned

earlier.

Mr. Rosenthal. He needs the one on both of those. [Laughter.] Mr. Abersfeller. To give your wife the specifications on those two products, and they might not be written in the complicated language that a highly technical item would be, but we have specifications on fresh fruit and vegetables as we have on very complex items. Again here the consumer is simply made aware of the characteristics to look for if he can translate the characteristics.

I brought with me today a sample of scouring powder. The committee has the specifications, and, gentlemen, in all fairness to you in your eminent knowledge, I defy you to determine by observation that this item complies with the specification.

Mr. Rosenthal. Could someone polish that specification you have down to laymanlike understanding?

Mr. ABERSFELLER. We have tried desperately to do this but we don't think we can. can.

Mr. Wydler. This doesn't have on it what is in it. All I see is the

Mr. Abersfeller. That's right. It is in compliance with Federal specification so and so. Here is a liquid glass cleaner. Have you ever heard of the brand name? This is what we buy. This meets our requirements as stated in the specification as to what it will be.

Mr. Wydler. Can you get it in a spray can or one of these automatic things that you push down?

Mr. Wydler. My wife would never buy this. I could tell you that. Mr. Abersfeller. We don't do that. I know. She likes that convenience of the container. In that case she

Mr. Abersfeller. The only point I would make here was there probably buys aaren't definitive scientific termed characteristics that we spell out on each of those four items that are in front of you-I am a consumer, too. I buy by touch and feel like everyone else, so I am not unmindful of the consumer's problem. I am married, too, and we recently bought carpeting. My wife has long fingernails. That is how we did it. She makes a judgment as to the density and other things by her ability to get those nails down to the bottom of the carpeting. She went around and put her hand in a couple hundred samples of carpeting and found what she was satisfied with.

Mr. Abersfeller. This is the point I am trying to make. I am sup-Mr. Myers. Is this GSA specification? posed to have the reservoir of all this knowledge and I haven't been able to find use for it yet as a consumer either, because I can't translate this information into anything meaningful. This is not to deny the fact that there is in the QPL area some information which the public could use. At least as a guide. If it were properly qualified and properly understood, certainly that information is basic and could be used.

Mr. Wydler. There are other organizations, such as Mr. Kaplan's, that could take spec information and translate it into useful information for consumers. That would be entirely possible. I do not know how useful it would be to his organization or organizations of that

type but it would seem to me that that could be done. Mr. ABERSFELLER. I think, with all due deference to Mr. Kaplan, who is still here to defend himself, that his analysis of those products that are good, better, and best is based on his ability to test characteristics which he and his firm have established in terms of deciding their merits, but again we get back to the consumer. Without some kind of comparative testing by independent organizations such as his or Government organizations, it is, in my view, virtually impossible for the consumer to take specifications forth into the marketplace and make a proper judgment as to whether or not the characteristics which he has agreed with and which he is seeking now are, in fact, in the product he proposes to buy. So often he succumbs to statements of salesmen or hucksters that are involved in selling products—or he gets a simple assurance that "Yes, this item has every characteristic you are seeking." There is no further way of checking it out.

Mr. Wydler. You could certainly make the statement that this product meets Federal Government standards. That, you could make. Whether that meant anything particularly may not be—that is the next question—it may not be important to the consumer that it meets Federal Government standards. He may not be interested in those qualities at all in the particular case. This is the next problem that

Mr. ABERSFELLER. This is the other side of the coin. In some cases for instance, you can pick a Sears, Roebuck or Montgomery Ward you will have. catalog and you will find they advertise and publish under the descrip-

tion of some of their items that this meets Federal spec so and so. There is some assurance to the consumer that at least the Government has decreed that this is the item they are buying.

Now, as you point out, the consumer, if he knew what those characteristics were, may not be interested in that. There are varieties of needs. But again, I think it is important that we do encourage that

We think, in the final analysis, that some kind of either voluntary endorsement of Federal standards or ASTM standards or other specifications which are available you have the Society of Automotive Engineers standards and specifications, too, that could be relied on, we think, from a certification point of view is the answer. I do not want to sound too discouraging because, as a consumer and Government official, I am dedicated to the proposition that consumers need more information. There is a real question as to how one gets this to

For instance, even if we were to do the things the chairman has suggested—binding up these QPL's and putting them in some kind of booklet how do you then get it in front of the public that this is available on subscription or free or by whatever way we decide to do it? How does everyone in the country who might have a need for this know that they have this available?

Mr. Rosenthal. Issue a press release.

Mr. ABERSFELLER. This is certainly a way of doing it. This would get to a large segment of the public provided the papers carried the

Mr. Chairman, we have offices in 10 cities throughout the country where we try to help not only the businessman but the consuming public and I think it is common knowledge among those in Government that the Government Printing Office has available a very elaborate index of material which is available to anyone upon subscription, but if you get out in the boondocks and ask anyone if they ever heard of or learned of this, they do not know about it. This is why so often I have heard friends of mine in the Congress relate to me the many requests they get for information, as an example, a pamphlet that seemed to come up more than any other one is "Baby Care," that I understand the Department of Agriculture puts out so, instead of going to other places, it seemed more convenient to write the Congress-

It seems to me this breaks down to two problems: One, what information do we have? Certainly, professional people from the consumer's point of view such as Mr. Kaplan could, I think, contribute a great deal to this. What do we have that consumers ought to know? Once having established that, how do you get it out and somehow publicize it so the consumer will be able to acquire it for his use?

Mr. WYDLER. Thank you.

Mr. Rosenthal. Mr. Myers?

Mr. Myers. I have just a couple of quick questions.

Mr. Abersfeller, in your statement you talk about setting up specifications and you test them and then make recommendations; is that right? How often are the products satisfactory after you have gone through all this procedure? How often are they not satisfactory, I should say?

Mr. ABERSFELLER. This is the procedure incident to setting up a

Upon delivery, of course, each of the products vended to us is tested. Federal specification I was referring to. Last year, in dollar volume, the rejects amounted to about \$14 million out of a total procurement of around \$600 million.

Mr. Myers. Not too great a percentage, then? Mr. Abersfeller. We deal with a very wide range of people and we

believe this is an essential protective device. Mr. Myers. I believe you suggested that your specifications, GSA, would not be the same in very many cases as what the general consumer would need; am I correct in that?

Mr. ABERSFELLER. As I said, I estimated about 1,000. We think, by and large, with some expert and professional modification, about 1,000

Mr. Myers. The antifreeze you were talking about, is this antifreeze would be usable by the consumer. used in different climates? Do all types of equipment use the same antifreeze? Does a tank operating in the Arctic use the same type of antifreeze that a jeep would in Fort Benning, Ga?

Mr. ABERSFELLER. Presuming antifreeze was needed there; it does,

Mr. Myers The same specs?

Mr. Myers. But then, at the same time, it is possible that if you did Mr. ABERSFELLER. I would say so. release these names—does Prestone or some of these manufacturers make antifreeze for other chainstores, and so forth? That is a danger

Mr. ABERSFELLER. And they sell it for less. That is a danger, They also might make it of a lesser quality. I do not know. We have not

Mr. Myers. I am sure you do not test all the products that could examined that particular line-

Mr. Abersfeller. Absolutely not. As Mr. Wydler said before, if this became a practice and did affect the business of the manufacturers, we provide would be floundering under a tremendous amount of pressure—not

The unfortunate thing is: Not having the resources to do this makes only pressure but requests to test. it extremely difficult to be fair to everyone. This again is why I happen to be dedicated to the proposition that we must do something about this but we ought to be able to fund it and finance it and not do it in bits and pieces.

Mr. Myers. Every agency would not have the same specification, would it? For example, the retractable cord we spoke of, very few agencies—or none that I know of—hire children, so this would not be

Mr. ABERSFELLER. The specification we are talking about does deal applicable here. with every agency. We are developing Federal specs and agencies do not generally buy things on their own. They come to us for procure-

Mr. Myers. You do not buy, then, for the Department of Defense ment or we procure for them.

Mr. ABERSFELLER. Yes, we would buy—for instance, in the houseor NASA or people like this, do you? hold appliance area, we buy all the items required by the Federal Government as a total, including Defense, and on the common products we buy the total Government requirement—buy and distribute it.

Mr. Myers. I have seen advertisements where producers say they provide all this equipment for NASA and they use it; do they not? You

Mr. Abersfeller. There is a variety of Government policies on that particular point of view; yes, sir. Our policy happens to be that we do not allow advertising which would give the implication to the public

Mr. Myers. You feel it would be unfair to use your recommenda-

ions, is that correct, in this area?

Mr. Abersfeller. I would have no objection to the qualified products list being distributed—it is now made available to the public as it is—as long as it is understood as to what it is, that it represents only a partial evaluation of all the products that could be produced.

Mr. Myers. You see nothing wrong with releasing this list.
Mr. Abersfeller. Not at all.

Mr. Myers. Thank you.

Mr. ROSENTHAL. I think Mr. Barash has some questions. Mr. Barash. I have a couple of quick questions.

You seem to suggest in your statement that consumers have to rely basically on industry's and manufacturers' certifications of compliance for their products and you go on to point out, as an example, your standards on automobile safety and the fact that certain automobile manufacturers have advertised that their vehicles meet these require-

I would like to read to you from the Wall Street Journal of June 22 of this year a report on the new automobile safety agency headed by Dr. Haddon, and it states here:

The Bureau plans eventually to compile and publish frequently updated reports designed to help consumers compare the safety features of competing makes and models. The industry is going to be operating in a goldfish bowl, Dr. Haddon says, with the public aware of what each manufacturer is doing or not doing to make cars safer.

Apparently, then, Dr. Haddon does not agree with your philosophy that you should let the manufacturers decide how much information

on automobile safety will be available to the public.

You also say that the specifications are of little or no value to consumers unless accompanied by the ability to test the products. Then you point out as an illustration your scouring cleanser and you wonder how a consumer could possibly check to see if the specifications are met by the products in his local supermarket.

It is true, however, that you have two different specifications on scouring powder: One, on glass-cleaning scouring powder and a second

Mr. Wydler. One with bleach and one without bleach.

Mr. Barash. It would be interesting to know—and perhaps you might be able to tell us—why you specify a separate scouring powder for glass cleaning on the one hand and another for regular cleaning on the other, or one with and one without bleach.

You also state in your scouring powder spec that the product shall contain no ammonia-forming compounds.

It might be interesting to the consumer to know she should not use a regular scouring powder on glass. It might be interesting for them to know that for various reasons, which I am sure you would be able

to explain to consumers, they should not use scouring powders with

What I am trying to suggest is that it is not just your qualified ammonia-forming compounds. products list that might be valuable. I have gone through some of your specifications on consumer-type items and, as a layman, I have extracted information which I think the average consumer would find very useful. I think a technical writer could probably perform that

For example, the flexible cord is one item. This is something the function a great deal more efficiently. consumer can visualize; whether the coffee urn they want to buy has that particular flexible cord. You also require in your coffeemaker specification that it conform to the standards of the Underwriters Laboratories. I think they have a label of some kind that is affixed to the product. This is something else that might be interesting to the consumer; you feel it is important that your product conform to the Underwriters Laboratories standards. Perhaps it would also be impor-

On the subject, for example, of lawnmowers, which consumers buy tant for the consumer to know that. all the time, you require various kinds of safety features. You require, for example, on the subject of balance, that lawnmowers shall not tip over of their own accord when placed in either direction of travel across a 30° slope. I have a 30° slope on my property. You specify in addition that the tire of the lawnmower be of a certain size because anything smaller than the size you specify would get stuck, supporting the heavy equipment, in every rut in your lawn. I mention these things because these are just a sample of the kinds of information that I have abstracted from your specifications as a layman and I am wondering whether it is, in fact, true that your specifications are valueless to the consumer.

Mr. Abersfeller. Well, let me respond in sequence as I recall it. Let me first explain my philosophy on this thing because I didn't intend to convey the impression that I dare say you got. I do not suggest there is not some solution to this particular problem. I tried to encourage that there is. The point I made in my statement was more directed to what the consumer needs to do today to get the information. This is not to suggest, when the committee reacts to this particular problem and if it should decide that additional information can be made available in other ways, that I would not encourage and endorse

that. In fact, I do, if this makes that statement clearer.

I am simply trying to state that the consumer today must pretty much rely on brand names he has some wealth of information on, buys repetitively, or he must rely on the certification of the industry.

Secondly, with regard to the scouring powder problem as to why we have different brands and different characteristics, the glass-cleaning powder is a finer powder. In fact, it is of a somewhat substantially different composition than you notice in the regular cleaning powder. I would assume that every housewife knows that she ought not use regular scouring powder on windows. Now, the reason for this, of course, is that the regular scouring powder is generally—and I want to qualify this because we have not tested every scouring powder on the market; there may be one that does both—but anyway, as a general rule, the normal pot and pan scouring powder is more abrasive and is somewhat thicker—I guess that is the proper term—in the sieve thickness than the glass-cleaning powder would be.

As far as the bleach or nonbleach characteristics are concerned, this deals primarily with whether you are doing pots and pans or tiles and so forth. The bleach in our scouring powder, as it is in most products that have bleach in them sold commercially, is intended primarily for the cleaning of sinks and other things where stains occur and the bleach

With regard to your observation on lawnmowers, certainly if an individual had a sloping area such as you have in your particular yard, I think you would be very concerned that it not tip. Frankly, I am not. I have a different problem from you, and this is my point. My yard is reasonably level and I would not go to the additional expense of a nontipping lawnmower. It does not mean that much to me. In addition, my lawn does not have any ruts in it and I have bought a lawnmower which would not qualify under our specification and I am

I do not think we ought to impose on people the additional expense attendant with doing what the government thinks is necessary. Bear in mind what we are trying to do in this endeavor of ours. It is to cut down on the number of items we have in our system. As we said before, true, some lawns may be level and some sloping, some rutty and everything else, but we only have one style mower; not one to suit everyone's purpose. It is also common knowledge that government property does not receive the care and attention you and I give our personal property. Therefore, it must be built differently. It must be able to withstand a wide number of people operating it, not all of whom necessarily care much about that particular piece of equipment.

Again, we have this information available and, certainly, if the committee, in its wisdom, feels that the information that you have been able to garner from this hearing would be helpful. I want to assure the committee we stand ready and able to help to the extent we can.

Mr. Barash. With your permission, Mr. Chairman, might we insert in the appendix to the record the abstracts of the specifications that the staff has prepared so that the public might judge whether there is any valuable information contained within those specifications?

Mr. ROSENTHAL. I think it would be useful.

(The information referred to can be found in the appendix.)

Mr. Barash. There is a publication of the General Services Administration for the guidance, I gather, of other Federal agencies entitled "Cleaning, Waxing, and Maintenance of Soft Floors," I would just like to add the observation that I found a wealth of material in this particular booklet and I wonder whether similar booklets might not be prepared on other products for the use of consumers.

Mr. ROSENTHAL. Is this publication only for the Federal Government? It is not for general consumption?

Mr. Abersfeller. No, although we would be pleased to make it available.

Mr. Rosenthal. If someone would pick up the tab for the printing. Mr. Abersfeller. Yes.

Mr. Rosenthal. Thank you very much. The subcommittee stands adjourned until tomorrow at 1:30. (Whereupon, at 12:20 p.m., the subcommittee was adjourned.)

CONSUMER INFORMATION RESPONSIBILITIES OF THE FEDERAL GOVERNMENT

WEDNESDAY, JUNE 28, 1967

House of Representatives, SPECIAL STUDIES SUBCOMMITTEE OF THE COMMITTEE ON GOVERNMENT OPERATIONS, Washington, D.C.

The subcommittee met, pursuant to notice, at 2:37 p.m., in room 2203, Rayburn Building, Hon. Benjamin S. Rosenthal, presiding.

Staff present: James A. Lanigan, general counsel full committee; Present: Messrs. Rosenthal and Myers. Peter Barash, legal assistant; I. Warren Harrison, legal assistant; and William H. Copenhaver, minority counsel.

Mr. ROSENTHAL. The subcommittee will be in order.

This is a continuation of the hearings of the Special Inquiry on Consumer Representation in the Federal Government of the Special Studies Subcommittee of the Committee on Government Operations.

Our first witness this afternoon is Mr. M. W. Jensen, manager, Engineering Standards, National Bureau of Standards, Department of

Mr. Jensen, perhaps your colleagues would want to join you at the table, and you might for the record identify them by name and what Commerce. position they hold.

STATEMENT OF M. W. JENSEN, MANAGER, ENGINEERING STAND-ARDS, NATIONAL BUREAU OF STANDARDS, DEPARTMENT OF COMMERCE; ACCOMPANIED BY ALLEN J. FARRAR, BUREAU LEGAL ADVISER; AND C. N. COATES, ASSISTANT TO THE DIRECTOR

Mr. Jensen. Thank you very much, Mr. Chairman. I am particularly grateful for your being willing to hear me this afternoon. Your hearings are being held right in the center of our National Conference on

My name is Malcolm W. Jensen, manager, Engineering Standards, Weights and Measures. National Bureau of Standards. I have with me the Bureau legal adviser, Allen Farrar, and Assistant to the Director, C. N. Coates.

Mr. Chairman, I think it is important at the outset to point out that the National Bureau of Standards, since its inception in 1901, has served primarily science, industry, and other Government agencies, including the States. We have very little contact—directly, that is with the consumer. Indirectly of course we have an enormous impact, especially in the role we play in the national measurement system.

The four major programs of the Bureau are: Basic measurement standards, engineering measurement and standards, properties of mat-

ter and materials, technical assistance to science, industry, and government.

These are described briefly in a brochure which I have submitted for the files of the committee.

The consumer benefits ultimately from all of these programs, but I emphasize indirectly.

Perhaps a crude analogy will illustrate the point. A steel manufacturer supplies an automobile manufacturing company with steel. The latter shapes this steel through a series of complicated processes into the automobile that the consumer buys. Obviously, the consumer cannot use the raw steel, but he can drive the car from which it is made.

We do have certain outputs that can be used by the consumer directly, and I will discuss these a bit later.

The second point I should like to make is that we are not by any means a major testing facility. Our testing program constitutes a very small fraction of our work—less than 2 percent of our technical activities. And even this small fraction is done mainly for other government agencies. For example, we do general tests on materials and components for such agencies as the General Services Administration, Department of Defense, National Aeronautics and Space Administration, and other agencies interested in developing procurement specifications based on tested and evaluated materials and components. We also do some testing—but very little—of specific products for such agencies as the Federal Trade Commission for use by them in legal

Moreover, since 1954, the Bureau has been operating under a policy of the Department of Commerce set forth in the Publications and Reports Manual of the Bureau as follows:

The testing of products for other Government agencies is done in response to specific requests from such other agencies and the work is considered in the naspecing requests from such other agencies and the work is considered in the nature of a confidential service to a client. The results of such testing, therefore, are not to be publicized by the Bureau. Reports on such testing are to be made solely to the requesting agency.

In this country, testing of direct interest to consumers is done primarily by private organizations. If the Bureau were to get involved in any significant product testing program, it would require a funding many times our presently available resources. As a matter of fact, it would transform us into a different type of organization.

During the late 1920's and 1930's, the Bureau did have a number of publications that were consumer-oriented. "Care and Repair of the House" is an outstanding example. There was considerable industry objection to the continuance, not to mention the expansion, of this type of publication and the activity it reflected.

Such publications were issued under the authority of our enabling act, 31 Stat. 1449, which authorizes "The compilation and publication of general scientific and technical data resulting from the performance of the functions specified herein or from other sources when such data are of importance to scientific or manufacturing interests or to the general public and are not available elsewhere * * * * "

The key phrase here is "and are not available elsewhere." This was the primary basis for the industry objections.

With the foregoing qualifications, there are, nevertheless, several outputs and activities of the National Bureau of Standards that are

related reasonably directly to the interests of consumers. I would like

A program of long standing that is of incalculable benefit to conto describe them briefly now. sumers is the leadership, cooperation, and technical backup provided by the Bureau in developing uniform State weights and measures laws, regulations, inspection equipment and methods, and in the technical training of State weights and measures officials.

These activities affect consumers directly and vitally inasmuch as the accuracy of scales, meters, and gas pumps, of commercial weighing and measuring devices of all types, as well as the accuracy of package quantities, are dependent almost exclusively on the regulatory activity of State and local weights and measures officials who look to us for their reference standards, for techical advice and counsel on measurement problems, and even for model weights and measures laws.

One of the important links with the States in these activities is the series of annual National Conferences on Weights and Measures, sponsored by the Bureau. These conferences have been going on for more

Examples of publications resulting from these State weights and measures activities include: The proceedings of the annual conferthan 60 years. ences and the publication and revision of "Units of Weights and Measures—Definitions and Tables of Equivalents." This publication contains conversion factors and conversion tables for weights and measures units. It is helpful in comparing packaged products with weights listed in different units, and NBS Handbook 67: "Checking Prepackaged Commodities," which prescribes procedures to be followed in assuring accurate quantity delivery to consumers.

The Bureau provides the technical and staff services to the Department of Commerce leading to the promulgation of mandatory standards and the publication of voluntary standards that affect consumers.

The mandatory standards, provided for by law, cover flammable fabrics and door closures for household refrigerators. Two others, those for seat belts and brake fluids, originally assigned to NBS, are now the responsibility of the new Department of Transportation.

Five hundred voluntary standards have been issued including some 250 commercial standards, an equal number of simplified practice recommendations, and eight product standards. All of these, of course, are indirectly of interest to the consumer, some directly. Examples of the latter include standards for ice cream containers and metal containers for other food, aluminum chain-link fencing, body-sizing standards for apparel and patterns, attic ventilation fans in residences, aluminum tension window screens, household insecticides, venetian blinds, et cetera. New voluntary standards under development that are of interest to consumers include urethane foam bedding and seat cushioning, household water softeners, polyethelene plastic containers for

Voluntary standards will also be developed under the new program authorized by the recently enacted Fair Packaging and Labeling Act. petroleum products. These will be of very direct concern to consumers. One of the objects of this new program will be to reduce undue proliferation of quantities of packaged consumer commodities which impairs the reasonable ability of the consumer to make value comparisons in the marketplace.

The NBS carries on a relatively extensive building research program and some fire research activities. These programs and activities

generate publications of interest to consumers. Some examples are: "Doors as Barriers to Fire and Smoke," "Weather Resistance of Porcelain Enamels," "Thermal Insulation in Buildings," "Performance Criteria for Sanitary Plumbing Fixtures," "Effects of Thermal Shrinkage on Built-up Roofing," and "Building Construction and

A final point. NBS is a most important resource for consumeroriented programs, but as I said earlier almost entirely of an indirect nature. If this resource is to be exploited, a translation or conversion mechanism must be developed. In other words, ways must be found to take the results of NBS research and convert them into a form that is useful to the nontechnical consumer.

Mr. Rosenthal. Let me ask a question at this point, if I may. Do you think that is a difficult thing to do?

Mr. Jensen. No, sir; it is not a difficult thing to do.

Mr. Rosenthal. Would it take any major increase in personnel requirements?

Mr. Jensen. I think that one would need to have reasonably practical general engineers who can work in the fields of chemistry, physics, and engineering, plus a small staff of technical writers and clerks.

Mr. Rosenthal. In other words, with a few people who are engineers and a few who are skilled technical writers, information could be converted which would be useful to the general public?

Mr. Jensen. Some of the information that is developed at the Bureau, I think, sir, could be converted to useful publication.

Mr. Jensen. Technical expertise is needed that can evaluate NBS research results in terms of their usefulness to the consumer and, having done so, put those results in a form that the layman can use. For example, testing of materials and components help Government agencies make purchase choices, but these agencies make bulk purchases based on tests of a few samples chosen under a sound statistical plan. However, the individual consumer cannot buy a refrigerator to test its performance as a guide to future purchases. I shall be happy to answer any question, sir.

Mr. Rosenthal. Thank you very much for a very thoughtful and well prepared statement, Mr. Jensen.

Mr. Jensen, am I correct, were you the Chairman of the Interdepartmental Study Group which studied the subject of Government information?

Mr. Jensen. I was the Chairman, sir. Its original mission was more directly to determine whether or not the Government should look to the development of consumer standards; that is, standards for con-

Mr. ROSENTHAL. When did this committee meet? Mr. Jensen. During 1965.

Mr. ROSENTHAL. Did they issue a report?

Mr. Jensen. The report was issued to the Secretary of Commerce, who I understand transmitted it to Mrs. Esther Peterson, Special Assistant to the President for Consumer Affairs. report?

Mr. Rosenthal. Briefly and generally, what was the thrust of the

Mr. Jensen. Our conclusions were two: (1) There is a wealth of information in the Government that could be of help to the consumer;

(2) the development by the Government of consumer standards, that is, standards for consumer commodities and products, would have little real use, because it would require either some regulatory authority to see that people who claimed that they were making a product to the standards actually did, or the consumer would have to be a testing facility in himself, and he is not.

The average housewife cannot count the threads in a bedsheet, for

Experience has indicated that if the use of a hallmark or of a designation number is authorized without any one regulatory authorexample. ity to determine whether or not products really comply with a standard, there is the possibility that the conscientious manufacturer would be hurt because he is going to be careful, while the man who might not be quite so conscientious could make a product inferior to the standards with no one responsible to determine whether the standards

Mr. ROSENTHAL. Let me ask you, is it your opinion that within the National Bureau of Standards and other Federal agencies there exists a reservoir of information useful to consumers which is as yet untapped and untranslated and generally unavailable to the public?

Mr. Jensen. Yes, sir. There definitely is a wealth of information, but in its present form it is my feeling that it would not be of use to

Mr. ROSENTHAL. Now is there some efficient, yet inexpensive way, the consumer. to translate that information into a form useful to the consumer?

Mr. Jensen. I think there are a number of ways. One way that has occurred to me is that if there could be employed a small staff of engineers, technical writers, with appropriate clerical support, with the assistance of the Office of the Special Assistant to the President for Consumer Affairs, with consumer organizations, with the help of the State weights and measures officials, and food and drug officials, items could be selected, in some order of priority, probably starting with major items—refrigerators, roofing, ovens, furnaces, and so forth. Then, gathering together the knowledge that is now in the Government, either in the minds of the experts or in published form, reduce this knowledge to generic or nonproprietary information that would help the consumer who wants to make a more intelligent judgment in his selection.

Mr. ROSENTHAL. Now it is very pleasant for me to hear you say that. When you say a small number of people, what do you mean?

Mr. Jensen. I do not think it is possible or practical or realistic to

One of the real problems here is to get the information out to the have a big organization. consumer. I have the feeling that if one were to publish small pamphlets, nickel, dime, quarter pamphlets, make them available only through the Government Printing Office, they largely would stay on shelfs. So some mechanism would need to be devised to get the publica-

tions out to the people who can use them. I believe that two or three engineers, maybe a couple of technical writers, and appropriate support staff could do a lot of work in

No research or development work would be involved. What would be done would be to identify the source, gather together information, translate it, and get it out.

Mr. Rosenthal. Is it your testimony that with some 6 people we could, after 6 months or a year, actually deliver to the consumer a wealth of information that he would find useful?

Mr. Jensen. We could deliver to the consumer information in a regular progression. There is no doubt that some could be put together quite rapidly. Some, where you would have to talk to several Federal agencies, identify the fellow who is the knowledgable man, dig out a publication, do a literature search, would take longer; but I have no doubt that in 6 months to a year, you would have a flow of information started to the consumers.

Again I would like to emphasize that his would have to be a generic type of information; that we talk about the characteristics of the product or commodity that might be of concern—that should be of concern—and that would lead the consumer to make an intelligent choice,

Mr. Rosenthal. Would there have to be a separate office or some central place where this information would all funnel into, be translated into laymen-like language, and then be distributed to the general public?

Mr. Jensen. I guess I do not know what you mean by separate office. I think there are a number of departments in government in which such an activity properly could be located.

Mr. ROSENTHAL. I am trying to find out how we could do this practically.

Mr. Jensen. I think this could be accomplished in the National Bureau of Standards, in the Department of Commerce. The Department of Agriculture, as you know, puts out many consumer pamphlets.

Now whether one could look at the physical sciences as opposed to agricultural sciences and join with that group, I do not know. The Food and Drug Administration has put out some consumer-type pamphlets.

I think the important thing is that it can be in a technical orientation

and that-

Mr. ROSENTHAL. I understand all of that. What I do not understand is that if we leave this responsibility of disseminating information to each agency, I do not think it is going to work. It just seems to me that there ought to be one single place that all of this consumer related information ought to flow into, and that this office should have the responsibility of disseminating it to the general public.

Mr. Jensen. I think you have stated the point very well. I doubt that information would generally flow into this office wherever it is located. I think it would have to be searched out, but I think it well could be searched out.

Mr. Rosenthal. For example, if the President issued a directive to all agencies to pursue this policy and to send this information into this central dissemination office, then it would follow through, I imagine?

Mr. Jensen. One would want to be quite selective. That is, one would want to work on item by item and do a professional job on the item before proceeding with the next item. You would not want to have eight or 10 items proceeding at the same time. You would want to put something out that represents the best information the Government has on a particular topic to help bring about good judgment.

Mr. Rosenthal. I can understand that. It sounds very mature and very responsible to me.

I am just wondering in terms of structure, which is really the jurisdictional area of this committee. Apparently you agree with my thought that if there were one central office that all of this information could flow into, they would be charged with developing one product or one area at a time, converting it from technical language into useful laymanlike language and finding some inexpensive method for distributing it to the general public. Do you agree with that?

Mr. Rosenthal. Let me ask you a question on another related mat-Mr. Jensen. Yes, sir. ter. You indicate, sir, that the National Bureau of Standards is bound by a policy issued by the Secretary of Commerce, who I think was Mr. Weeks, in 1954, is that correct?

Mr. Rosenthal. Now since that 1954 policy statement has there Mr. JENSEN. I believe that is correct.

Mr. Jensen. I could not answer that question, sir. From our standbeen any review of that policy? point our publication policy now reflects that departmental policy.

Mr. Rosenthal. Now, have you given any thought to the new freedom of information law reported by this committee and how it might

Mr. Jensen. We have, indeed, and I think with your permission, sir, affect the subject we are discussing?

Mr. FARRAR. Mr. Rosenthal, the Department is, of course, cognizant Mr. Farrar could speak to that point. of the new freedom of information law and the fact that it becomes effective next week. We have been preparing procedures for internal use by the Department in order to be in full compliance with that new

The Department of Justice under the Attorney General has issued a memorandum explaining what it feels the implications of the law

I would say that this policy will certainly be carefully reviewed with are and how it should be carried out. a view to making such information available to the public as can be

Mr. Rosenthal. Mr. Jensen, assuming that the Attorney General made under the new law. informed your Department that there can be and should be greater dissemination of information, have you thought about how you might

Mr. Jensen. The Bureau has a very broad and well developed pubcomply with this law? lication policy. Results of research really become meaningful only when they are put out to the people who can use them. I am not an attorney obviously, but just simply making available the information, the data the Bureau has, I think, would not fulfill the need you have described here.

Mr. Rosenthal. We need the conversion procedure somewhere along

the line.

Mr. Jensen. Yes, sir. It is a translation into meaningful terms for

Mr. ROSENTHAL. Now, for example, we heard from Mr. Kaplan of Consumers Union yesterday about some tests I think that NBS did on hearing aids for the VA, and that those tests and the results of those tests, could be understood by the general public, is that correct?

Mr. Jensen. I think there is information that was presented to the Veterans' Administration that might well be informative to certain

consumers.

One would have to dig through it, the report to VA.

Mr. Rosenthal. Under the freedom of information law, could you extract the pertinent provisions of your report to VA and just issue that to the public without further clarifications, without further editorializing?

Mr. Jensen. I think that under the freedom of information law there is no question that this could be done. The question is whether we have the manpower to do it and whether the Department under the present policy would want us to do it or whether it should be by Veterans' Administration for whom the work was actually done.

We really are performing for them under a contract to them, and we would present to them the data, and they of course, can issue it any way they would like to.

Mr. ROSENTHAL. Aside from the question of who has priority of interest in the results of the tests, is it generally your feeling that that information should be made available in an understandable fashion?

Mr. Jensen. I think I would say that it is my feeling, yes, sir; information the Government has that would be of assistance to society should be made available to society.

Mr. Rosenthal. To the best of your knowledge, and I ask you specifically because of your chairmanship of the Interdepartmental Study Group, has anyone connected with the Study Group taken a special interest or taken the initiative in trying to move the information out of the archives and into the public domain?

Mr. Jensen. I believe there is in the record, sir, some communication from Mrs. Peterson to Secretary Connor, in which this proposal was advanced. And the response from the Secretary or someone in the Secretary's Office, which agreed with the proposal, but which said that it was the feeling of the Department that identification and financing probably should be sought by the Office of the Assistant to the President for Consumer Affairs.

Mr. Rosenthal. Did you pursue that at all and find out what happened with respect to his recommendations to her?

Mr. Jensen. I saw the correspondence.

Mr. ROSENTHAL. After he bucked it back to her?

Mr. Jensen. If there was anything further, I am not aware of it. I think that ended the correspondence.

Mr. Rosenthal. To do the job of disseminating the information after having it converted do you have any notion at all how much money it might cost to take at least what information you folks had and to get it out to the public?

Mr. Jensen. I do not have an inventory of information that NBS presently has that might be translated. It would be very difficult. I think largely this would depend on the rate at which one wanted to make the information available. Frankly, sir, I do not think that very much would be produced if one agency, certainly one as small as the National Bureau of Standards, were singled out and say, "Let's get this for the consumer." I think there should be a policy of the Government, and I think one should establish priorities of things of greatest interest, greatest concern to the consumer, and work on those first.

Mr. ROSENTHAL. Mr. Jensen, one final question, how would you respond if the President said to you: Mr. Jensen, what should we do to improve our policy with relation to disseminating information to

Mr. Jensen. I think I would respond very similarly to the way I responded to you. I think that a small office with this specific responsibility and with capable people could produce a great deal of information of considerable help to those who want to be helped or who are able to be helped.

Mr. Rosenthal. Mr. Myers.

Mr. Jensen, you speak about your testing and so forth, and you make reference to certain generic items. Does this mean that you go into all brands in certain areas, certain items, or how do you go about this?

Mr. Jensen. No. Our testing program, sir, generally is on the basis

of a request paid for by another Government agency.

Mr. Jensen. Yes. If, for example, General Services Administration Mr. Myers. Like GSA? wants us to work on the development of a test method for pencils, GSA would normally supply us with a statistical sample of the pencils, tell us what they want it for, and our technical people then, sponsored by GSA, would develop the test method.

Obviously you have to do some testing to develop a method includ-

Mr. Myers. The first thing then, you do not set the criteria; the ing the machinery involved. agency tells you what criteria-

Mr. Myers But you then set up the prescribed—the actual test? Mr. Jensen. That is correct.

Mr. JENSEN. That is correct. Mr. Myers. And then you conduct the actual test?

Mr. Jensen. And then we report back to the agency.

Out testing normally is only to the extent that is necessary to produce the test method.

Mr. Myers. But you do not include all of the brands in a certain

area?

Mr. Jensen. I would say a reasonable answer to that is negative, sir. Mr. Myers. Then I think that I detect from your suggestions here, you would not want to-not endorse, but you do not want to mention

Mr. Jensen. There would need to be very little, probably no, testbrand names, either, is that right? ing but a developing of information, translation of information, on the knowledge that exists in Government now. I am not talking about a testing program where one would say this brand is better than the

For example, there are terms used in the sale of refrigerators: Frostfree and automatic defrost, volume—what do these mean? How does each of these relate to the current requirement? What should one look for in insulation? What size for a particular family? These sort of things that would be helpful to anybody. I think it would be completely impossible, improper, for Government to undertake a testing such as Consumer Union does, for example, on the basis of brand name.

What we are discussing is gathering information that is presently available and putting it into a form that would be helpful to a

Mr. Myers. Well, on page 3 of your prepared statement you make reference back in the twenties and thirties to the National Bureau of Standards, they did some of this, and you made reference to one particular one, the care and upkeep of the home, I believe.

Mr. Myers. And then you said there was considerable industry objection to this. I know obviously you were not there then but-

Mr. Jensen. I know the story quite well. This is a little booklet, 5 by 8, and perhaps a half inch thick, that resulted from our work in building technology. It was written specifically for the consumer. It told you if you had a window leak or you had a short or you wanted to look at the plumbing, step by step what to do, including seeking pro-

To say the least, this was a best seller in Government. I do not know how many tens of thousands of copies were sold, but many of them. At one point, one of the major publishing companies made it clear that the publication could be developed and sold by private industry, that it was completely improper for the Government to do it.

On the basis of that, this policy was issued which said we would

do it no more.

Mr. Myers. Actually it did not come from any undue criticism the public was bringing against the industry; it was just—they felt it was just unfair competition? Mr. JENSEN. Exactly.

Mr. Myers. Fine. Also on page 5 you make reference to the mandatory standards provided for by law, and you use some examples there of the flammable materials for clothing, and also the doors for

Mr. Myers. And once again the agency brings this—is that right to your attention that they want you to test a particular line of

Mr. Jensen. No; these two standards have been mandated by the Congress. In the case of flammable fabrics, Congress, in the statute, references what was a voluntary standard, which fixed the limitations with respect to flammability of fabrics in wearing apparel.

Our job is a technical job, to keep aware of technology in this field and to advise the Congress as to the need, the advisability, of amending the statute. As you know, there is a bill before the Congress right now in which the administration has recommended rather strong amendments. Incidentally, the enforcement of this act lies with the Federal Trade Commission, not with the Department of Commerce.

The refrigerator door closures law resulted, of course, from children being smothered in refrigerators that had been discarded. Here again our job was to determine technically what was needed in order to make it possible for a youngster caught inside a refrigerator to get out.

So we wrote the technical standards, after much consultation with the industry and full cooperation. As far as we know, every household refrigerator now is well within the standards.

Mr. Myers. Here again your job here was procedural rather than actually going out and making tests?

Mr. Jensen. Exactly.
Mr. Myers. You do not carry out the testing?

Mr. Jensen. We conducted the test necessary to fix the standards, but we do not conduct enforcement tests.

Mr. Myers. But here again, though you do not actually test, I read once in a while where a doll is flammable, and a child is severely burned—I hope not fatally—but once in a while there are severe burns

from dolls and toys. You do not do the actual testing? Mr. Jensen. Perhaps I can give an example. Let's say the Federal Trade Commission receives a complaint that a certain sweater is so flammable as to possibly cause personal injury if it ignites. The Federal Trade Commission was not aware of the test method and the testing equipment to determine whether that particular sweater meets or does not meet the existing statute and standards. They would come to us and say would you develop for us the test methodology. In order to develop methodology we have to do some testings. Once the standard method is published, Federal Trade would take over all enforce-

The only enforcement—and this is stretching the meaning of the word—testing that the Bureau does, is that if, for example, Federal ment testing. Trade has a problem, they come to us and say we would like to have 12 examples of these measured and the data reported to us, so we can determine whether or not legal action is indicated. This is as close to enforcement tests as we get. We supply the data and the expert

Mr. Myers. Actually, I begin to see what you mean by yourself as indirect. The only area really where you directly are responsible witness if needed. to the public is in the area of weights and measurements and how can people check the scales to make sure they are accurate.

Mr. Jensen. For the public it is indirect. We really serve the States, counties and cites, and the industry. The State really en-

Mr. Myers. I am familiar with that; yes. Really then, you never get in a position where you are going to put out any documents to

Mr. Jensen. Under the policy under which we now operate, that is absolutely correct. My personal feeling is that there is technical expertise available. There are publications of the Bureau, of GSA, and of other agencies of the Government from which information could be developed and put in a form that would be helpful to the consumer. There is one publication in the Bureau now for the consumer. It is called A Household Kitchen Card that tells how many teaspoons are in tablespoons and how many tablespoons are in a cupful. Strictly measurement. It sells for a nickel, and the housewife can hang it up in the kitchen. That is our one consumer publication.

Mr. Myers Later on we are going to have to go to meters, maybe a

Mr. Jensen. I could speak on that subject if you desire. few other things.

Mr. Myers. I am not real sure about that one. One last question that I would like to ask, you say you prescribe certain tests for agencies, and you mentioned GSA. Is most of it done

Mr. Jensen. Yes. Certainly the most work we do in the developfor GSA, your prescribed testing? ment, specific test methodology, would be for General Services Administration. We do, however, have many of our technical people serving on committees of private standardizing bodies: American Society for Testing and Materials, the American Petroleum Institute—all of this is another way of translating into technical use, scientific and en-

Mr. Myers. Do you know if you do all of GSA's systems? Mr. JENSEN. We do not.

Mr. Myers. You do not prescribe all their testing?

Mr. Jensen. No, sir; we do not. Actually the most we do is when they select an item for which they would like some methodology.

If we are able to undertake this under our sponsorship, we do. We report back to them the results and our recommendations, and they make the final decision as to whether they will become a part of purchase specifications. Responsibility for compliance with their specification rests with GSA—never with us.

Mr. Myers. In other words, they can set up their own if they want to or go to some other agency? Mr. Jensen. Absolutely.

Mr. Myers. Thank you, Mr. Jensen.

Mr. COPENHAVER. May I ask a question?

Mr. Rosenthal. Let me ask a question and then I will come back

I am intrigued by the response you made to Mr. Myers' question about what happened when the Bureau issued "Care and Repair of the House," which sounds to me like a very, very useful book to have

I would suspect that the publication with the largest circulation in the country is the one that the Federal Government puts out, HEW I think puts it out, called Infant Care.

Has Dr. Spock, who has a competing publication, ever complained, to your knowledge?

information.

Mr. Jensen. I could not answer that question, sir. I have no

Mr. ROSENTHAL. You see the trick to this is that instead of having the Government Printing Office offer a book, you give it to Congressmen to send out, and there it has a lot of useful advantages-

Mr. Rosenthal. Mr. Copenhaver?

Mr. Copenhaver. Mr. Jensen, I am interested in a point that Mr. Myers developed. GSA buys thousands of different products and presumably they must test these products against certain standards and specifications, is that not correct?

Mr. Jensen. They are authorized. They have the responsibility of seeing that the products purchased by the Government meets specifications that are issued.

Mr. Copenhaver. Do they test these products, a sample-Mr. Jensen. They do testing; yes, sir.

COPENHAVER (continuing). Themselves? In their own laboratories? Mr. Jensen. Yes, sir.

Mr. COPENHAVER. I am surprised that—this is new to me—that we do not have a central facility like the Bureau of Standards to do the testing for the GSA. Why is it that we have this divided kind of

Mr. Jensen. GSA takes advantage of our expertise and of the expertise of other agencies of the Government, the Department of Defense and others, in assisting them to develop purchase specifications. The responsibility for the specifications and compliance of product with those specifications resides specifically with GSA. We are just one of the inputs to the specifications.

Mr. Myers. If you give that answer, let's find out why GSA does

Mr. COPENHAVER. This is a different question. Maybe I am mistaken. not do all the buying. Yesterday we discussed about the buying of antifreeze. I see about three different things: You and the Bureau of Standards can establish a system for testing certain specifications of antifreeze, and then you pass these on to GSA who will bring them into the specification, shall we say, or write specifications, and then they are able to actually test a sample of a product in accordance with the system that you have developed for GSA to see if it met specifications, is that correct?

Mr. Copenhaver. Do you also assist GSA in establishing the

Mr. Jensen. Ours is an input to specifications. They will send the proposed specification to us and ask for comments by a certain date. specifications? If there is available at the Bureau an individual who is qualified in this field, we will send it to that individual.

If he has time or can find the time, he will examine it, and make his

Presently there is no exchange of funds here. It is a contribution of

But even with these comments to GSA, there is no obligation of GSA to include our recommendations in the specifications. They have NBS to GSA. absolute authority in developing specifications.

Mr. COPENHAVER. Well, I know this is a question that should go to GSA and not you, but where does GSA get the technical information

Mr. Jensen. I think, sir, that should be directed to GSA as you to develop the specification? suggested.

Mr. Jensen. I do not. I am not sufficiently aware of their individual

Mr. COPENHAVER. One other question along this line which Congressman Myers raised. It has been a concern to me. I have noticed an people. increasing number of stories in the papers about it and I know Senator Magnuson and his committee has had some hearings on this matter concerning the flammability of at least certain material used in this ready to wear, this "no iron" type of product, and I have seen many cases of children and adults being burned.

This is in the hundreds or the thousands, not one or two. And I ask myself, how can this be? We have a law, and we have a Bureau of Standards supposedly doing some testing, and you did indicate to Congressman Myers that the Federal Trade Commission may actually

Mr. Jensen. They will ask us to do such testing as is necessary to ask you to do some testing, is that correct? develop equipment and procedures for their enforcement testing.

Mr. Jensen. There is proposed a strong amendment to the existing Mr. COPENHAVER. I follow you. Flammable Fabrics Act, which incidentally was enacted into law in 1953, I believe for the express purpose of making it a criminal act to introduce into Interstate Commerce those items—sweaters that the

press called firetraps, the materials that just blow up with any kind of ignition. And under that old statute there is definite limitation as to how far the Federal agencies can go with respect to flammability of

The amendment that is in both houses, sponsored by the administration, provides for research and development, input of industry, and for far greater coverage than just wearing apparel: rugs, draperies, upholstery—if it can be proven that these do contribute to loss of life or property. I think you would like to look at this bill. It is a good amendment.

Mr. Copenhaver. Do you actually do any testing for the FTC, Federal Trade Commission?

Mr. Jensen. We do not do enforcement testing for them. They have their own enforcing testing laboratory, using equipment that actually we designed in cooperation with the industry.

FTC responds to a complaint or acts at its own initiative, obtains samples of the apparel, runs the tests, and determines whether or not it is in compliance with the standard which is published by the Na-Mr. Copenhaver. Thank you.

Mr. Rosenthal. Thank you very, very much, Mr. Jensen.

You have been very helpful to the committee. We appreciate your coming at this time of day.

Mr. Jensen. It has been a real pleasure to be here.

Mr. Rosenthal. Your full statement will be printed at this point in the record. (The statement referred to follows:)

PREPARED STATEMENT OF MALCOLM W. JENSEN, MANAGER, ENGINEERING STANDARDS,

Mr. Chairman and members of the subcommittee, my name is Malcolm W. Jensen, I am on the staff of the National Bureau of Standards, serving as both Manager, Engineering Standards and as Chief of the Office of Weights and Measures.

It is important, I think, at the outset to point out that the National Bureau of Standards, since its inception in 1901, has served primarily science, industry, and other Government agencies, including the States. We have very little contact—directly that is—with the consumer, the individual citizen. Indirectly, of course, we have an enormous impact—especially in the role we play in the national measurement system. The four major programs of the Bureau-

Basic measurement standards;

Engineering measurement and standards; Properties of matter and materials; and

Technical assistance to science, industry, and Government are described briefly in a brochure (submitted for your files) outlining the work of the

The consumer benefits ultimately from all these programs but —I emphasize indirectly.

Perhaps a crude analogy will illustrate the point. A steel manufacturer supplies an automobile manufacturing company with steel. The latter shapes this steel through a series of complicated processes into the automobile that the consumer buys. Obviously, the consumer cannot use the raw steel, but he can drive the car from which it is made. We are more like the steel manufacturer.

We do have certain outputs that can be used by the consumer directly, and I will discuss these a bit later.

The second point I should like to make is that we are not by any means a major testing facility. Our testing program constitutes a very small fraction of our work—less than 2 percent of our technical activities. And even this small

fraction is done mainly for other Government agencies. For example, we do general tests on materials and components for such agencies as the General general tests on materials and components for Such agent autics and Space Services Administration, Department of Defense, National Aeronautics and Space Administration, and other agencies interested in developing procurement specifications based on tested and evaluated materials and components. We also do some testing—but very little—of specific products for such agencies as the Federal Trade Commission for use by them in legal actions.

Moreover, since 1954, the Bureau has been operating under a policy of the Department of Commerce set forth in the Publications and Reports Manual of

"The testing of products for other Government agencies is done in response to specific requests from such other agencies and the work is considered in the the Bureau as follows: nature of a confidential service to a client. The results of such testing, therefore, are not to be publicized by the Bureau. Reports on such testing are to be made

In this country, testing of direct interest to consumers is done primarily by private organizations. If the Bureau were to get involved in any significant product testing program, it would require a funding many times our presently available resources. As a matter of fact, it would transform us into a different

During the late 1920's and 1930's the Bureau did have a number of publications that were consumer oriented. "Care and Repair of the House" is an outtype of organization standing example. There was considerable industry objection to the continuance, not to mention the expansion, of this type of publication and the

Such publications were issued under the authority of our enabling act, 31 Stat. 1449, which authorizes "The compilation and publication of general scienactivity it reflected. tific and technical data resulting from the performance of the functions specified herein or from other sources when such data are of importance to scientific or manufacturing interests or to the general public, and are not available else-

The key phrase here is "and are not available elsewhere." This was the priwhere * * *.'

With the foregoing qualifications, there are, nevertheless, several outputs and mary basis for the industry objections. activities of the National Bureau of Standards that are related reasonably directly to the interests of consumers. I would like to describe these briefly now. A program of long standing that is of incalculable benefit to consumers is the

leadership, cooperation, and technical backup provided by the Bureau in developing uniform State weights and measures laws, regulations, inspection equipment and methods, and in the technical training of State weights and measures

These activities affect consumers directly and vitally inasmuch as the accuracy of scales, meters, and gas pumps, of commercial weighing and measuring devices of all types, as well as the accuracy of package quantities, are dependent almost officials. exclusively on the regulatory activity of State and local weights and measures officials who look to us for their reference standards, for technical advice and counsel on measurement problems, and even for model weights and measures

One of the important links with the States in these activities is the series of annual National Conferences on Weights and Measures, sponsored by the Bureau.

These conferences have been going on for more than 60 years. Examples of publications resulting from these State weights and measures ac-

tivities include-

Publication and revision of Units of Weights and Measures—Definitions and Tables of Equivalents. This publication contains conversion factors and conversion tables for weights and measures units. It is helpful in comparing

packaged products with weights listed in different units; and NBS Handbook 67: Checking Prepackaged Commodities, which prescribes procedures to be followed in assuring accurate quantity delivery to con-

The Bureau provides the technical and staff services to the Department of Commerce leading to the promulgation of mandatory standards and the publica-

The mandatory standards, provided for by law, cover flammable fabrics and tion of voluntary standards that affect consumers. door closures for household refrigerators. Two others, those for seat belts and brake fluids, originally assigned to NBS, are now the responsibility of the new Department of Transportation.

Five hundred voluntary standards have been issued including some 250 commercial standards, an equal number of simplified practice recommendations, and eight product standards. All of these, of course, are indirectly of interest to the consumer, some directly. Examples of the latter include standards for ice cream containers and metal containers for other food, aluminum chain-link fencing, body sizing standards for apparel and patterns, attic ventilation fans in residences, aluminum tension window screens, household insecticides, venetian blinds, etc. New voluntary standards under development that are of interest to consumers include urethane foam bedding and seat cushioning, household water softeners, polyethelene plastic containers for petroleum products.

Voluntary standards will also be developed under the new program authorized by the recently enacted Fair Packaging and Labeling Act. These will be of very direct concern to consumers. One of the objects of this new program will be to reduce undue proliferation of quantities of packaged consumer commodities which impairs the reasonable ability of the consumer to make value comparisons

The NBS carries on a relatively extensive building research program and some fire research activities. These programs and activities generate publications of interest to consumers. Some examples are: Doors as Barriers to Fire and Smoke.

Weather Resistance of Porcelain Enamels.

Thermal Insulation in Buildings.

Performance Criteria for Sanitary Plumbing Fixtures. Effects of Thermal Shrinkage on Built-up Roofing.

Building Construction and Maintenance.

A final point, NBS is a most important resource for consumer-oriented programs, but as I said earlier almost entirely of an indirect nature. If this resource is to be exploited, a translation or conversion mechanism must be developed. In other words, ways must be found to take the results of NBS research and convert them into a form that is useful to the non-technical consumer. Technical expertise is needed that can evaluate NBS research results in terms of their usefulness to the consumer and, having done so, put those results in a form that the layman can use. For example, testing of materials and components help Government agencies make purchase choices, but these agencies make bulk purchases based on tests of a few samples chosen under a sound statistical plan. However, the individual consumer cannot buy a refrigerator to test its performance as a guide to future purchases. I shall be very happy to answer any questions to the best of my ability.

Mr. ROSENTHAL. The subcommittee stands adjourned. (Whereupon, at 2:20 p.m. the subcommittee was adjourned.)

CONSUMER INFORMATION RESPONSIBILITIES OF THE FEDERAL GOVERNMENT

TUESDAY, JULY 25, 1967

House of Representatives, SPECIAL STUDIES SUBCOMMITTEE OF THE COMMITTEE ON GOVERNMENT OPERATIONS, Washington, D.C.

The subcommittee met at 10:15 a.m. in room 2203, Rayburn House Office Building, the Honorable Benjamin S. Rosenthal presiding.

Present: Representatives Benjamin S. Rosenthal (presiding), John

Also present: Peter Barash, legal assistant, and I. Warren Harri-W. Wydler, and John T. Myers.

son, legal assistant, committee staff.

Mr. ROSENTHAL. The subcommittee will be in order.

Today's hearing is a continuation of the hearings of the Special Consumer Inquiry, Special Studies Subcommittee, to determine what Federal agencies can do to better implement their consumer responsihilities.

Today's first witness will be Commissioner Arthur M. Ross, Com-

missioner of Labor Statistics, Department of Labor. Commissioner, I think you have a prepared statement and you

Incidentally, I might say we are extremely grateful to you for taking time from a very busy schedule to appear before the may proceed.

STATEMENT OF ARTHUR M. ROSS, COMMISSIONER OF LABOR STAsubcommittee. TISTICS; ACCOMPANIED BY ARNOLD CHASE, ASSISTANT COM-MISSIONER FOR PRICES AND LIVING CONDITIONS

Mr. Ross. Thank you, Mr. Chairman. It is a privilege to participate in this important study by the Special Consumer Inquiry of the Special

I have been requested to discuss with the Special Consumer Inquiry Studies Subcommittee. how Bureau of Labor Statistics data can be of help to consumers and how this information might be more effectively presented and

Most consumers need and want help in the form of more information to assist them in their shopping. In order to buy wisely, condisseminated. sumers need objectively determined facts about the comparative prices of the alternative products among which they must choose. Consumers need an appraisal of the current price situation. Which prices are rising? Which are falling? What are today's good buys? When is the best time of the year to buy various items? How much can be

saved by deferring some purchases? How much can be saved by stocking up when prices are lowest? Many consumers also want help in developing family budgets. How much do persons in a particular income bracket generally spend for clothing? How much does it cost to own and operate a car? The Bureau receives thousands of letters each year wanting to know the answers to such questions. Many letters are referred to us by Members of Congress.

As you know, the Bureau does collect and analyze a great deal of information that is of value to consumers. We publish the Consumer Price Index, a statistical measure of changes in prices of goods and services bought by urban wage earners and clerical workers. It is published monthly for the country as a whole and separately for 23 large metropolitan areas. On a national basis the details extend to separate indexes published either monthly or quarterly for about 300 individual consumer items. We also publish average retail prices for nearly 100 food items for the United States and the 12 largest metropolitan areas.

Here I am distinguishing between the actual prices and index of prices, which I covered earlier.

I should like to make special mention of the Bureau's standard budget studies, estimates of what it costs in dollars and cents, to maintain various standards of living. Next month, the Bureau will begin publishing new indexes of intercity differences in living costs. The Bureau plans to publish cost estimates for a modest living standard, separately for 39 metropolitan areas. A U.S. urban average cost estimate will also be published and, in fact, will be the base of the intercity—or interarea—indexes of living costs.

I might interpolate, Mr. Chairman, that the total program for budget studies which has been financed by previous Congresses is somewhat larger than that. We are pricing out the cost of family budgets at three different levels of living.

The one in the middle is the one mentioned in my statement, a modest living standard.

Then we are working on and will be publishing somewhat later budgets at a minimum adequate, the very basic minimum adequacy which will, I think, show us the line between the minimum standard and the substandard living based on very careful studies of dietary requirements, minimum housing requirements, minimum clothing requirements for decency and self-respect, and objectively determined minimums for all the important categories of consumption.

Then up at the other end we will have a budget which I don't think we have given a title to yet, but it is for a somewhat more com-

fortable or more liberal standard for wage and salary earners.

At the present time we have projected this program to cover two types of families. One is a typical family of four: the husband, wife, one daughter, and one son; and the other is for an elderly couple.

There has been some discussion of budgets for other groups such as rural residents, single working girls, and so forth.

Up to now we have had the resources to project these three budgetary levels for the family of four and for the elderly couple.

We do try to relate the information collected to the needs of consumers. Bureau representatives meet with consumer groups to show them how BLS data can be used. Sometimes, we cooperate with special commissions or other groups in collecting data. For example, early last year, the Bureau made a special study for the National Commission on Food Marketing and the Office of Economic Opportunity, comparing prices charged by stores located in low-income neighborhoods of six large cities with those charged by stores located in higher income neighborhoods. The purpose was to answer the question whether the poor pay more for important consumer items.

I have the full study here.

The poor paid more for food. This is because they more often In my statement I summarize it very briefly. bought their groceries in small independent stores where prices were usually higher than in large independent or chain stores. However, there were no significant differences in prices for the same type of store, whether located in low income or higher income neighborhoods. Thus, price differences for the same quality goods appeared to be associated with the size of store in which purchases were made rather than with differences in the geographic location of the stores. Another factor brought out by the study was that the poor were more likely to purchase certain items in smaller sizes, which made the unit cost higher.

In other words, a 1-pound bag of sugar or flour generally costs more per pound than a 25-pound bag, and the poor generally buy the

It was also observed that in general the condition of goods available in stores in low income areas was inferior to that in stores in higher smaller sizes. income areas. The stores in low income neighborhoods tended to be less orderly and clean, and the meats and produce did not appear

With respect to other consumer items, the study showed that the prices for such appliances as washing machines and television sets as fresh. were higher in the neighborhood stores in the low income sections of the cities. On the other hand, the poor paid less for such services as drycleaning, shoe repairs, and haircuts, if they patronized neighborhood establishments

I might say we weren't able in the study to go into the impact of borhood establishments. credit arrangements upon the total price paid by the poor, but if we had, I am sure the credit arrangements often used by poor people would produce a greater differential than our study showed, in the case of durable consumer goods such as washing machines, television sets, jewelry, and so on.

Mr. ROSENTHAL. So your study didn't take into account the final net cost to the consumer because in most of those cases he was carrying

Mr. Ross. We studied the prices rather than the price plus the credit charges. interest.

Mr. Rosenthal. In those low-income areas that is often a rather

Mr. Ross. Well, it is the price and the study was made in a sense in the same way as we collect data for the Consumer Price Index. That is, fictitious price. by ascertaining the price for goods meeting certain specifications. We weren't equipped or financed in this study to actually do it on a consumer-by-consumer basis, find out which consumers paid cash, which paid credit, what credit arrangements they used, and so on.

An analysis also was made from the Bureau's existing records of the comparative quality of rental housing. In general, homes occupied by low-income families were more often of lower quality than those occupied by families with higher incomes, even when they paid the same rent. Low-income families lived in poor-quality neighborhoods, and higher proportions of them occupied deteriorating or dilapidated housing at comparable rents. Heating equipment in housing occupied by low-income families was often inferior, and many of them had to share a bathroom with other families, without enjoying commensurately lower rents for such deficiencies.

It remains true that much of the information collected by BLS has not been published in a form that is most meaningful to the average consumer. Indexes, for example, are useful tools for market researchers, for economists in charting our battle against inflation, and for determining the amount of wage escalation in union-management contracts. The average consumer finds it difficult to relate an index to his own experience.

The price data collected by BLS can be analyzed and presented in such a way as to be more understandable and useful to the individual consumer. Let me list some examples of how this can be done. I know that the committee will understand that the Bureau would require additional resources to develop a full-scale program of consumer edu-

Mr. Rosenthal. Let me ask you a question which is somewhat off the point here but is certainly relevant to this subcommittee.

All the other information you collected about the discrepancy and differences between what the poor consumer pays or the poor renter gets in terms of housing, what you begin talking about on the bottom of page 3 and running to the top of page 4—do you make this information available to political scientists and Government leaders?

Mr. Ross. Well, this information was published, Mr. Chairman, and it was widely noted in the press. Yes; it is certainly available to political scientists and the others you mentioned. I don't have information on how many of them have used it, but it was published and we did all we could together with the Commission on Food Marketing and the Office of Economic Opportunity to bring it to the attention of the public.

There were press conferences, news releases; other devices of that type were used. I did see a few references to it on television news programs. I am not really up to date on the total exent of utilization of the survey.

Mr. ROSENTHAL. But other than food items this other factual information on inferior housing and credit costs together with the conclusions you referred to, were they ever disseminated throughout

Mr. Ross. Yes. Well, Mr. Chairman, that study was made on contract for the Office of Economic Opportunity. We did publish a summary in our publication the Monthly Labor Review which has a circulation of around 13,000 and is considered an authoritative magazine; we published a summary there of the information concerning rental

housing and other items.

The full detail was supplied to the Office of Economic Opportunity because it was done on contract for them. I don't believe they have

Now coming back to some examples of how the Bureau data could be presented more usefully to the consumer, I list five or six examples in

1. Prices of many items have pronounced seasonal fluctuations. This means that the items are better buys at certain times of the year. From its historical records, the BLS could develop seasonal patterns of prices, to advise consumers how they could save by making their purchases at specified times of the year. How much are prices generally reduced for sheets and towels during the January "white sales" or for furniture during the usual semiannual sales? When are prices reduced by closeouts of seasonal items of clothing and shoes? A family might want to wait until winter to buy a used car if it knew that car prices are usually significantly lower in February than in July. For many food items, particularly if freezer space is available, advance buying during the seasonal low periods can result in considerable savings. It may be helpful to remind consumers that in some parts of the country fresh fruit and vegetables are higher in price in July when current crops have not reached the market in volume. A few weeks later, prices for these items will drop considerably.

2. Bureau data could be made more meaningful by presenting more information on actual prices in dollars and cents. In my statement I say actual prices in dollars and cents. I might add it might be possible also in the major areas to present some more information on the range of prices for a given period, the range of prices encountered by our field collectors in the stores or other establishments which they sampled. For example, the food component of the Consumer Price Index went up in May, partly because lettuce prices increased. This kind of information is not nearly as meaningful to the consumer buyer as if he were to be told that the average price of lettuce in his home city went from 29 to 39 cents per head. I might add that it might be even more meaningful if he were told that among the stores in the BLS sample during July lettuce prices ranged from 25 to 45 cents per head. Thus he would know whether the price he has been paying is at the high end or low end of the range or above or below the range which we en-

Mr. ROSENTHAL. What could be do once he had that information? countered in our sample. Mr. Ross. This would be information. This would be along the lines of consumer education and of course would be up to him and his family

Mr. Rosenthal. Could you give us an example of how he could best to decide what to do with it.

Mr. Ross. Well, I suppose if he should learn from this information put that information to use? that he was purchasing at a price at the high end of the range available in his community, he would look around and purchase it at another store where he would get it at the average or the low end of the range. In other words, it would, I think, put him on notice that he might be able to obtain the same item more advantageously. This information could be tied in with publications regularly issued by the Department of Agriculture on the supply and price outlook for food of all kinds, to assist the consumer in planning his food budget. The same kind of information could also be provided, at least on a national or regional basis, for many other consumer items, such as men's suits, women's dresses, refrigerators, hospital rooms, etc. I emphasized the

last point because I think there is some tendency in discussions of this type to emphasize pretty heavily food. Of course, we all know that food represents about 23 percent of the budget of urban wage and salary earners and smaller percent of the budget of more affluent groups, so in discussing consumer education we ought not stop at food but also consider what can be done for other items.

If prices for more items, either average prices or a range of prices, were published for a greater number of localities, consumers might be able to determine whether items they are considering are really the bargains that sellers claim them to be. If they were able to obtain a reasonable estimate of what they should expect to pay for an item, they could be in a position to be more careful shoppers.

3. There appears to be a great deal of confusion in the minds of consumers about the price per unit represented by different sizes of packages. Because of its present method of collecting price data, the Bureau's existing price records do not provide a complete answer to this question. With an expansion of coverage to include a broader cross-section of package sizes, however, we could advise consumer of per-unit differences in prices for various package sizes.

This comes back to the point I made with respect to our survey of food costs for poor and affluent consumers. The price per pound or per unit is generally higher for the smaller packages with so many hundreds of consumer goods and such a confusing variety of package sizes. We don't presently have a good sample of prices for all sizes of packages for all goods but this is something which conceivably could be done. We also could provide information on changes in per-unit prices

as new package sizes are introduced, or old ones are altered.

4. A major area in which BLS data could be made more useful to consumers is that of family budgeting. In connection with our forthcoming reports on standard budgets, we are planning to prepare pamphlets in popular form. More could be done along this line than we now are presently able to do. It would involve further simplification of the manner in which the budgets are presented, and their adaptation to various types and sizes of families. The results would provide a "norm" against which individual families could measure their own spending for various classes of goods and services.

I know Mrs. Ross and I have discussions approximately once a month on why we are spending so much. This often comes down to the question of whether we are spending too much for food. Are we spending too much for recreation? Are we spending too much for the auto? And so forth. I think probably most families have this type of discussion about once a month it would probably help them to know how their expenditures for their particular items compare with the average for families in their income group.

The data which the Bureau gathers on consumer income and expenditure, as well as the work that is done in preparing the standard budgets, could be exploited further. For example, we could prepare pamphlets on "the cost of running a house," or "the cost of owning and operating a car," or "the cost of rearing a child." These are subjects on which we receive many inquiries.

We do the best we can with these inquiries but we are not able to handle them at all. Most of the basic data needed to produce them are contained in the results of our consumer expenditure surveys, but

they have not been organized and interpreted in such a way as to be

I might say that we have probably the best staff of economists and meaningful to consumers. statisticians which is enjoyed by any government agency anywhere in the world, but these people are not necessarily the best equipped to interpret for the lay public and to present in such a way as to be most helpful. This type of information for the consumer and his wife-

Mr. Rosenthal. Do you think if you turned over some of the special studies you have or some of the information to the Walt Disney organization and told them to make a 15-minute short on it that they

Mr. Ross. Why I think so. I might say BLS does get a good deal could probably be helpful? of mileage, not from Walt Disney yet, but we do from newspapers, magazines, television programs, and so forth, where they have people on their staff who are better than we are at making something meaning-

Mr. ROSENTHAL. I was looking at page 2 of a BLS publication ful to the average lay person. entitled "The Consumer Price Index, January 1964, A Short Description." In there is a sentence, "the Consumer Price Index is used widely by the general public to guide family budgeting and to understand what is happening to family finances." Do you really think it's used widely by the general public?

Mr. Ross. I would like to comment on that. I am about one paragraph short of finishing my statement. Let me finish it and then I

5. If we are to make our data more meaningful and understandable will come right to that question. to consumers, more creative ways must be found to disseminate the information. We will have to discover the best ways of getting the information into the hands of the consumers themselves as well as to persons and agencies who help consumers, such as newspapers and magazines, social welfare agencies, women's organizations, home

In summary, the Bureau's present program is being enhanced as economics teachers, et cetera. we complete our work on standard family budgets. Nevertheless, there are a number of steps that can make them more useful such as the points I have enumerated. The Bureau hopes to improve its program continually to better serve the needs of the American consumer.

Now, Mr. Chairman, you called attention to a statement in our pamphlet concerning the price index that the Consumer Price Index is widely used by the general public to guide family budgeting. We also pointed out here that it is used extensively in labor-management contracts to adjust wages, long-term leases, other types of long-term contracts. In addition, it is used as a measure of changes in the purchasing power of the dollar for such purposes as adjusting royalties, pensions, welfare payments, all money-

Mr. Rosenthal It is used by a lot of professionals, but I was interested in the statement that it is used widely by the general public.

Mr. Ross. Well, that I think would have to be regarded as a hopeful statement. I would say that we do get a lot of correspondence. Over the year, including our regional offices, we probably get tens of thousands of inquiries concerning price trends, so that is some indication of interest among the general public.

I find it difficult to answer your question very precisely. I am sure if we could, and were to do the things set forth in my statement, it would be used more widely and more usefully.

Mr. Rosenthal. Let me say this much, Commissioner. I want to commend you for your statement. It is unusual for a bureaucrat to come before this congressional committee and not give five reasons why they can't do something. You have given us five things that you can do with just a little effort and initiative, and I presume with some extra funds from the Congress; you could take the information that you presently have, and with your presently existing staff, convert it into more meaningful and more useful information for the general public, which really, I suppose, is our mission in life. Mr. Ross. Yes, sir.

Mr. ROSENTHAL. For that I really want to commend you; for being creative and coming here today with some new ideas, new recommendations, and it indicates, at least to me, that you folks have not merely been collecting data, but have been thinking of ways to communicate with the consumer, so he can convert this information to his own good interest

Mr. Ross. We appreciate that comment, Mr. Chairman.

Mr. Rosenthal. You do, presently, Commissioner, gather data for the Consumer Price Index in 56 U.S. cities, but publish this information only in 23 cities having a population of a million or more.

Why don't you make the same information available to the other cities, where you collect it, but don't publish it?

Mr. Ross. Well, there are two answers to that. The most important answer is that in most of these 56 cities, the sample is not sufficiently large as to yield city by city information for all of these diverse items and services.

Another part of the answer is that the policy of the Bureau of the Budget, which, of course, is an important influence on the statistical program of Government agencies, is to limit the publication of area information to the largest areas, I think, on the grounds that if the Government, in addition to its national program, publishes area information beyond the largest areas, there are so many hundreds of them, it might be difficult to know where to stop.

Mr. Rosenthhal. Do you have any notion of how many private citizens receive the Consumer Price Index either on your mailing list, or some other method of distribution?

Mr. Ross. I will supply, to the committee, Mr. Chairman, some information about the number of our own publications on the Consumer

(The information referred to follows:)

The Washington office mailing lists for consumer price reports include approximately 10,300 names. In addition, there are about 28,900 names on mailing lists maintained by our six regional offices. Names are put on mailing lists only at the specific request of the person or organization wishing to receive the informa-

Mr. Ross. A lot of the requests come through our regional offices and I don't have that information at my fingertips, but I could obtain it. I would guess, however, that the great majority of private citizens learn about price trends through newspapers, magazines, and other organizations that pick up our material and disseminate it.

Mr. ROSENTHAL. Are you satisfied with the way that the mass media

disseminates the information you make available to them?

Mr. Ross. Well, I think they do a pretty good job. I always feel that it is hard for me to tell the reporters and educators how to do their job. I feel there is some inclination in reporting the CPI to milk it for the sensation value of what often happens—that is, a new alltime high

of the CPI, if it goes up a tenth or two-tenths in a month.

Of course, the consumer price index does have a natural tendency to drift upward, even in a non-inflationary period, because service prices, I think for pretty good economic reasons, have a tendency to drift upward. So that a study was made last year, going back to the beginning of the CPI was made, and except for the period of the thirties, which is a depression we wouldn't want to repeat, I found in the great majority of all months, there was some increase in CPI. It is kind

I think the press tends to milk that point a little harder than I would. of a natural thing. I think the press probably emphasizes food somewhat out of proportion to the importance of food in the family budget. Of course, I think perhaps that reflects the feeling of consumers. There is something which I call the bacon syndrome. Housewives are particularly sensitive to changes in the price of food, and especially for some reasons, to changes in pork and bacon prices. There may be some sensitivity there which is, maybe one of the reasons why two of the world's leading religions have proscribed the consumption of bacon and other pork-

Mr. ROSENTHAL. What came first, the bacon or the Consumer Price

Mr. Ross. I think the former. But, I found that the newspapers and Index! [Laughter.] the housewives both suffer from this bacon syndrome, and tend to put

more weight on it than it is worth.

I know sometimes, other things like women's apparel, which cost more than bacon, go up more, and we don't get any complaints, but each time the price of bacon goes up, every Government official gets an awful lot of hate mail.

Mr. Rosenthal. Do you think there would be an across-the-board savings on behalf of the American consumer if they made better use of

Mr. Ross. Yes; I do, indeed. I believe that—I am sure—if we could information you publish? do more to help them, they would, because most families are conscious that their income is restricted and try to spend their income intelligently, so I am sure that most families would be glad to have more assistance.

Mr. ROSENTHAL. If they did get more for their money by following some of the recommendations you make, would that, in your judgment,

stimulate the free market economy? Mr. Ross. Well, I think so. The free market economy is a competitive economy. It is the policy of the U.S. Government to make it and keep it

Competition, as we know from elementary economics, assumes that as competitive as possible. the people competing in the market have knowledge. In other words, competition gives good results assuming that the producers, the sellers, the consumers, the workers, everybody else in the free market, is operating on the basis of intelligent thinking and sound information, so I am sure that better dissemination of consumer information would give better results. That is to say, lower prices and better quality in the free

Mr. Rosenthal. Now, are you satisfied about what the press does, aside from dramatic rises such as milk, have you found the press useful in disseminating information that would be concretely useful to the Mr. Ross. Oh, yes.

Mr. Rosenthal. You said in your statement, it is better to buy a used car in February than July.

Have you ever seen anything like this reported in the press?

Mr. Ross. Well, I don't recall that particular statement. I don't want to single out different newspapers, or magazines for comment. I would

say some of them do a better job than others.

I have seen in some newspapers and magazines, particularly valuable treatments of consumer budget information and of the CPI, and the wholesale price index, what they are, what they measure, how they can be used by the consumers, what they show, and so forth. The particular point about seasonal fluctuations has been dealt with quite adequately in some treatments I have seen. For example, one newspaper had a series of five long—I think almost a page long each—articles last year, on the Consumer Price Index, and the man who wrote that had the space to give a very adequate treatment.

Mr. ROSENTHAL. Some of the studies you have made for the Consumer Price Index on the costs of such items as mortgage insurance, real estate property taxes, insurance rates, appliance costs, clothing, and so forth are published on a national basis rather than a city by

Wouldn't it be more useful if it were published on a citywide basis, or a communitywide basis?

Mr. Ross. I think I will ask Mr. Chase to comment on that.

Mr. Chase. It certainly would be more useful. It goes back to the problem the Commissioner mentioned earlier, that the samples outside of food are too small to support separate city indexes for these other

Mr. Rosenthal. Is that because you don't have enough people to take samples, or you don't choose to take larger samplings?

Mr. Chase. We don't have enough resources to do it on a city by city

Mr. Ross. Collection of prices is a pretty expensive process. There are just so many hundreds of different goods and services which have to be sampled. There are hundreds of cities. In each city, there are many types of stores, discount houses, chain stores, independents, supermarkets, and so forth. So that it is a pretty complicated task to get a sample of all these different variables.

Of course, there are different qualities of merchandise, different package sizes, all kinds of variations. There are really millions of different prices in the economy, and I think Mr. Chase is correct that right now we don't have the budget which would permit publication of city by city prices for all these items. We would have to get bigger

Mr. Rosenthal. Do your field clerks check stores the same day of each month?

Mr. Ross. No.

I will ask Mr. Chase to say something about the scheduling of price

Mr. Rosenthal. Take as an example, the city of New York, where you check food prices. Do you do it on the same day of each week, or

Mr. Chase. On food prices, the collection is done on Tuesday, Wednesday, and Thursday. It is always on those three days of a week,

In other words, it may be the first or second week in different before the 15th. months, and all the work is done on those 3 days, but it is not done in the same store on the same day month after month. There is a

Mr. Rosenthal. A store manager would not have any incentive to change prices to satisfy any special desire he might have in impressing

Mr. Chase. We don't think so, because he doesn't know precisely your collector? when our agent is going to be there. The agent observes the prices posted on the shelves, so that the manager would have to sell at that price to any customers that were there that day.

Mr. Ross. In any case, the store manager has no particular motive in impressing our price collector. His prices go into an index along with many, many other sellers, and I don't think there would be enough in

Mr. ROSENTHAL. I am intrigued by this fact though—some people it for him to change it. say many large stores raise prices on a Saturday for various commer-

cial reasons. Yet, you don't check prices on Saturday.

Mr. Ross. On the other hand, Mr. Chairman, many food stores, in particular, have their weekend specials and the food industry has often said that it wishes we would collect our prices on Friday and Saturday when they have the weekend specials, particularly on meat, because so many people buy meat for the week on Friday and Saturday, and they buy it more cheaply than the Tuesday, Wednesday, Thursday prices. Now we are basically interested in the indexes.

Mr. ROSENTHAL. You collect your prices only on the days Congress

is in session. [Laughter.]

Mr. Chase. The reason we don't collect on Saturday, is that it is a very busy time in the stores. It would be very difficult to get the attention of the manager on a Saturday.

Mr. ROSENTHAL. But, you said you don't need his attention. You

check prices off the shelves. Mr. Chase. We do both. We check the price on the shelf, but if there is any change in the price or change in the sizes of packages or anything of that sort, it is checked with the manager after we observe what the price is.

Generally, the prices in effect on Thursday are also the prices in effect on Saturday, so that we think we get in most cases the Saturday

prices by doing the pricing on Thursday. Mr. ROSENTHAL. Going back to one other thing, Commissioner, you said that you answer tens of thousands of letters to individual consumers. I would assume that it takes a fair amount of manpower to answer these letters.

Is it conceivable that you could take some of that creative manpower now used to answer letters, and put them to work converting some of

the statistical material into useful forms for the consumer?

Mr. Ross. It is something I would like to think over. We do have our correspondence units in all our regional offices, and in Washington. Many of the letters can be answered on a pretty routine basis by sending out the appropriate publication or by looking up some information and answering it. I am not sure the people in the correspondence units would necessarily have the talent to write pamphlets and booklets, of a consumer education character.

Mr. ROSENTHAL. But, if we did get Walt Disney's firm, or some Madison Avenue firm to take this document and make it interesting,

it would be pretty useful.

Mr. Ross. Well, I think whether we do it, or the information industry does it or Walt Disney or whoever does it, I think there is a great deal of mileage that could be secured from it.

Mr. ROSENTHAL. In my view, there is a wealth of information in this material that you have gathered, but it has never really been put to its maximum use, because of a lack of complete information or

Mr. Ross. That's right. I think more could be done. It has not been the concept of BLS that it is essentially a consumer education agency. I think it is probably true that our information is just essential to all kinds of specialized groups like the governmental establishments, the Congress, labor community, management community, market researchers, business planning, the academic community, and so forth.

While we do feel that a great deal of information does get out to the general public, I don't believe it has yet been the concept of BLS that Congress has asked us to do this on a systematic or blanket basis.

Much more could be done.

Mr. Rosenthal. If we asked you to do it, you feel you have the resources to make the adjustment to do a good and useful job in this

Mr. Ross. Yes, sir.

Mr. Rosenthal. Mr. Myers?

Mr. Myers. Thank you, Mr. Chairman.

Mr. Ross, as I understand it, the information that you do collectyou publish a monthly magazine called the Consumer Price Index with a 12,000 circulation; is that correct?

Mr. Ross. No, sir; that is not quite the case; for one thing, we have

a monthly press conference which Mr. Chase and I conduct.

Mr. MYERS. Do all the news media participate in this?

Mr. Ross. Yes. It is very well attended. The last one we had waswhen?

Mr. Chase. The 28th of June.

Mr. Ross. Yes. We are having one tomorrow, as a matter of fact. [Laughter.]

Tomorrow's press conference will be held in a conference room in the Labor Department. There will be some dozen—I don't know how many—people from magazines, newspapers, radio, sometimes television, and we give in an integrated way all of the indexes for the current Consumer Price Index and the wholesale price index, with all the breakdowns and a preliminary version of the wholesale price index for

We have tried to bring it all together. We used to issue it spasmodically during the month. We now issue it all at the same time to try to give a total picture. That is one thing we do. That usually gets pretty

Then later on we issue a more complete statement for the month that good coverage. gives a lot of detail that isn't covered in our press conference and the

release at that time.

Mr. Myers. Again this goes to the news media.

Mr. Ross. There is also a very large mailing list for that.

Mr. Myers. Who does this go to? What kind of mailing list?

Mr. Ross. The mailing list would include all kinds of people. I would like to supply for the record at this point, if I can, some analysis of the mailing list.

Mr. Rosenthal. Without objection.

(The analysis of the mailing list referred to follows:)

An analysis of the classes of organizations and persons included has been made only for one of the Washington office mailing lists. It showed the following distribution:

dist	Class of organization or individual	Percent _ 100
All	classes	17
	Business organizations	7 13
	T 1 organizations	
	n-essional organizations and mo-	- 12
	Government agencies (Federal, State, municipal, and foreign)	
	All others the buginess firms, labor organization	s, vari-

Mr. Ross. I know it goes to business firms, labor organizations, various types of journalists, it goes to marketing research people, advertising agencies, social welfare organizations and so on but I would rather give you the precise breakdown.

Mr. Myers. But in all of these relatively few of the consuming public

really get this information. Mr. Ross. I would say that is true, yes. The magazine I mentioned is the Monthly Labor Review-I am sorry I don't have a copy with mebut that is the general journal or magazine of the Bureau of Labor

We summarize the price data in it also. We have many special arti-Statistics. cles in the Monthly Labor Review about prices. It has a circulation of 13,000. Obviously that is somewhat fewer than the circulation of Life magazine and it doesn't go to a large proportion of consuming

Mr. Myers. Then the information you are now getting through families. your department or subdepartment or whatever you call it, the only way the consuming public really gets it is from the newspaper, radio, or television; is that correct? And there is a chart there which has no explanation really-

Mr. Ross. Well, some newspapers have a pretty good explanatory

story. Some don't.

Mr. Myers. But this is the only way, now, that you are disseminat-

ing your information. Mr. Ross. Well, that is not quite the full story, Mr. Myers, because after all, in our democracy there is a lot of information that gets around to people indirectly. For example, there are consumer organi-

zations—consumer research or consumer cooperative organizations. They make tremendous use of our material. Some trade unions, although not all, have consumer programs. I, when I get a chance, try to follow trade union publications. They sometimes have consumer columnists and quite a good deal of consumer information.

There are, I think, all kinds of organizations that do make use of consumer information and they get it to the public that way. We do have a great many inquires from consumers although certainly only a small proportion of total consumers would be corresponding with us

Mr. Myers. Now some of the information you get, does that go into the cost of living figure we see published?

Mr. Ross. That is our information.

Mr. Myers. You mean that is the cost of living that we see, the index-

Mr. Ross. The consumer price index which I have been referring to is generally known as the cost of living index. That is our index.

Mr. Myers. Well, you say, here, you don't go into a lot of areas such as cost of mortgage loans and automobiles and so forth-

Mr. Ross. No, sir; I didn't say that.

Mr. Myers. I thought that was in the statement.

Mr. Ross. No. We have to distinguish between the index and the publication of actual dollars and cents prices. We publish—I

Mr. Myers. I just got this statement but I thought I remembered you saying something—well, you know what you said.

Mr. Ross. No. I didn't say that. We do publish an index-

Mr. Myers. Excuse me. I stand corrected.

Mr. Ross (continuing). For all significant items of consumption. We have indexes for the Nation and the 20 largest cities on automobiles, for example, and on mortgage interest-

Mr. Myers. I know where I got that information. You were talking about the cost of living, the poor, housing areas and so forth and said

you didn't consider their-

Mr. Ross. That was the special study of living costs of the poor as compared to the affluent or nonpoor. That was a special inquiry we made at the request of the Food Marketing Commission and OEO, and we only took certain points of relevance there. Only certain types of consumer goods.

Mr. Myers. How many people do you have working now in your

Department?

Mr. Ross. The entire Bureau of Labor Statistics?

Mr. Myers. Yes.

Mr. Ross. 1,600.

Mr. Myers. What is your budget? How much does this cost per

Mr. Ross. I am referring to the entire program of the BLS, not just the price indexes.

Mr. Myers. CPI.

Mr. Ross. Oh, that is another story, Mr. Myers. The answer to your question is that the consumer price index program costs us about \$2 million a year. That is the budget which Congress gives us for that purpose. The employment on that program comes to about 175 people including people in Washington and our six regional offices. Above and beyond that there are some so-called daily rate employees who are hired on a more casual basis to help in the collection of prices in certain cities where our regular staff is not sufficiently large.

Mr. Myers. Now these letters that you say you received which run into the thousands, can you tell or have you tried to tell whether that

comes from the consuming public or industry? Mr. Ross. Both. We get a lot of letters from the general public. We get a lot of letters from businessmen and the other financial organizations and people in industry. But I don't want—I wouldn't want to claim that the average general consumer is directly in touch with BLS or that he gets a great deal of our information.

Mr. Myers. On pages 3 and 4 you talk about the housing and you also—the survey you made for OEO and the National Commission

of Food Marketing-

Mr. Myers. You also talk about the poor usually buying in small quantities and from smaller stores where it was more expensive to buy. You also then go further and talk about five examples of how these people might improve their buying position.

Do you think really there is anything you can do for those people? Do you think you can put out a pamphlet which you are suggesting that the people buying in smaller stores now could walk three blocks

and buy cheaper, will they read the pamphlet? Mr. Ross. This listing of five items didn't have any particular reference to poor people. The question that the chairman asked me to comment on was: What could the BLS do for consumers in general?

Mr. Myers. Most of the consumers are poor. I think we are, aren't

Mr. Ross. Well, this study of the poor really was concentrating on a

Mr. Myers. Who need the most help?

Obviously, different groups of consumers would have to be reached in different ways. My listing on pages 5, 6, 7, and 8 is rather general the types of things that the Bureau might do for consumers in general. Of course there are all kinds of consumers, as you indicated.

Mr. Myers. Well, each day, especially in the last few weeks, we have been hearing charges all over the country that Congress should be

What do you suggest your agency might do to help these people? doing more to help in poor areas. How would you reach these people? How can you reach these people who need the help but don't seem to be helping themselves and want

Mr. Ross. Well, I have to answer kind of off the cuff because in line somebody to help or do it for them? with the request we had we were thinking about consumers in general. But off the cuff I would say that many of the poor people in slum and ghetto areas are very unsophisticated as consumers. Many of them have come up into the cities from the country, from rural areas recently. Many of them don't have a good education and they do not consume wisely.

I am not really a poverty expert and I hate to pretend to be one, but I think that through community action organizations under the poverty program and various other ways, a great deal of work would

have to be done in educating people like that, what the concept of budget means rather than getting whatever money you have and spending it on what might strike your fancy at the moment—some of the rudimentary elements of getting the most for your dollar. I know that Congress is considering legislation to make it imperative to tell consumers what interest rate they are paying. Of course I think that would be helpful to many consumers, although some of them don't have an awfully clear concept of what a percentage is.

You say you are paying 20 percent a year for this credit jewelry or you are paying a real interest rate of 16 percent or 25 percent on this used car. I am not sure that would have an awful lot of meaning to many consumers. It would also involve that they understand just what the significance of that is. I think there is a big job to be done.

I wouldn't suggest BLS can do it all, particularly when you come to the poor consumers who lack sophisticated background in handling income in an urban society.

Mr. Myers. I have been a country banker in a rural area—I come from one of those rural areas you talk about—we are very cost conscious out there. I might add to what you are saying: I have been dealing with the public for about 15 years and I made lots of loans, and the people that are really concerned about the rate ask, and the people that don't care I could sit here and tell them 10 times, walk out the front door and ask them and they wouldn't know what they pay.

I don't know the answer to the question I asked you. You should always know the answer but I don't know. I think many of us are looking too.

How do you approach this problem? These people are in the position they are because they don't have the desire that you and I have or they wouldn't be living there. They would be elevating themselves. They would be doing something about it. I don't know how you approach the problem. Maybe you have suggestions since you have been

Mr. Ross. I don't know that I have any further suggestions. My own belief is that the bulk of the people who are poor do have a desire to make it up onto the high road of affluence that most of us are on. We are all poor consumers. We feel that way once a month when we pay the bills but the United States in general is an affluent society.

The majority live decently and well. We have come to the point fortunately where poverty is no longer a general condition. It is a minority phenomenon. That is a sign of progress. But on the other

I think when everybody was poor we used to talk about poor but proud, or the decent poor.

Now when most people are well off or better off, when even many of the manual workers have made it out of poverty, I think that poverty is regarded as shameful, a kind of social disease and it is probably much harder to take than it was when everybody was poor.

I feel that the bulk of people who are poor want to make it into the mainstream of society.

Now I agree fully with you that unless and until they have that desire, there is not much anyone can do for them. I am rather skeptical about motivation, giving people motivation the way you give pills. I think motivation has to come from within. I think it is coming. I

think some of the terribly tragic and perverted things we are seeing this week around the country indicate the beginnings of motivation in the sense of expectations or wishes having been stimulated which run so far ahead of what is currently possible that it leads to all these frightful manifestations, so I think that there is a desire.

Mr. Myers. That is all I have. Mr. Rosenthal. Thank you.

Mr. WYDLER. A great many things in our economy really are tied in with this index of yours, aren't they?

Mr. Wydler. Do you know-for instance, are there still many labor

union contracts that are drawn based on this index? Mr. Ross. Oh, yes. There are about 21/4 million union workers at the present time, who have their rates of pay adjusted periodically, generally quarterly, but not always. Most of these contracts are tied to the national index, although there are a smaller number-for example, some in Los Angeles—that are tied to local indexes.

In addition, the Federal civil service retirement benefits are adjusted periodically on the basis of movements in the cost-of-living index. Military pensions are adjusted on the basis of movements in the

cost-of-living index. A great many other types of things. For example, under some awards, alimony payments, there are longterm business contracts which are adjusted on the basis of either wholesale or retail price movements. So that you are certainly correct in saying that many transactions are affected by these indexes.

Mr. Wydler. When was the last time this index, when the basis or any part of the basis on which this index is drawn up, was changed? Mr. Ross. Well, if you say any part of the basis, it would be very

recently because we do try to improve it as we go along. The last overall revision would be January of 1964.

Mr. WYDLER. And at that time were significant changes made?—

in what parts? Explain what parts of the index were changed. Mr. Ross. Well, it is necessary periodically to make consumer expenditure surveys to find out what are the things that we ought to put into the index. For example, let's say we don't have saddles any

Mr Wydler. Change the commodities you are indexing.

Mr. Ross. It is a matter of changing the market basket of goods and services. It is a matter of changing the weights. The overall CPI is weighted. So much percent for food. So much for apparel. As time goes on, we find that consumers spend their income in different proportions for different items. We have hundreds of items.

I might say I have a lot of literature on all this if you want it for the record or I could give it to your staff director, Mr. Chairman.1

Mr. ROSENTHAL. That would be fine. Mr. Ross. But we occasionally have to make a very comprehensive consumer expenditure survey to find out how to weigh all these items.

Mr. Ross. Then-I was going to say to identify what are the Mr. Wydler. Go ahead. leading cities for which city information should be published and

The information requested has subsequently been furnished and is in the files of the

the cities in which information should be collected and also the

For example, there was a time when, oh, discount houses became popular so that we had to make sure we had discount houses in the

sample although they hadn't been previously.

Now we have the suburbs, so we had to make sure we had enough of our sample in the suburbs. So these things are always being studied, and then periodically, after a certain number of years, there is a basic revision.

Mr. Wydler. In 1964 was this a significant change in the basic

elements of the index?

Mr. Ross. Yes. It was fundamentally reworking of the whole thing. We do it every 10 years, although I suppose if we could write our own ticket and sign our own checks we would like to do it every 5 years but it is an expensive thing and it is up to Congress to decide how often to do this. We do it every 10 years and the next revision is scheduled to go into effect in 1975.

Mr. Wydler. Well, that is really what I was particularly concerned

with. It is done on a regular basis?

Mr. Ross. Oh, yes, Mr. Wydler. I might say, to make a full-scale consumer expenditure survey costs several million dollars for this comprehensive revision.

Mr. Wydler. Something that bothered the people out where I come from, a suburban area outside of New York City in Nassau and Suffolk County, is the fact that we are lumped in, with the metropolitan central area of New York City. I don't think, in many particular items, that makes too much sense any more. We have an almost totally distinct situation out our way. For example, I know where the Nassau/ Suffolk area is in the national picture. We claim now to be the fourth largest marketplace in the country, after three major cities. The Nassau/Suffolk area is the fourth largest consuming area in the United States of America. Yet we are just an appendage or a part of an area. We are not treated in any independent way for the purpose of getting our statistics together and using them. We are lumped in with New York City and are reported in this fashion.

Mr. Wydler. It seems to me to be a totally unrealistic viewpoint of the way the United States is developing, and I can't really see how you can justify that—this is a broad question, going to the Department of Labor-but I don't see how that can be justified any more. We

Mr. Ross. Yes. I would, without arguing the point, observe this: that primary stress is placed by the administration on the national index.

Mr. Wydler. For that purpose this makes no difference.

Mr. Ross. The question of local indexes is somewhat controversial and we are permitted to publish them for the 23 areas. Now, within any area there are certain subareas. Certainly anything as vast as the New York City standard metropolitan area does have significant areas. Here again it is really a matter of the total size of the program and a sample. We don't have the sample that would make it possible, aside from the question of policy, to take an area like New York City or to take an area like Washington and distinguish between Anacostia, Bethesda, and downtown Washington, let's say, where there may well

be differences, although certainly not as great as between Nassau County and Manhattan. But we don't have that. Now, there are some cases where there are local groups connected with chambers of commerce or local colleges and universities which want to survey on a narrower basis than we do in our program, and we are able to give

I might say there are some universities around the country that them technical assistance. do have their own programs which are designed for these specialized local needs, and we try to give them help in showing them how to

Mr. Wydler. I think there will be a look taken at this situation in the near future, so I wanted to give you the benefit of my thinking in case you happened to be asked about it in the Department.

Mr. Ross. Yes. Well, I am aware certainly that New York is an

Mr. Wydler. One thing, in conclusion in your statement, what really extremely vast area with many differences. struck me rather strongly is this statement regarding the difference in the price of food in well-to-do and poor neighborhoods. If I understand what you say, it seems to me you say it is really a question of the fact that you don't have chainstores in the poverty areas. Would that be a fair-

Mr. Ross. I wouldn't say there are no chainstores in poverty areas. Of course, there are some. But there are a larger proportion of the small neighborhood stores, the so-called mom and pop stores, small in-

dependents, and a lesser availability of chainstores. Mr. Wydler. Which you say accounts for the difference in the gen-

Mr. Ross. It accounts for much of the difference. There are also differences in the appearance of the stores, in the freshness of the eral cost. merchandise, and so forth, which you sometimes find even between a chainstore in a slum area and a store of the same chain out in the suburbs, but the price differences, by and large, are related to dif-

Mr. Wydler. Which would seem to me to be an indication of what ferences in type of store. might have to be done or the direction your efforts should take if you really wanted to eliminate or ameliorate, depending on how you look

Mr. Ross. Well, I know my friends in New York City have maids who live in Harlem, and they have tried to advise their maids to do at it, that difference. their own shopping in the high-rent area near Central Park, let's say, from supermarkets rather than to go back in Harlem and buy there, so they can save money. That does indicate the lack of full availability

Mr. Wydler. Could you comment on the fact-I am just trying of merchandising outlets in the slums. to figure in my own mind-why the cost would be higher under these circumstances? Is it more expensive to do business in low-income

Mr. Ross. No; I think it is more expensive—you don't get the economies of scale in a small independent mom and pop store that you do running a chain. I don't want to argue for or against bigness, I don't want to get into that, but it is certainly true that a chain can operate more economically in some ways than the small store. It has the ability to buy en masse, it has experts of all kinds, and usually can sell at lower prices.

Mr. Wydler. There wouldn't be any way you can think of to encourage chains or large stores of this type to go into these areas?

Mr. Ross. Well, I am sure there are ways it could be done, but I

Mr. WYDLER. Possibly the cost of doing business in an area such as that, looking at our recent disturbances around the country, I would imagine your insurance rates, for example, must be tremendously different—or they will be at least in the near future. I don't really know what they are.

Mr. Ross. Well, I have been in the Watts area a couple of times since the riot there and I know that some of the chainstores have not been rebuilt, and I think there still is a shortage of chainstores in the

Mr. ROSENTHAL. One way Government could help would be through tax abatement or tax advantages of one sort or another to induce them to go into these areas.

Mr. WYDLER. I thank the gentleman.

Mr. Rosenthal. Thank you very much, Commissioner. Again, please accept my compliments. It has been a pleasure to have you, and I want to congratulate you on coming up with new thoughts and ideas. Maybe we can be useful in putting them into action. Your full statement, together with a description of the CPI and the "Estimated Retail Food List for May 1967" will be printed (The information referred to follows:)

PREPARED STATEMENT OF ARTHUR M. Ross, COMMISSIONER OF LABOR STATISTICS

I have been requested to discuss with the Special Studies Subcommittee how Bureau of Labor Statistics data can be of help to consumers and how this information might be more effectively presented and disseminated.

Most consumers need and want help in the form of information to assist them in their shopping. In order to buy wisely, consumers need objectively-determined an their snopping. In order to buy wisely, consumers need objectively-determined facts about the comparative prices of the alternative products among which they must choose. Consumers need an appraisal of the current price situation. Which prices are rising? Which are falling? What are today's good buys? When is the best time of the year to buy various items? How much can be saved by deferring some purchases? How much can be saved by stocking up when prices are lowest? Many consumers also want help in developing family budgets. How much do persons in a particular income bracket generally spend for clothing? How much does it cost to own and operate a car? The Bureau receives thousands of letters each year wanting to know the answers to such questions. Many letters are referred to by Members of Congress.

As you know, the Bureau does collect and analyze a great deal of information that is of value to consumers. We publish the Consumer Price Index, a statistical measure of changes in prices of goods and services bought by urban and plantal workers. It is published monthly for the country as wage earners and clerical workers. It is published monthly for the country as a whole and separately for 23 large metropolitan areas. On a national basis the details extend to separate indexes published either monthly or quarterly for about 300 individual consumer items. We also publish average retail prices for nearly 100 food items for the United States and the 12 largest metropolitan

I should like to make special mention of the Bureau's standard budget studies, estimates of what it costs in dollars and cents, to maintain various standards of living. Next month, the Bureau will begin publishing new indexes of intercity differences in living costs. The Bureau plans to publish cost estimates for a modest living standard separately for 39 metropolitan areas. A U.S. urban average cost estimate will also be published and, in fact, will be the "base"

We do try to relate the information collected to the needs of consumers. Bureau representatives meet with consumer groups to show them how BLS data can be used. Sometimes, we cooperate with special commissions or other groups can be used. Sometimes, we cooperate with special commissions or other groups in collecting data. For example, early last year, the Bureau made a special study for the National Commission on Food Marketing and the Office of Economic Opportunity comparing prices charged by stores located in low-income neighborhoods of six large cities with those charged by stores located in higher income neighborhoods. The purpose was to answer the question whether the poor pay

The poor paid more for food. This is because they more often bought their more for important consumer items. groceries in small independent stores where prices were usually higher than in groceries in small independent stores where prices were usually higher than in-large independent or chainstores. However, there were no significant differ-ences in prices for the same type of store, whether located in low income or higher income neighborhoods. Thus, price differences for the same quality goods appeared to be associated with the size of store in which purchases were made rather than with differences in the geographic location of the stores. Another factor brought out by the study was that the poor were more likely to purchase certain items in smaller sizes which made the unit cost higher. It was chase certain mems in smaller sizes which made the unit cost higher. It was also observed that in general the condition of goods available in stores in lowincome areas was inferior to that in stores in higher income areas. The stores in low-income neighborhoods tended to be less orderly and clean, and the meats

a produce the not appear as fresh. With respect to other consumer items, the study showed that the prices for and produce did not appear as fresh. such appliances as washing machines and television sets were higher in the such apphances as washing machines and television sets were lighter in the neighborhood stores in the low-income sections of the cities. On the other hand, the poor paid less for such services as dry cleaning, shoe repairs, and hair-

An analysis also was made from the Bureau's existing records of the comcuts, if they patronized neighborhood establishments. An analysis also was made from the Bureau's existing records of the comparative quality of rental housing. In general, homes occupied by low-income parative quanty of remai housing. In general, homes occupied by families with families were more often of lower quality than those occupied by families with higher incomes, even when they paid the same rent. Low-income families lived in poor-quality neighborhoods, and higher proportions of them occupied deterin poor-quanty neignormous, and ingher proportions of them occupied deter-iorating or dilapidated housing at comparable rents. Heating equipment in housing occupied by low-income families was often inferior, and many of them had to share a bathroom with other families, without enjoying commensurately

It remains true that much of the information collected by BLS has not been lower rents for such deficiencies. published in a form that is most meaningful to the average consumer. Indexes, for example, are useful tools for market researchers, for economists in charting our battle against inflation, and for determining the amount of wage esing our pattie against innation, and for determining the amount of wage calation in union-management contracts. But they may not be very meaningful for most consumers. The average consumer finds it difficult to relate an index

The price data collected by BLS can be analyzed and presented in such a was as to be more understandable and useful to the individual consumer. to his own experience. Let me list some examples of how this can be done. I know that the committee will understand that the Bureau would require additional resources to develop

1. Prices of many items have pronounced seasonal fluctuations. This means a full-scale program of consumer education. that the items are better buys at certain times of the year. From its historical records, the BLS could develop seasonal patterns of prices, to advise consumers how they could save by making their purchases at specified times of the year. How much are prices generally reduced for sheets and towels during the January "white sales" or for furniture during the usual semiannual sales? When are prices reduced by closeouts of seasonal items of clothing and shoes? A family might want to wait until winter to buy a used car if it knew that car prices are usually significantly lower in February than in July. For many food items, particularly if freezer space is available, advance buying during the seasonal low periods can result in considerable savings. It may be helpful to remind consumers that in some parts of the country fresh fruit and vegetables are higher in price in July when current crops have not reached the market in volume. A few weeks later, prices for these items will drop considerably. 2. Bureau data could be made more meaningful by presenting more informa-

tion on actual average prices in dollars and cents. For example, the food component of the Consumer Price Index went up in May, partly because lettuce ponent of the consumer rifee index went up in May, partly because fettuce prices increased. This kind of information is not nearly as meaningful to the consumer buyer as if he were to be told that the average price of lettuce

in his home city went from 29 to 39 cents per head. This information could be in his nome city went from 25 to 55 cents per nead. This information could be tied in with publications regularly issued by the Department of Agriculture on the supply and price outlook for food of all kinds to assist the consumer in the supply and price outlook for food of all kinds to assist the consumer in planning his food budget. The same kind of information could be provided, at least on a national or regional basis, for many other consumer items, such as men's suits, women's dresses, refrigerators, hospital rooms, etc.

If average prices for more items were published for a greater number of localities, consumers might be able to determine whether items they are considering are really the bargains that sellers claim them to be. If they were able to obtain a reasonable estimate of what they should expect to pay for an item,

3. There appears to be a great deal of confusion in the minds of consumers about the price per unit represented by different sizes of packages. Besumers about the price per unit represented by different sizes of packages, because of its present method of collecting price data, the Bureau's existing price records do not provide a complete answer to this question. With an expansion of coverage to include a broader cross section of package sizes, however, we or coverage to include a broader cross section of package sizes, now, and could advise consumers of per unit differences in prices for various package sizes. We also could provide information on changes in per unit prices as new

4. A major area in which BLS data could be made more useful to con-4. A major area in which bles data could be made more useful to consumers is that of family budgeting. In connection with our forthcoming reports on standard budgets, we are planning to prepare pamphlets in popular ports on standard budgets, we are planning to prepare pamphiets in popular form. More could be done along this line than we now are presently able to do. It would involve further simplification of the manner in which the budgets are presented, and their adaptation to various types and sizes of families. The are presented, and their adaptation to various types and sizes of ramilles. The results would provide a "norm" against which individual families could measure their own spending for various classes of goods and services.

The data which the Bureau gathers on consumer income and expenditure, as well as the work that is done in preparing the standard budgets, could be exploited further. For example, we could prepare pamphlets on "the cost of running a house," or "the cost of owning and operating a car," or "the cost running a house," or "the cost of owning and operating a car, or the cost of rearing a child." These are subjects on which we receive many inquiries. Most of the basic data needed to produce them are contained in the results of our consumer expenditure surveys, but they have not been organized and interpreted in such a way as to be meaningful to consumers.

5. If we are to make our data more meaningful and understandable to consumers, more creative ways must be found to disseminate the information. We will have to discover the best ways of getting the information into the hands of the consumers themselves as well as to persons and agencies who help consumers, such as newspapers and magazines, social welfare agencies, women's

In summary, the Bureau's present program is being enhanced as we complete our work on standard family budgets. Nevertheless, there are a number of steps that can make them more useful such as the points I have enumerated. The Bureau hopes to improve its program continually to better serve the needs of the American consumer.

The CONSUMER PRICE INDEX

(Revised January 1964)

A Short Description



UNITED STATES DEPARTMENT OF LABOR
W. Willard Wirtz, Secretary

BUREAU OF LABOR STATISTICS Ewan Claque, Commissioner

(85)

Contents

What the inda.	
What the index is The meaning of the index measurement Uses of the index Brief history of the index The market book	
Uses of the index Brief history of the index The market basket Price data collection	Page
Brief history	1
The merical of the index	2
Price dos	2
Brief history of the index The market basket Price data collection Index Calculation	3
The market basket Price data collection Index calculation Limitations of the index Explanations of the index Tables:	3
Limitations of the index Explanations of the index formula Tables: 1. Cities	4
Tat.	4
	5
	,
1. Cities, population weights, and pricing schedule for the revised Consumer Price Index 2. Groups of goods and services priced for the revised Consumer Price Index 9	
2 Consumer Price Tall	
2. Groups of goods and services priced for the revised Consumer Price Index	
for the revised Consumers priced	
for the revised Consumer Price Index, their December 1963 relative imposes	
December 1963 relative importance, and number	
of items priced	
맞게 하다 그 병에는 어느가 이 생기가 되는데 어느라는 사람이 되었다면 하다. 이 없었다	

September 1964

THE CONSUMER PRICE INDEX (Revised January 1964)

The Consumer Price Index (CPI) is a statistical measure of changes in prices of goods and services What the Index is bought by urban wage earners and clerical workers, including families and single persons. The index is often called the "cost-of-living index," but its official name is Consumer Price Index for Urban Wage Earners and Clerical Workers. It measures changes in prices, which are the most important cause of changes in the cost of living, but it does not indicate how much families actually spend to defray their living expenses. Prior to January 1964, the complete name for the index was: Index of Change in Prices of Goods and Services Purchased by City Wage-Earner and Clerical-Worker Families to Maintain Their Level of Living.

The index covers prices of everything people buy for living-food, clothing, automobiles, homes, housefurnishings, household supplies, fuel, drugs, and recreational goods; fees to doctors, lawyers, beauty shops; rent, repair costs, transportation fares, public utility rates, etc. It deals with prices actually charged to consumers, including sales and excise taxes. It also includes real estate taxes on owned homes, but it does not include income or personal property taxes.

Through December 1963, the index applied only to families of two persons or more. With the January 1964 index, the coverage has been extended to include single workers living alone. At the same time, a separate new series index applying only to families of two persons or more is being computed for comparability with the previous series. The average size of families represented in the index is about 3.7 persons, and the average family income in 1960-61 was about \$6,230 after taxes. The average income after taxes of single persons represented in the index was about \$3,560.

The index measures price changes from a designated reference period. Since 1962, the base reference The Meaning of the Index Measurement period for the CPI has been the average of 3 years-1957, 1958, and 1959-as 100.0. (Index numbers are also available regularly on 1939=100 and 1947-49=100 bases, and they can be converted to any desired base period.) An index of 110 means there was a 10-percent increase in prices since the base period; similarly, an index of 90 means a 10-percent decrease.

¹ The definition of wage earners and clerical workers is based on the occupational classification used by the Bureau of the Census for the 1960 Census of Population and listed in the Alphabetical Index of Occupations and Industries. The group includes craftsmen, foremen, and kindred workers, such as carpenters, bookbinders, etc.; operatives austries. The group includes crarismen, toremen, and kindred workers, such as empenders, observations, operatives and kindred workers, such as apprentices in the building trades, deliverymen, furnacemen, smelters, and pourers, etc.; one ninuted workers, such as apprenitives in the outlaing traces, deliverymen, turnacemen, ameners, and powers, etc.; clerical and kindred workers; service workers, except private household, such as waittesses, practical nurses, etc.; and a power and a service workers, except private household, such as waittesses, practical nurses, etc.; and a power an cierical and kindred workers; service workers, except private nousenold, such as waitresses, practical number, every soles workers; and laborers, except form and mine. It excludes professional, technical, and kindred workers, such as sales workers; and laborers, except form and mine. It excludes professional, recinical, and kindred workers, such as engineers and teachers; formers and form managers; managers, officials and proprietors, except form; private household respinence and templaces, retimers and forement. A consumer unit included in the 1960-61 Survey of Consumer Expenditures and form laborers and forement. A consumer unit included in the 1960-61 Survey of Consumer Expenditures workers; and form toporers and revenue. A consumer unit included in the 1700-01 oursey of consumer papernatures and classified in the index group if more than half the combined income of all family members was obtained in a wagewas classified in the index group it more than hair one combined income or all family memoers was obtained in a wageearner and clerical-worker occupation and at least one family member was a full-time earner (i.e., worked 37 weeks or more during the survey year).

Moveme of the index from one date to another are usually expressed as percent changes rather than changes in index points because index points are affected by the base period, while percent changes are not. The following example illustrates the difference between percent change and index points change:

Period	Base A	Index	
I	Dase A	Base B	Base C
II	112,5		Dase C
Index points	121.5	168.8	
change		182.3	225.0
Percent change	9.0	등하다 내내 하는 맛이 하는데 하다.	243.0
	9.0 112.5×100=8.0	13.5	
	112.5*100=8.0	13.5 168.8×100=8.0	18.0
The Bureau calculates	현대 교육하다 위하다 하다	168.8-100-0.0	$\frac{18.0}{225.0} \times 100 = 8.0$

The Bureau calculates a monthly index representing all urban places in the United States.—The U.S. City Average Index—and a separate index for each of 17 Standard Metropolitan Statistical Areas. 2 The individual city indexes measure how much prices have changed in a particular city, from time to time; but they do not show whether prices or living costs are higher or lower in one city than in another. For example, consider the prices of a single item in two cities in 2 years:

	r.	rice	
City A		Year II	Index, Year II
City B	\$0.30	\$0.60	(Year I= 100)
	•40	•70	200
ice is high			175

The price is higher in City B in each of the 2 years, but the relative increase in price in City B is less and therefore the index is lower.

Uses of the Index

The Consumer Price Index is used widely by the general public to guide family budgeting and to understand what is happening to family finances. It is used extensively in labor-management contracts to adjust wages. Automatic adjustments based on changes in the index are incorporated in some wage contracts and in a variety of other types of contracts, such as long-term leases. In addition, the CPI is used ties, pensions, welfare payments, and occasionally alimony payments. It also is used widely as a reflection of inflationary or deflationary trends in the economy.

²For New York and Chicago, the more extensive Standard Consolidated Areas are used. Revised indexes for six additional Standard Metropolitan Statistical Areas will be computed beginning at various dates in 1965.

The Bureau of Labor Statistics has been calculating the Consumer Price Index nearly five decades. Brief History of the Index The weighting factors, the list of items included in the market basket, and the cities in which price data were collected for calculating the index have been updated several times during that period. Initially, they were based on a survey of expenditures by wage earners and clerical workers in 1917-19. Because people's buying habits changed substantially by the mid-1930's, a new study was made covering expenditures in the years 1934-36 which provided the basis for a comprehensively revised index introduced in 1940 with retroac-

During World War II, when many commodities were scarce and goods were rationed, the index weights tive calculations back to 1935. were adjusted to reflect these shortages. Again in 1950, the Bureau made interim adjustments, based on surveys of consumer expenditures in seven cities between 1947 and 1949, to reflect the most important effects of immediate postwar changes in buying patterns. This adjustment was followed by the first comprehensive postwar revision of the index, which was completed in January 1953. At that time, not only were the weighting factors, list of items, and sources of price data updated, but many improvements in pricing and calculation methods also were introduced.

The index has just undergone another comprehensive revision, beginning with the index for January 1964. To determine the current pattern of expenditures for goods and services by wage earners and clerical workers, the Bureau made a Consumer Expenditure Survey (CES) covering the period 1960-61.3 The sample of cities in the survey included 66 urban areas which were chosen to represent all urban places in the United States, including Alaska and Hawaii. Only 50 of the 66 areas comprise the list of cities in which price quotations are obtained for the index. (A list of the areas and cities is given in table 1.)5 In this most recent survey, as in those conducted earlier, a detailed record was obtained of the kind, qualities, and amounts of all goods and services bought by each consumer unit (family or single person living alone), and of the annual amount spent for each item. A total of 4,344 urban wage-earner and clerical-worker families and 517 single workers provided such records.

It is not feasible or necessary to obtain current price quotations on everything that consumers buy in The Market Basket order to calculate a valid index of changes in consumer prices. About 400 items have been selected objectively to compose the "market basket" for current pricing, beginning with the January 1964 "new series" indexes. Not all items are priced in every city. In order to make possible estimates of sampling error, two subsamples of items have been set up. These are priced in different cities and in different outlet samples, as indicated in table 1. The list includes the most important goods and services and a sample of the less important ones. In combination, these represent all items purchased. The content of this market basket in terms of items, quantities, and qualities is kept essentially unchanged in the index calculation becween major revisions so that any movement of the index from one month to the next is due solely to changes in prices. A comparison of the total cost of the market basket from period to period yields the measure of average price change.

The Survey for Anchorage, Alaska, covered expenditures in 1979.

4The selection of the city sample is described in "The Revised City Sample for the Consumer Price Index," The selection of the city sample is described in the Neviseo City sample for the Consumer First and Reprint No. 2352 from the October 1960 Monthly Labor Review.

Reprint No. 2352 from the October 1960 Monthly Labor Review.

Six additional Standard Metropolitan Statistical Areas are being added to the national index in January 1966.

⁶The complete list is available on request.

Price Data Collection

Prices are obtained by personal visit to a representative sample of about 16,500 retail stores and service establishments where wage and clerical workers buy goods and services, including among the service establishments where wage and clerical workers buy goods and services, including among me establishments chain stores, independent grocery stores, department and specialty stores, restaurants, professional people, and repair and service shops. Rental rates are obtained from about 34,000 tenants. Reporters are located both in the city proper and in suburbs of each urban area. Cooperation of reporters

To insure that the index reflects only changes in prices and not changes due to quantity or quality differences, the Bureau has prepared detailed specifications to describe the items of the market basket. Specially trained Bureau representatives examine merchandise in the stores to determine whether the goods and services for which they record prices conform to the specifications. Where the precisely specified item is not sold at a particular retail establishment, the Bureau's representative obtains a detailed technical description of the item on which prices are quoted, in order to insure that prices will be quoted

Prices are collected in each urban location at intervals ranging from once every month to once every 3 months, as indicated in table 1, with a few items surveyed semiannually or annually. Because food prices change frequently, and because foods are a significant part of total spending, food pricing is conducted every month in each urban location. Prices of most other goods and services are collected every month in the five largest urban areas and every 3 months in all other places. Pricing of foods is done on 3 consecutive days each month; rents and items for which prices are obtained by mail are reported as of the 15th of the month; pricing of other items extends over the entire calendar month. The Bureau uses mail questionnaires to obtain data on streetcar and bus fares, public utility rates, newspaper prices, and prices of certain other items which do not require personal visit by Bureau agents. For a number of items, e.g., home purchase, college tuition, used cars, magazines, etc., data collected by other Government Index Calculation

A standard statistical formula 7 is used to calculate the Consumer Price Index from prices for the market basket items. Average price changes from the previous pricing period to the current month are expressed in percentage terms for each item, and the percent changes for the various goods and services are combined, using weighting factors based on the item's importance in family spending and that of other items which it represents. This composite importance is called the cost weight of the market basket item. Table 2 shows the relative importance of the various groups and subgroups in the U.S. index as of December 1963, together with the number of items priced. There is a set of separate cost weights for each of the 50 urban locations included in the index. The following hypothetical example for pork illustrates the index procedure:

7See	Explanation		
	Explanation of the	Index Form	ula, p. 7.

Sample item Pork	September price	October price	Percent price change	September cost weight	Increase in cost weight due to	October Cost
chops Ham Bacon	\$0.75 .80 1.00	\$0.77¼ .82 1.02	+ 3 +2½ + 2	\$15.00 8.00 10.00	\$0.45=(15.00x.03) .20=(8.00x.025) .20=(10.00x.02)	weight \$15.45 8.20
				\$33.00	10.00x.02)	\$33.85

Identical results could be obtained for pork by multiplying prices each period by the implied physical quantities included in the market basket, as illustrated below:

quantities included	in the market bas	ket, as illustrated b	September cost	October	October cost weight
Sample Item Pork chops Ham Bacon	quantity (pounds) 20 10 10	September price \$0.75 .80 1.00	weight \$15.00 8.00 10.00 \$33.00	\$0.77¼ .82 1.02	\$15.45 8.20 10.20 \$33.85
					in October with

The average change in pork prices is computed by comparing the sum of the cost weights in October with the comparable sum for September, as follows:

October cost weight	\$33.85 ×100=102.6
September cost weight	\$33.00

This means that pork prices in October were 102.6 percent of (or 2.6 percent higher than) pork prices in

Although the second method may appear simpler, in reality it is not. Deriving the implied quantity September. weights is an extra operation. Furthermore, the second formulation greatly complicates the handling of the numerous substitutions of reporters and items which occur constantly in repetitive index work. Consequently, the first method is the one actually used for the CPI. The second illustration, however, may assist the user to understand the meaning of the index mechanism.

After the cost weights for each of the items has been calculated, they are added to area totals for commodity groups and all items. The U.S. totals are obtained by combining area totals, with each area total weighted according to the proportion of the total wage-earner and clerical-worker population which it repreweighten according to the proportion of the total mag. In this process, it is necessary to make estimates for sents in the index based on 1960 Census figures. 8 In this process, it is necessary to make estimates for cities in which price data are not collected in a given month. Finally, the U.S. totals for the current and previous months are compared to compute the average price change.

Limitations of the Index

The Consumer Price Index is not an exact measurement of price changes. It is subject to sampling errors which cause it to deviate somewhat from the results which would be obtained if actual records of all retail purchases by wage earners and clerical workers could be used to compile the index. These estimating or sampling errors are not mistakes in the index calculation. They are unavoidable. They could be reduced by using much larger samples, but the cost is prohibitive. Furthermore, the index is believed to be sufficiently accurate for most of the practical uses made of it,

Another kind of error occurs because people who give information do not always report accurately. The Bureau makes every effort to keep these errors to a minimum, and corrects them whenever they are discovered subsequently. Precautions are taken to guard against errors in pricing, which would affect the index most seriously. The field representatives who collect the price data and the commodity specialists

⁸Table 1 shows the cities included in the CPI as of January 1963, their population weights, and their pricing schedules.

and clerks who process them are well trained to watch for unusual deviations in prices which might be due to errors in reporting.

The Consumer Price Index represents the average movement of prices for wage earners and clerical workers as a broad group, but not necessarily the change in prices paid by any one family or small group of families. The index is not directly applicable to any other occupational group. Some families may find their outlays changing because of changes in factors other than prices, such as family composition. The index measures only the change in prices and none of the other factors which affect family living expenses.

In many instances, changes in quoted prices are accompanied by changes in the quality of consumer goods and services. Also, new products are introduced frequently which bear little resemblance to products previously on the market; hence, direct price comparisons cannot be made. The Bureau of Labor Statistics makes every effort to adjust quoted prices for changes in quality, and has developed special protectives for this purpose, including the use of technical specifications and highly trained personnel referred fect the movement of the Consumer Price Index either downward or upward from time to time.

Explanation of the Index Formula

In the absence of magor weight revisions or sample changes, the index formula is most simply expressed as:

(1)
$$I_{i;o} = \frac{\sum (q_o p_i)}{\sum (q_o p_o)} \times 100 = \frac{\sum (q_o p_o) \left(\frac{p_i}{p_o}\right)}{\sum (q_o p_o)} \times 100$$

This is the customary, oversimplified way of writing a price index formula to show that the q's are held constant between major revisions. In actual practice, the basic data for weights are values, and the quantity and price elements of the "pq" values (p's and q's) are not separated.

With a weight revision, the formula becomes:

is a derived composite of the annual quantities purchased in a weight base period for a bundle of goods and services to be represented by the specific item priced where q

p and 9, are the average prices of the specific commodities or services selected for pricing (the superscript indicates that the average prices are not necessarily derived from identical samples of outlets and specifications over long periods)

i-s is the month preceding a weight revision (most recently, December 1963)

- is the period of the most recent consumer expenditure survey (1960-61) from which the revised is the current month weights were derived
- is the reference base period of the index (1957-59).

The (q, p) or (q, p) base "weights" for a given priced item are the average expenditures in a weight base period represented by that item (including expenditures for the item itself and for other sim-

In actual practice, this expenditure is projected forward for each pricing period by the price relative ilar non-priced items). for the priced item:

$$(q_a p_i) = (q_a p_{i-1}) \left(\frac{p_i}{p_{i-1}}\right)$$

In practice, then, the index formula is as follows:

Thus, although the cost weight changes with every change in price, the implicit quantity $\binom{q}{o}$ or $\binom{q}{a}$ remains fixed between major weight revisions.

The long-term price relative for each priced item $\begin{pmatrix} p_i \\ p_o \end{pmatrix}$ in reality is:

$$R_{i:o} = \left(\frac{\rho_1}{\rho}\right) \cdot \left(\frac{\rho_2}{\rho_{\frac{1}{2}}}\right) \cdot \left(\frac{\rho_2}{\rho_{\frac{1}{2}}}\right) \cdot \left(\frac{\rho_2}{\rho_{\frac{1}{2}}}\right) \cdot \dots \cdot \left(\frac{\rho_{i-1}}{\rho_{i-1}}\right)$$
is the product of ...

That is, Rio is the product of a number of short-term relatives. The superscripts on the p's indicate that these average prices are not necessarily derived from identical samples of outlets and specifications over long periods. This chaining of monthly, or quarterly, price relatives based on comparable specifications in successive periods allows the requisite flexibility to make substitutions of items, specifications,

Table 1. Cines, Population Weights, and Pricing Schedule for the Revised Consumer Price Index

		PRIC	ING SCHEDULE	.TEUS			
	6 		OTHER ITEMS				3
CITY AND SIZE STRATUM	POPULATION WEIGHT ¹	FOOD ³	SAMPLES			2	3
A. Standard Metropolitan Statistical Areas of 1,400,000 or more in 1960: Baltimore, Md- Boston, Mass- Chicago-Northwestern Indiana ⁴ - Cleveland, Ohio Detroit, Mich Los Angeles-Long Beach, Calif New York-Northeastern New Jersey ⁴	1.402 1.930 5.552 1.325 2.895 5.017 12.577	1A,1B,2A,2B	1A,2B 1A,2B 1A,1B,2A,2B 1A,2B 1A,2B 1A,2B 1A,2B 1A,2B	X X X X		\ \ \	\
New York-Northeastern	1.565 1.428 2.372		1A,2B 1A,2B 1A,1B,2A,2B 1A,1B,2A,2B		2	1	x \
B. Standard Metropolitan Statistical Areas of 250,000 to 1,399,999 in 1960: Atlanta, Ga Buffelo, N. Y Dallas, Tex Dayton, Ohio Denver, Colo Hartford, Conn Honolulu, Hawaii Indianapolis, Ind- Nashville, Tenn- Seattle, Wash- Wichita, Kans-	3.267 2.347 3.267 2.210 2.174 2.348 3.269 2.209 3.266 2.173	1A,2B	1A,2B 1A,2B 1A,2B 1A,2B 1 A,2B 2 2 1A,2B 2 1A,2B 2			*	x x x
C. Standard Metropolitan Statistical Areas of 50,000 to 249,999 in 1960: Austin, Tex Bakersfield, Calif Baton Rouge, La Cedar Rapids, Iowa Champaign-Urbana, Ill Durham, N. C. Green Bay, Wis Lancaster, Pa Orlando, Fla Portland, Maine	1,250 1,323 1,250 1,284 1,284 1,284 1,284 1,250 1,284 1,180	1A,2E 1A,2E 1A,2E 1A,2E 1A,2E 1A,2E	1A,2	B B			* * * * * * * * * * * * * * * * * * *

Table 1: Cities, Population Weights, and Pricing Schoole for the Revised Consumer Price Index-Continued

CITY AND SIZE STRATUM	POPULATION	PRICING SCHEDULE ²							
	WEIGHT1	FOOD ³		HER ITEMS					
	1	1 000	SAMPLES	100			E 3		
D. Urban Places of 2,500 to 49,999 in 1960:				M I		EDULE ³			
Anchorage, Alaska	1 000-								
	0.065	1,2		1 1			1		
Devils Lake, N. D	1.352 1.352	1	1,2	I = I	x				
Findlay, Ohio Florence, Ala	1.352	2	2				x		
,	1.227	1	-	H					
Kingston, N. Y	1.22/	1	;	I = I		x			
	1.171		•		X	- 1			
Logansport, Ind	1.338	2	2		- 1				
	1.352	. 1	i l		- 1		x		
Martins ville, Va	1.226	2	ž l			x			
	1.227	1	7		x				
McAllen, Tex		2	2				x		
	1.227					x			
Niles, Mich	1.171	2 2	2						
	1.351	1	2 2		43		x		
Southbridge, Mass	1.339	2	1	1.	٠ ١	-			
	1.170	· .	2	*	1				
Union, S. C		*	1,	1 ^	1.	1			
Vicksburg, Miss	1.227				×				
	1.226	2	1		١.				

The 12 largest Standard Metropolitan Statistical Areas as defined for the 1960 Census of Population were se-The 12 targest standard metropolitan statistical areas as defined for the 1900 Census of requiation were selected on a certainty basis and represent themselves only in the population weight patterns. The other sample selected on a certainty basis and represent themselves only in the population weight patterns. The other sample selected on the sample selected of the sected on a certainty basis and represent themselves only in the population weight patterns. The other sample selections carry not only their own population weights but also prorate shares of the population weights of all cities in

² tem samples are itendified as samples "1" and "2." Outlet samples are identified as samples "A" and "B." The determination as to the extent of sampling within an area depended on plans for publishing separate area indexes and on plans for developing estimates of sampling error and its components.

³Foods, fuels, and several other items are priced every month in all cities. Prices of a few items are collected Poods, tuels, and several other items are priced every month in all cities. Prices of a few items are collected semiannually or annually in all cities. Prices of other goods and services are obtained on the schedule indicated:

^{1 =} January, April, July, and October. 2 = February, May, August, and November. 3 = March, June, September, and December.

Table 2. Groups of Goods and Services Priced for the Revised Consumer Price Index,
Their December 1963 Relative Importance, and Number of Items Priced

Table 2. Groups of Goods a Their December 1963			E IMPORT	ANCE					<u> </u>
GROUPS	100.00	RELATIV				398 105	96		
l items	22.43	17.89					96	9	
Food ····		17.09	2.45	34 33 54					4
*Food at home	1	100	** **	0.80		100	1000		5
*Cereals and bunty I				1.65			12.0	29	
Cereals			- 13				1		21
			5.63	4.45		1			1 9
Bakery products *Meats, poultry, and fish	16.20	100		4.47	2.21	•			1 6
*Meats, pourty,					1.30				1 16
Meats Beef and veal	•				.94				3
Pork	•				1 .,	0.7 E. F. J.			15
	-			.73					'
	• I			.45				\ 7	
Poultry Fish	-		2.80					29	
Fish			3.02						8
*Dairy products			1 777	1 .76					111
*Dairy products *Fruits and vegetables				.9	4				
*Fruits and vegetables Fresh fruits									10
				1.3	2			2	
			3.9	* Table 1			1		1
	52 Mari		2.9	. 6	64				3
*Other food at home					55				4
Eggs		A			64				6
Eggs Fats and oils	•••				01				
	•••		* * * * * * * * * * * * * * * * * * *	1 **			100	3 0 13	8
							G4950	rings No	
Prepared and partially				1.	.15			9	38 Med (4)
prepared foods			.54			3.5			
prepared loods		1	• / •			100	81		
*Food away from home		\						18.	ı
	\ 3	33.23	0.15						
*Housing		1	··· \ 5	.50				1 1	1
*Shelter				.38					16
*Rent Hotels and motels			1.	4.27			1		
Hotels and motels				•	9.11		1		
*Home ownership	ing				2.13				
*Home ownership					3.03		4.00		
Purchase and Illiance Taxes and insurance						.98			
						2.05		10	1 1
								1 1	2
			5.26	.73					6
									2
*Fuel and utilities *Fuel oil and coal				2.71					
*Fuel oil and coal *Gas and electricity -			15.55	1.82					
Other utilities			1 1					53	6
	and		7.82						1 11
*Household turnis				.61					4
operation Textile housefurnish	ings	1	A > 0.4	1.44	1			S. 154	8
Textile nouse.				.48				14	
Furniture		4		1.36	1	1			\ 8
Floor coverings			1. 26/4	.83	1500		15 H		\ 8
Appliances Other housefurnish	ines		1 1	1.55			444		ી ક
Other housefurnish Housekeeping supp	lies	.		1.55	6 1 5 4 5		1	1	
Housekeeping supp Housekeeping serv	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11		1					

Table 2. Groups of Goods and Services Priced for the Revised Consumer Price Index,
Their December 1963 Relative Importance, and Number of Items Priced--Continued

Apparel and the		ative Importance, and Number of Items Pric							
Men's apparel	10.63	2.86		T T		77	UMBER OF		
Women's and girls' apparel		4.08	2,21 .65			19	9 15		
Footwear			3.23 0.85	* 1	1	35	26		
Services		2.18	.71		1	11 12	9		
*Private	13.88		1.47			12	6		
Autos and related goods	1:	2.64	9.02			34 29			
Gasoline and motor oil Auto parts Automobile services Auto repaire	- 1		3	3.02 .28		11	17 12		
maintenance		3	.62	.72			12 3		
Health and	1.	24	2.0	98 54	1	11	6		
PHealth and recreation - 19. *Medical care 19. Drugs and prescriptions - 19. Professional and prescriptions - 19.	45 5.7		1			5	6		
Hospital services	1"			1	101	38 20	11		
Toilet goods	2.75	1.61		1		12 2			
Reading and recreation	5.94	1.52 1.23				12 8			
Recreational goods	7.94	4.36	1	1		34 4			
Other goods and services	5.06	1.58	2.78 1.58	1		27	20		
Alcoholic beverages Personal expenses cellaneous	00.0	1.89	1		1				
2 .38	1 1	.53	1	1 1		5	1		

eIndicates groups and subgroups for which separate indexes are published monthly.

1 Represented by prices of hospital and professional services, most of which are included in the count of items priced for other subgroups of medical care, and the overhead cost of insurance. The four items shown are

2 Not priced; imputed from priced items.

U.S. DEPARTMENT OF LABOR. Bureau of Labor Statistics Washington, D.C. 20212

ESTIMATED RETAIL POOD PRICES BY CITIES May 1967

: Prices published in this report are estimated from special benchmark averages computed : in January 1966 and adjusted for price changes to the current amonth as shown by data : collected for the Consumer Frice Index. Benchmark Prices for 1967 will not be comparable that of a revision of the store sample schedules for later this : puted until the completion of a revision of the store sample schedules for later this : year. quotations from each source are on a comparable basis from one period to the : pear. quotations from each source and different sources and different so to brand, quality, and size, but quotations from differents sources and different ent urban areas may reflect some variation in the factors. Therefore, differences : in prices between areas may not represent true price differentials.	Page 2 New York, N.YNortheastern N.J.	2	7	2		Claveland, Ohio 2 14dVe. 2 Washington, D. C14dVe.	narrolt, Mich.
		Baited States -	Baltimore, Md.	Boston, Mass.	Chicago, 111	Cleveland, Ohi	Perrolt, Mich.

2 Explanation

Los Angeles-Long Beach, Calif. -----

Estimated United States and city average retail prices of fool,

Contract Contract	Control Cont		5	United States	Baltimore	Boston	1	1	
10 10 10 10 10 10 10 10	Color Colo	Cercals and Batery or	Series			1	Chicago - Morthwestern In		Detroit
Column C	Column C			I		Cents	Cents		
State Stat	### State	¥6		60.7	59.5	•			Cents
Compared Compared	Control Cont	12			24.3	3.2	59.0	37.6	
10	10		4 4		7.67	33.0	8.7.	22.5	55.2 26.7
1979 1970	10		•		•	21.2		9:IF	30.1
Continue	Continue			29.8	2,58	9.2 2.2	2.5	21.3	• • •
Continue	1,	Steak, round		; 	8.7.9	51.5	28.7	8. 8. 8. 8.	1.6
1975 1975	11.00 10.0		•	107.0			ì	52.7	52.9
1,	1,		a ·	3/113.5	116.3	133,7			
10	10			131.1	127.2	148.6	106.7	99,5	
Column C	Column C			2/16/-b	116.0	135.7	130.7	1113	112.3
Column C	1,		•	4/ 59.3	6.5		8.8	103.2	139.7
10	The column The	cutlets		6/ 53.8	58.8		25.5	97.0	9. 8 8. 8
1,4 1,5	1,	111111111111111111111111111111111111111	¥	7/159.4	59.3	89	56.6		65.0
10	10				1771	175.6	- 59.6). 90.3	r:3
10	10		8 7 4 4 7 8	33.9	104.4		1.10	151.4	5.5
1,	10		. •	67.5	64.3	91.2	89.9		1.67
10	10	***************************************	e 0	67.1	4.5	4. 69 	63.9	9.9	7*.*
1,000 1,00	1,	***************************************			2.5	74.8	7.5	73.2	61.8
150 150	187 187			8.9	8.5	38.2	7 69	67.9	3.5
15.0 15.0	15.0 15.0			9/153.6		o.	79.2		46.8
10	1,000 1,00		•	70.6	167.3	155.6			80.6
ten	ten	*	• "	2/108.1	111.7	75.1	0. v	149.7	
Second S		8 8		E 69.3	45.2	112.7	115.1	67.9	6,53
10 10 10 10 10 10 10 10	10			•	61.6	 		0° 60' 74'	105.2
10	10		A & B	38.5		•		 8	E. 4.3
Continue	Continue	· · · · · · · · · · · · · · · · · · ·	٠,	68.1	55.4	42.6	• • • •		55.8
			•	6.84	8.84		61.0	38.2	, x
11.	115, Frozen 12, 13, 13, 13, 14, 15	0		12/ 86.5		•	0.64	, ç, ç,	39.6
Towary 64-01. can A 4.5 67.9 86.1 144 57.1 51.0 51.0 51.0 51.0 51.0 51.0 51.0 51	15 15 15 15 15 15 15 15	ua	•	(S)					47.2
Tocary 4-00. cm 8 2/ 55.7 14.6 60.7 70.9 75.4 15.4 15.4 15.4 15.4 15.4 15.4 15.4 1	Toesey to the first of the firs	.20-49	•	5/ 67.9			915	87.7	•
1	1	4-0E.		3/ 15.0			6.0	27.4	55.5
1.5 1.5	15.2 15.2			-			 	33.6	65.1
1,	10 10 10 10 10 10 10 10		 8 8 8 8		56.0	•	·	15.2	3.5 3.0
16.9 18.3 29.4 29.5 20.4 20.1 20.5 20.4 20.1 20.5 20.4 20.1 20.5 20.4 20.1 20.5 20.4 20.1 20.1 20.1 20.1 20.1 20.1 20.1 20.1	8 16.9 18.7 18.7 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5		 . v	8.8 5.6	63.1	7.00	51.5		
82.3 65.7 15.3 17.4 15.5 17.5 15.5 17.4 15.5 17.4 15.5 17.4 15.5 17.4 15.5 17.4 15.5 17.4 15.5 17.4 15.5 17.4 15.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5	82.3 95.6 16.3 15.5 15.5 15.5 15.5 15.5 15.5 15.5 15				- 58.3 - 28.3	23.6	. 85.3	51.2	45.7
A & 8 & 1,9 2.4 80.7 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5	A 6 8 64.1 41.9 42.6 89.7 72.5 72.5 72.5 83.5 83.5	8	< €	82.3	69:0	16.3	9-97	25.5	32.0 23.1
87.8 42.7 43.3 66.7 68.3 43.3 67.7 80.5	87.8 42.7 45.3 6.7 86.7 85.5 6.7 80.5	۷ .4 اله.	8.5	 	6119	91.4		16.5	16.4
83.5					87.8	27.7	42.7	43.3	83.6
			**					83.5	
						· T			

75.0 29.7 11.4 11.4 15.0 15.0 14.3	16.1 16.4 26.2 33,1 45.9 46.9	22.1 41.7 30.7 15.2 12.5 12.0 19.6	28.5 48.5 29.8 37.4 39.8	2.5. 20.3 20.3 78.2 86.7 58.8 58.8	16.7 11.9 11.9 11.0 11.0 11.0
15.8 77.3 77.3 12.1 45.0 45.0 46.0 40.0	14.0 15.1 11.6 11.6 13.3	36.4 24.5 46.0 31.8 11.6 11.6 25.5	18-6 18-6 26-9 47-0 30-7 39-7	26.2 5.2 23.1 78.8 85.5 693.7 61.2	1.47 1.12 1.23 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25
17.9 117.6 117.6 24.6 117.1 117.1 50.9 63.4 14.1	30.7 112.3 20.0 26.2 30.2 31.4	31.7 37.9 26.2 47.4 33.5 20.4 12.5 19.3	19.1. 20.5 20.5 17.6 50.7 26.0 38.1	63.2 25.2 4.6 20.6 79.2 92.8 56.3	78.6 14.8 17.5 18.5 18.5 18.5 29.5 29.5
21.3 14.6 15.5 19.2 11.9 4.7.1 73.7	15.1 12.0 16.4 16.4 11.6	28.5 28.5 36.5 26.2 43.9 90.7 16.5 13.4	19/ 21.8 23.8 25.1 25.1 48.4 48.4 40.1 40.1		20.45 11.00 11
		5.5.4 5.2.2.2.4 5.2.2.2.2.4	17.9 25.1 19.4 18.1 27.4 46.6 28.8 37.6	50.9 26.1 5.1 22.7 22.7 26.0	25.9 26.9 17.6 17.6 18.3 18.3 19.4
20.6 15.6 71.9 35.8 112.0 37.5 *	12	4388 440_	医 國 國 河	, i	
20.6 15.6 11.9 12.0 12.0 37.5	13.7	4388 HALL	138 22 22 22 22 22 22 22 22 22 22 22 22 22	137	<u></u>
21	28 A B A B A B A B A B A B A B A B A B A	11 21 21 22 24 24 24 24 24 24 24 24 24 24 24 24	18 18 18 18 18 18 18 18 18 18 18 18 18 1	25 7 2 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	~ < < < < < < < < < < < < < < < < < < <
9999 4 4 9 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	101 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	20 A 6 B 11/2 30	A B 18/12/14/14/14/14/14/14/14/14/14/14/14/14/14/	25 7 2 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	10 10 10 10 10 10 10 10 10 10 10 10 10 1
10. A 4 6 8 11 12 14 14 14 14 14 14 14 14 14 14 14 14 14	100 100 100 100 100 100 100 100 100 100	110 A B 117 33 11 11 11 11 11 11 11 11 11 11 11 11	A B 18/12/14/14/14/14/14/14/14/14/14/14/14/14/14/		948. of 488 1978. of 488 1978. of 488 1978. of 488 1978. of 488 1979. of 488 197
2444 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	10 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	11/ 15/ 16/ 16/ 16/ 16/ 16/ 16/ 16/ 16/ 16/ 16	A B 18/12/14/14/14/14/14/14/14/14/14/14/14/14/14/		948. of 488 1978. of 488 1978. of 488 1978. of 488 1978. of 488 1979. of 488 197
20. A 6 8 17. 18. A 6 8 4 7 17. 18. A 6 8 8 4 7 17. 18. A 6 8 8 4 7 17. 18. A 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	100 100 100 100 100 100 100 100 100 100	11/ 15/ 16/ 16/ 16/ 16/ 16/ 16/ 16/ 16/ 16/ 16	Frozen 500 cm A 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	1	948. of 488 1978. of 488 1978. of 488 1978. of 488 1978. of 488 1979. of 488 197
20	0.00	Vegetables 4005 cm B 2/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/ 4/	A B 18/12/14/14/14/14/14/14/14/14/14/14/14/14/14/	1	948. of 488 1978. of 488 1978. of 488 1978. of 488 1978. of 488 1979. of 488 197

	San Francian	60.00 110
	St. Louis	
Witten of Four	\vdash	######################################
May 1967 - Continued of food,	N. J. Philadelphia	444 4444 44444444444444444444444444444
	Mortheastern N. J	8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
		àn àir
Los Armes	\$ `` 	

XERO

6.4. 6.7. 6.1. 6.1. 6.1.	1) 1	, e. e.	122	::;	35.0	653 —	24.9	0.5	17.9	12.8		. 23.9	2°:	2,52	:	47.74						3				9.7										
21.4 16.0 69.9 41.8 16.3 4 *	97.6	6.83 10.33		 	24.0	ì.	34.1		23.0 43.2	33.3	22.0	14.0	2.55	34.3		31.9	1 57 /00) R	8	7 %		38.4	2.4	25.4			ŝ	3 1		4:	2	8.5	1.0	# :	# -		
19.4 16.8 17.6 13.0 *	77.1	8:5	717	16.2	- K	45.6	, ,		27.6	, r	, 4. E	13.4	18.8	24.6	28.5	27.6		45.4	79.7	37.3	42.3	61.0	77.4	2.5	•	78.5	7.7. 8.8.	57.5	ŝ	15.2	0.91	3.3	.s.	- ×	31.8		
18.8 15.5 79.0 78.3 12.2 4	57.3		7:	-	15.3		9.%	X	24.3	8.5	25.1	7:5	- 12	77	19.5	14.2	-	4.13		78.7	39.7			3	63	2	8.8	57.3	55.7	•	79	. 25.3	-	3	3.5	•	
20.8 15.6 54.0 34.0	. * £	14.1	13.5	15.4	21.3	35.6	63.9	38.1		23.5	28.8	14.6	11.3	15.3	2.5	16.8	24.7		7.	87.2	. X.	;	83.9	21.3	[]		78.7	57.7	85	:	14.4	E.3	3.5		ដូវ	}	
24.1 15.4 70.0 27.2 11.8	9.* *	69.9	8.9		5.5	21.2 \$6.9	È	8.5	;	25.0	63.0	23.0	. • •		2.2	18.4	ž,	;	69.2	•	×	9.8		2,5	5,	-	.g.	2.5	8	š	5.41	17.7	8	15.2	-	9.6	
21.2 15.3 75.5 45.8 14.0	33.2	78.5	12.0	4.	- 2.5	i	25.8	· •	31.0	•	29.27	7.4	21.8	12.0	17:	24.8	2) 8.62	29.0	, 49	<u>.</u>	27.9	78.7		57.4	\$ 1.5°	25.0	•	82.1							9		
	9 8	4	4	44	4	- is	bead	- a	. 10 02		#303 cen	425 cm	Irink 46-02. cen	rozen - 6-02. can	4303 Cen	#303 can	#303 cm	10 00.		- qog	à	. 8 og.	bt.		10 02.	16 05		1-1b. cm	ole. of 48	carton 72-08.	Carton /2-06-	114-02. COM	104-04 CM	7 02.	frozen 9 oz.	12 05	8 9
erables b	Grapefruit, size 80		Hateracion //	Onlone */		Carrots	Celary	Lettuce, size 24	Peppere, green	Spinson	Processed Pruits and Vegetables	cocktail	fruit luice	pole-graperior	ade concentrate, froze	Beets 4303 can	green	Together 10	Proceedly, frozen	ods at Boms:	Eggs, Grade A. Mars.	Margarine	Salad dressing, Italian	Salad of Cooking	900 n	Grape Jelly	Syrup, chocolate flavored	onelcoholic Beverages: 1-1b. can	fee, instant	page .	Cole drink carton /2-01.	repared and Partially Frepared	dnos un	abetti	Mashed potatoes, Instan. frozen 9 or	Laby foods	peret pickle reason
Fruits and Vegetables: Fresh Fruits and Veg Apples Dannass size 200 Oranges size 200	Orange Orange	Strange	Vaterme lon	Onlows	Paper C	Carroti	Calary	Lettec	Pepper	Spire	Processe	Prait	Perf	Pine		3	je.	100	Proce	Other Po		Tata .	Sell	100	ľ	3	8 8	1	88	Ā	88	Prop	14	3 A			•

as footsotes on page 6.

```
21/56 cities.

22/ United States average retail price for base offee in chain stores in 22/ United States average retail price for bas coffee in chain stores in 24/ 100 percent shoulds all other cities.

24/ 100 percent shoulds all other cities.

25/ 100 percent should chain.

25/ 100 percent should chain should chain stores in 25/ Solid pack, Extra Standard grade, No. 24 can.
                                             Footnotes
            ** Fricae only in season.

1 20 cities.
2 20 cities.
2 3 43 cities.
2 43 cities.
5 40 cities.
5 5 cities.
7 5 octies.
6 5 cities.
7 5 cities.
7 5 cities.
8 40 cities.
10 35 cities.
11 4 cities.
12 4 cities.
13 3 cities.
14 Anders pound.
15 3 cities.
16 3 cities.
17 3 cities.
18 3 cities.
19 3 cities.
11 4 cans per pound.
12 4 cities.
13 30 cities.
14 Buddock, fillet, fresh.
* Priced only in season.
```

LABOR - D.C.

· 보는			* Standard Consolidated Areas
		MINATUR	Devils Lake, F. Kingston, N.Y.
Frice Index. This Term of The Consumer Price Index is available on trees formerly included in Terms Frice Index is available on trees items.	Wicksburg, Miss.	Logacistonile, Va. Martinaville, Va. McAllen, Tax.	Bakersfield, Celif.
Indexes for increasing the indexes for ind	Ores, Utah	Remaining 11 medium-size and small tre-	. Remaining 11 medium-
like characteristics of the components are published monthly report on the Const		Hangem.	Findley, our.
prices for all sides or cities in which prices cities. Lous of the SMSA's or cities by the sample cities.		Lancaster, Pa.	Crookston, Minn.
	Southbridge, Tale	Green Bay, Wisc.	
and other fo	ss, Mich.	and of the resaining 22 medium-size	aning of the resetuing
grace. gwerage prices for the three some for three targets are as a second and a second transport of the second transport of	citioni		. c. 1 Amchorese, Alaska
factors propulation are then the groups are simple average in for each chain organization at other two groups are sighted by relative food sales in			Dayton, Ohio
of separate average stores, largely limb within the manner sperage large and small food store amount sales volume within the channer store sverage large and small to the amount to the chain store sverage. The	Seattle, Mash.	Indianapolis, Ind.	Clecimati, Obio-Ky.
Benchmark prices for state of storeschain a. Internal weighting	Orlando, Fire	Bonolulu, Savaii	1000 ane, 111.
outlets, etc.	Hashville, Tenn.	Bartford, Conn.	
prices may differ from the prices meeting of prices meeting or prices may le, uneveilability of prices meeting	Minespolis-	Demet, Colo.	
excluding for and adjusted in success calculated water of changes in S6 urban areas and adjusted to fine are prices as a result of changes in S6 urban areas and adjusted to fine adjusted t		itan areas for mir	tv-one other metropolitan areas for mix-
benchmark prices reprie the accepted size the price change these	es are not published	Farmer co. which pric	Clevering
of the 1964 retains and city prices for prices seeting sperimen of the muting United States and city prices of prices seeting the second control of the cont	H48.	Hortheastern M.J.	Borthwatern Ind.
Changes in samples and process in the procedure sensual	Ockland, Calift.	Long Beach, Calif.	
comparisons, time-to-time rather time procedures adopted at the time orices is for time-to-time orices in for time-to-time rather procedures	St. Louis, Mo iii.	Detroit, Mich.	
price of the said in small that the primary use to a no city may be sold in sing that the primary use to the primary use to borne in sing blace-to-place comparisons.	Piccsburgh, Pa. 111.		A 6 B The 12 largest standard are shown separately: re shown separately: re shown separately:
Differences in the place A brane city. In making practice city. In making practice in the bureau's	 	rropolitan statistical ar	Item Sample
not permitted to mitter in food habits smong the various areas continued	which prices		
the spectation are also price different or published praces		en sample dessa.	A c. B on sellowing is the city-item sample design
may quote the price of the used in computing pitter and small packages		boot for food	priced in each group.
accepted airs range are containst size specified. Prices of aires ourselvent as accepted airs. Frices of the exact containst such airs. Frices only by comperison as an item of the exact containst airs changes only by comperison.		one sech ites is indicate for each ites	areas and Anchorage, you groups and only one sarry as indicated of the divided into two groups and only for each item is indicated of the city sample for each i
prices on the brane are volume in recent mount. Morever, to the dealer	portant foods 18	aining 22 medium size	In all 56 urban ach of which is prince less A and B, each of which Ihe rem
grade and size famp. grade and size famp. these specifications are available upon layer such apecification the fame. These specifications are distanced within the fame.	in 21 medium-8120	alected for pricing and alected in helf the outlets	largest metrofs which are most tape.
The Bureau's agents use a description are collected. The Bureau's agent food for which pitces are collected.	tures are priced	for which prices are	selected to represent the City. All the prices are pure are priced cities of 2,500 to New York City. Areas for which prices of 2,500 to New York City. In consumer expenditures are priced cities of 2,500 to New York City.
Prices are those in a prices which are other and or the quality or a ale or weekend special prices which are other or weekend special prices which are or weekend special prices which are other or weekend special prices which are other or	priced in the 12	of the United States,	from a sample of 39 Standard Matrobolithm of the United States, the first of the like it from a sample of the control of the c
prices. Prices. Thursday of a specified seen, the agent's visit, and seed on Thursday of the day of the agent's that day.	17 smaller chira-	and its food compound	r use in the price Index (
chain and independent retail food sample are collected manner. the month-	based on prices	hese prices coment) is	ta collected by the Bureau . These prices carried based on prices
indications of collected monthly by Item price asiling	taxes.	12 large of the U.S. Dep	This publication of the sach of the sach of the sach of the sack o
one sample (n for priced in both small footnote. Those priced in both small of		stimated retail prices of	onteins estimated retail prices of individual from
Because of this dealship areas unless ourse otherwise			
serie design, United States prices for foods prices in	Explanation		
	Town ton		

Mr. Rosenthal. The next witness will be Dr. Dorothy S. Brady.

STATEMENT OF DR. DOROTHY S. BRADY, PROFESSOR OF ECONOMICS, UNIVERSITY OF PENNSYLVANIA (FORMER MEMBER, PRESI-DENT'S CONSUMER ADVISORY COUNCIL)

Mr. Rosenthal. Dr. Brady, thank you very much for taking time from your busy schedule to come and be with us this morning. Do you have a prepared statement?

Dr. Brady. I have written something down, Mr. Chairman. Mr. ROSENTHAL. We would be pleased to hear it.

Mr. Wydler. May I just comment, Doctor, it is a delight to have, occasionally at least, a member of your sex appear here on behalf of the consumers. Since you are, in most cases, I think practically in all cases, one who probably expends about 90 percent of the consuming dollar.

Dr. Brady. That is the type of statement that had been made one time or another. I think the last one was made by the Department of Commerce and we have been quoting it ever since. Mr. WYDLER. How much was that?

Dr. Brady. Upward of 90 percent. So, I would like to say, Mr. Wydler, that my remarks prepared before I came here do relate to your last question and I have given this problem a considerable amount of thought. The statement is entitled "Product Diversity and Price Statistics." Our knowledge-

Mr. Rosenthal. For the record, you were a member of the President's Consumer Advisory Council?

Dr. Brady. Yes. Last year. And I am on the Advisory Council of the Food and Drug Administration presently, and some problems relating to prices come up there as you may know.

I might mention one about the problem of cut-up chicken being not as clean as it ought to be with respect to various infections, and yet the Food and Drug Administration is fully aware that this is a magnificent source of cheap protein for the population groups, particularly in those lower income areas, and that therefore, it must not be taken off the market.

It must be inspected to the degree that is necessary and not to prevent its price advantage in those areas. I think one of the most dramatic things that has happened in the meat industries is the relative price of chicken compared to 20 years ago.

You can buy various types of chickens in the supermarket where I buy, which happens to be a low-income supermarket in Philadelphia area, south Philadelphia, for prices that look something like the 1930's. Thirty-five cents; 38¢ a pound.

So, the whole problem of relative prices is a very important one. My own research has been focused pretty much on the impact of relative prices on innovation. Now, of course, the chicken industry has been the product of substantial innovations that has made it possible to make chickens as cheap as they are now and not just something for Sunday dinner or occasionally for holidays. That is one example of how important it is to know about price developments and—but, remarks I prepared are on probably a more general point.

One of the things we know very little about in our economy and should be very proud of is the degree that we have increased the variety and diversity of products that are in the market.

Now, a few of the statisticians are interested in the statistical techniques for the measurement of product diversity, but mainly they want to do something in the way of revising the price index formulas to allow for the fact that consumers have much more choice in the way of products in the market than we did even at the close of World War II. Now diversity is, in some ways, of great value to the consumer. One example I use in my historical research is glasses. Eyeglasses, are fitted to our special needs as individuals. Around the time of the Civil War there was a very minimal amount of variations in eyeglasses that would fit the product to the individual needs. Shoes are another example. So that we have had a magnificent history of the development of various varieties to suit individual needs of a wide range

Now, there is another aspect of diversification in products that we of products. don't feel quite so certain of. There is some concern of diversification that is, one of my colleagues 15 years ago called it nonprice competition where you introduce a great deal of the variety in particular products to place the competition between qualities or varieties instead of on the price level, when it comes to the ultimate consumer inside

Our knowledge of the factors that explain changes in the prices of the grocery store or department store. particular goods and services can only be extended by increasing very considerably the amount of information available on the variations in prices at a given time and the variations in price changes over time. There is a quality range in most products purchased by consumers and within each quality level there are numerous varieties distinguished by fashion styles and brands.

The diversity in quality and in varieties complicates the measurement of price changes and increasingly has limited determination of meaningful measures of the absolute level of prices to those commodities which are provided in recognizable and standardized grades.

The range of quality and the number of varieties for some products differ little from place to place and change slowly over time. The compilation of price statistics for such commodities and services presents no great difficulties in concept, measurement or interpretation. Take salt, for example.

The determination of the average price of salt or of the average change in the price of salt in a given location is not likely to stir up controversies about definition and accuracies among statisticians and economists. Products like salt, sugar, vinegars and chlorine bleaches

are, however, becoming more and more exceptional.

The qualities and varieties of things that consumers buy are being increased continuously and the differences between qualities have become more and more difficult to define either for identification in statistical measurement or for the understanding of the consumers. As it becomes more difficult to discriminate among quality levels, this distinguishes between qualities and varieties, that is styles and fashions, become blurred.

The quality of a product is in some way associated with its price. Consumers given different purchasing power are willing to pay more for higher quality. It costs more to provide goods of higher quality judged by some of the attributes that are generally recognized as distinguishing levels of excellence in workmanship and performance.

The variation in prices charged for some one commodity in a given metropolitan district at a particular time cannot, however, be taken to represent quality differences judged by consumer preferences or the costs of provisions and distribution. Within the metropolitan district, there are different locations, sections or areas, where low-income, middle-income, and upper-income consumers try to satisfy their wants.

The varieties of products to be found differ among the locations and within locations between types of establishment. So do the prices for what appears to be equivalent articles of services. Changes in the price of different varieties of a product are not likely to be uniform over a metropolitan district because new variants appear at different times in the locations where the various classes of consumers do their shopping. The new variants may and probably do affect the prices of the produce in these locations. Commissioner Ross mentioned the problem of one of my New York friends who said the way that bacon prices increased in some of the center city metropolitan supermarkets is by the simple device of removing a perfectly good quality lower price brand so that the consumers have no alternative but to buy the other brands which appear at higher prices and may be really no different in quality.

Under the circumstances, consumers have no way presently of knowing whether a price change is quite general or how persistent it is likely to be. If new brands appear and familiar brands disappear, the possibility of comparing prices is eliminated. Within the present program for the collection of price statistics by the Bureau of Labor Statistics, there are some methods for describing the variations in prices or in price changes that could improve the analytical potential—their analytical potential and contribute to the local consumers' understand-

The range in prices for specific goods and services among different types of establishments in different locations in metropolitan districts could be used to describe the consumers alternatives with respect to quality and variety or differences. Such summarizations might lead to questions on marketing practice that would require some

If the range of prices for standard brands of coffee were higher consistently in supermarkets of middle-income suburbs—whether you call Nassau-Suffolk middle income or not-

Mr. ROSENTHAL. Upper middle income?

Dr. Brady. Than in center city locations catering to a similar population, the explanation might be found in the relative number of brands

Similar schemes for describing the ranges in price changes could be developed. When the prices for particular products change, the effects on different classes in the population can be judged by such location or

classifications of the reporting establishments.

A knowledge of the concentration of price changes by location or type of establishment could contribute to our understanding of the impact of different classes of consumers on the evolution of product design and on the structure of prices. When consumers' incomes increase, they seek for better quality and more variety in what they buy. In the long run, greater variety means higher prices relative to, say the goods that are standardized, say as salt and sugar.

Knowing how price changes are distributed by location—and by location I mean the markets within the big metropolitan areas—could throw light on the process by which they spread and affect wider areas and other products. The value of publishing current releases on ranges in prices and price changes (Commissioner Ross mentioned this possibility too; I am underscoring what he said) within locations and types of establishments, would be greatly increased, if benchmark studies of

Now what I mean by a benchmark here, is something on the order of prices could be undertaken. those special surveys in poor areas, in middle-income areas, that BLS has already conducted, but on a much wider and broader scale. Such benchmarks would involve a general survey on the qualities, varieties, and prices of representative products in the market at intervals of, say, three and not more than 5 years. These surveys would cover greater detail on products and prices than is feasible in the monthly collection of data for the Consumer Price Index. Observations would have to be made several times in the year, on the commodities and services affected by significant seasonal movements in prices.

Such benchmark surveys could reveal whether the sources of difference is in prices or in price changes between low-income, middle-income, and high-income shopping locations or in the types of goods sold and

Such a series of benchmark surveys could show how much of the the services offered. differential price increases over time can be traced to shifts in the kind of goods offered by various types of establishments and how much might be attributed to the widening of the quality range or the in-

creases in the number of varieties of particular products. Consumers need to know whether price declines are real, as in white sales, or whether rises in prices are temporary and localized. By giving attention to various means of describing the distribution of price changes among various classes of consumers, the economic profession could contribute to its own benefit, as well as to the education of

It takes time to collect the source data and to prepare the summary price statistics for an economic indicator like the Consumer Price the consumer. Index. Information on prices and price changes, a month ago, can have little value for consumers in the market today unless it provides a framework for interpreting the current experience. If the prices of pork rose last month, and rose in all types of establishments in all locations, consumers in a particular location can interpret a price increase as a continuation of a seasonal movement. If, by contrast, the prices of some brand of canned fruit are increased in, say suburban supermarkets, and consumers are aware of no general changes in the previous month in the metropolitan area, they can look for close substitutes in other brands offered in their shopping centers.

Consumers do reduce their consumption of porkchops when the price is seasonally high, and shift to relatively lower priced brand

The price statistics published by the BLS are averaged for metrowhen the price of one brand is raised. politan areas and for the country as a whole. Consumers are aware of their alternatives in knowledge of the variations in prices at a given time, and in the price changes over time that is not revealed by the BLS averages.

There are real limits on the consumers' ability to see for themselves in current markets and the question under consideration here is, how to specify the information that might affect their response both to short run and long run changes in price.

By summarizing the price statistics, by shopping areas for all the cities, classified perhaps by region, the impact of price changes on different classes of consumers can be followed and particular trends can

be isolated about which little is known at the present time.

In the case of some foods, drugs, cosmetics, and cleaning supplies, summaries for the same brands would show whether the poor paid more and are submitted to more frequent changes in prices than occur in the shopping centers in upper income districts.

For goods that come in varieties not found in all establishments and in all locations, the ranges, that is the high and low prices, could be used to describe the alternatives to be found within the same kinds of shopping districts.

Statistical summaries of the variability in prices will call for explanations of the differences that they reveal. The number of establishments surveyed by the BLS for the purposes of compiling price indexes, is generally not large enough to provide information on the factors that may be associated with the variations in the level of prices or in the variations in price behavior over time. The services offered by retail establishments differ considerably, and must account for some of the spread in prices and some of the differences in price trends.

If the BLS could undertake these benchmark price surveys, establishments could be classified in many ways to throw light on the nature of the markets to be found within metropolitan areas.

Credit, delivery, and check cashing, are among the services that surely affect the prices of goods sold, and very likely will influence the course of price changes.

If consumers were made aware of the magnitude of the effect of various combinations of services on the price level, they might exert some influence on the composite of goods and services they pay for in every transaction.

The benchmark surveys could offer the basis for detecting significant trends in the structure of prices between and within locations where different economic groups do their buying. Rising income and more generally regular income among some classes of consumer, along with the greater use of credit, have had an impact on the qualities and varieties of goods that are offered in the various markets. The BLS has more expertise on this matter of variety and quality, than any other group of people in our country or in the world. I am suggesting that what we need is some periodic surveys of the price structure which would give us information about the differences between Nassau, Suffolk, and the rest of New York on some kinds of ongoing basis, could provide us all, along with the consumers, with a better knowledge of what there is in the market, and how to interpret the short-run price changes that are measured presently by the CPI.

Mr. ROSENTHAL. If the housewife had this information, could it be more useful to her and could you give us an example of how?

Dr. Brady. Well, I will use myself as an example. I like a particular brand of coffee, but if my supermarket decides for some reason to eliminate it, then I know what is being substituted, and it is 10 cents more. The very obvious thing I do, if I want to stick with my brand,

is to go and find out what the price is where it is being offered, and if its price hasn't gone up, then I simply switch my allegiance to the store offering the brands that I am accustomed to, and which have not evidently increased in price.

Mr. ROSENTHAL. Let me ask you a question. If the Bureau of Labor Statistics reported to the housewife, for example, that we have had made a survey of market conditions out West, and we anticipate a great flood of meat on the retail market in the next 4 or 6 weeks, or the reverse, that we expect a shortage and prices will rise in 6 weeks, could the housewife make a decision that she should buy a lot of meat today, and put it in the freezer, or not to buy a lot today?

Is this one example of how this information could be used?

Dr. Brady. I think it is a good example. If the information reached the consumers about developing seasonal movements or developing shortages or developing surpluses. This information could be used within the particular shopping district where consumers buy.

I have a feeling that those consumers who shop in the bigger supermarkets are fully aware from what is offered where there is plentitude and where there tends to be seasonal scarcity. I am thinking particularly of the meats and poultry and the fresh produce departments that you see in all types of supermarkets. So that consumers are not unaware of the seasonals, but they perhaps could profit by what Commissioner Ross suggested, that the Bureau make known for specific products what have been the seasonal patterns in the past, and changes in these seasonal patterns, if there are changes occurring, depending on new sources of supply for particular products.

Mr. ROSENTHAL. Do you think any housewife would pay attention to this information, if Commissioner Ross' department, for example,

Dr. Brady. Well, I have a notion that the newspapers are a good found a way to disseminate it? source. Especially if some way could be found to get this information more frequently and more regularly on the women's pages. Some New York newspapers used to publish information on the Department

of Markets, and what are good buys in the market today.

If some device could be discovered for getting information that the editors of the women's pages would find useful to insert at regular times, it could include the information about the most current release of the index. This other type of information about general movements in seasonals and ranges in prices for what apparently is the same quality of—canned goods, household—can be of greatest interest to the readers.

Mr. ROSENTHAL. Do you think some of the information collected by the BLS can be converted into useful information to the housewife?

Dr. Brady. Well, I know some of my former associates among the home economists have made valiant efforts to do just that at times past in connection with the food budgets. Also, a point mentioned by Commissioner Ross, the Department of Agriculture, many years ago, put out three recommended food budgets, low-cost budget, medium-cost budget, and high-cost budget, and they did undertake pricing of various kinds during the year for the purposes of enlightening the consumer on the choices within the frame of these budgets that he could make. Choices say, between the green and leafy vegetables that are so rich in vitamin C. You choose different ones according to the seasonals for the various vegetables.

So, I think that there are possibilities in these directions that need to be explored.

Mr. Rosenthal. Thank you.

Mr. Myers?

Mr. Myers. I think you mentioned, and it has been mentioned here several times, there is a problem of dissemination of the information and also utilization by the consuming public, but do you think that the mere fact that this should be published on an even wider range than it is today, might serve to help regulate a little bit and maybe level off the pricing so that actually there would be a result in a more equitable pricing even though maybe the consuming public wasn't aware Do you think this is possible?

Dr. Brady. Well, as an economist, I think the regulation is already there in the market, but there are certain things that would result from a consumer reaction, let's say, to an almost constant price in his supermarket for, say canned pineapple. If all brands were the same price, he would have some reason to wonder whether there was a range in the prices of canned pineapple in other locations in the same metropolitan area. That is, he could affect the situation in his own area by seeking particular outlets where there was offered some choice in terms of price for what apparently seems to be the same quality, and different brands of the same article.

Generally speaking, what happens, you see, is—a commodity is offered in a great deal of variety by a great many producers. Then, the lowering the price by one producer, will induce the consumer to shift

What does this mean in the long run in terms of the development of our productive capacity for making good quality goods cheaper and more abundant, or perhaps in more styles and fashions for the general consumer? It means you set some kind of innovation process to hunt for better ways of canning, cheaper ways, better canning machinery, in order to enter the price competition with the firm that lowered the price of pineapple in the first instance. This is a very complicated structure we have in our economy, but it has all of these possibilities

If we do promote the knowledge that one group in one sector of the economy, the consumers, is able to operate as we specify in economic theory, then a chain of activities is set in motion and you might

Mr. Myers. As an economist, I take it you do believe in supply and demand? Dr. Brady. Oh, yes.

Mr. Myers. This is what I am referring to, the fact you were talking about seasonable products, and so forth. If there was more awareness, even though the entire population doesn't have the information, people are going to be aware of the fact that lettuce is more expensive at certain times of the year, and will quit buying so the seller will have to reduce prices—don't you think there will be some benefit, even though everyone doesn't have this information?

This is in accord with the theory that if lettuce is too expensive, there are always a certain number of people who are perfectly willing to shift from lettuce to an alternative green vegetable until the price is reduced. This is the substitution that goes on within the meats and within the vegetable categories quite generally on the part of consumers.

Mr. Myers. You talked about substitutes, and so forth. A lot of people I note today think that the presentation of food products has caused some of the cost increase, such as packaging and prep-

Dr. Brady. It certainly does. I should have mentioned those in

connection with the bundles of services that I am talking about. I left the University of Chicago more than 10 years ago, but at the time, there was one of the Ph. D. students under Theodore Shultz who was writing a dissertation just on this point. How much, what has the packaging and other services added to the price of foods in the market? It really did account—his figures weren't up to date when he finally finished the dissertation, but up to somewhere in the middle 1950's—it was accounting for a really sizable part of the price increases that consumers pay. For having things readily available, prepackaging and the various substitutes for the housewife as a cook could come in one form or another. All these things have added to the cost of food.

My answer to a question about this, is that this may be a defect in our quantitative measures of economic activity in economy, because if we added to the 5 cents a pound that consumers paid for meat around 1860, for almost any kind of meat except ham or bacon, all the housewife services that went to preparing this meat and preserving it, we might find that meat was just as expensive as it is now.

We measure what goes on in the market, not in the household. I admit I know of a good many reasons why we have to stay with this,

but it does seem we need to remember it every once in a while. The thing I think we want to remember about this whole question of brands and varieties is that the consumers' demand curve for different brands is about as sensitive as it is for something that is exactly the same brand, because they shift from one brand to another, according to these diverse appeals put on the cans at the canned fruit counter, they are also labeled according to content, and quite transparently have

Mr. Myers. I see you also served on the President's Consumer differences in prices.

Committee.

Have you gone into this area of packaging versus bulk food? Have

Dr. Brady. Well, it is an old, old story. I have gone into it only to you ever gone into that at all? the extent of trying to trace, you see, the shifts in prices just prices as prices, the way Commissioner Ross said—without talking about other services. I hope to have some of my students kind of take the history way back into the first bags of flour and the first bags of sugar. From the point of hygiene, packaging has been a great boon to the consumer, and I wonder if any of us would really want to go back to the cracker barrels, when we think of our modern notions of cleanliness and public health and so on.

Mr. Myers, I was thinking about your bacon. A side of bacon versus prepackaged bacon. Dr. Brady. Yes. That is different.

Here, I have to talk, really, in the past tense. At the time I was at the BLS, and we were preparing the first of the family budget studies, we made a real effort in the additional pricing that was necessary for putting a price tag on the whole budget, to get alternatives of this kind into the picture, so we wouldn't come out with a food budget that looked really extraordinarily high by comparison with welfare budgets and budgets that had been prepared earlier in our

Mr. Myers. There is just as much food value in a slab of bacon that you slice yourself, as there is in prepackaged, and presliced, and everything else. What is comparative price?

Dr. Brady. Well, I can't tell you that. A few months ago, I could have. But I have sensed that in my supermarket I described as being low income, an income increase among its customers, because it has cut down on the extent to which they offered the various hams that are not precooked and the slabs of bacon and so on.

It is rather difficult to go into there now, even on a weekend, and find much of this sort of thing being offered any more.

Mr. Myers. We spent a lot of time talking about bacon this morning. Does that whet your appetite any?

Dr. Brady. Well, it is a good example of what we need to study more. There are varieties and there are quality differences in all processed foods, and this is where BLS has to put a great deal of effort in trying to hold quality constant, when they collect price statistics. They are, however, not yet prepared to tell you what the whole variety spectrum looks like as contrasted to real quality differences.

Mr. Myers. I find myself in the middle here. I am concerned about seeing that we get the cheapest food on the table for the consuming public, but I also come from a big farm area, so I am concerned about the farmer. You spoke about the cut-up chickens, and so forth. There are a lot of empty chickenhouses and producers out there in Indiana, too, that don't produce chickens any more because they can't do it.

Dr. Brady. They can't compete with the big industry in chickens.

Mr. Myers. They have a lot of chicken coops, or whatever you call them, that are empty because they aren't making any money at the present prices.

So, we are met with a problem. I think packaging is part of the story, but I don't think it is all of it. I think that is used as an excuse Well, thank you very much.

Mr. Rosenthal. Thank you very much, Dr. Brady. We are very much indebted to you for taking the time to come down here this morning. Your full statement will be printed at this point in the

(The statement referred to and an additional statement follow:)

PREPARED STATEMENT OF DOROTHY S. BRADY 1

PRODUCT DIVERSITY AND PRICE STATISTICS

Our knowledge of the factors that explain changes in the prices of particular goods and services can only be extended by increasing, very considerably, the amount of information available on the variation in prices at a given time and

There is a quality range in most products purchased by consumers and within the variation in price changes over time. each quality level there are numerous varieties, distinguished by fashions, styles, each quality level there are numerous varieties, distinguished by lasmons, styles, and brands. The diversity in qualities and varieties complicates the measurement of price changes and, increasingly, has limited the determination of meaningful measures of the absolute level of prices to those commodities that are produced in recognizable and standardized grades. The range of qualities and produced in recognizable and standardized grades. ingrui measures of the absolute level of prices to those commodities and produced in recognizable and standardized grades. The range of qualities and the number of varieties, for some products, differ little from place to place and change slowly over time. The compilation of price statistics for such commodities and services presents no great difficulties in concept, measurement, or interpretation. Take salt for example. The determination of the average price of salt or of the average change in the price of salt in a given location is not likely to stir up controversies about definition and accuracy among economists and statisticians. Products like salt, sugars, vinegars, and chlorine bleaches are however, becoming more and more exceptional. The qualities and varieties of the things commons have an hour increased continuously and the differences the things consumers buy are being increased continuously and the differences between qualities have become more and more difficult to define either for identification in statistical measurement or for the understanding of the consumer. As it becomes more difficult to discriminate among quality levels, the distinction between qualities and varieties, that is, styles and fashions, becomes blurred.

The quality of a product is, in some way, associated with its price. Consumers, given sufficient purchasing power, are willing to pay more for higher quality. It costs more to produce goods of better quality, judged by some of the attributes that are generally recognized as distinguishing levels of excellence in workman-ship and performance. The variation in prices charged for some one commodity in a given metropolitan district at a particular time cannot, however, be taken to represent quality differences judged by consumer preferences or the costs of to represent quality differences judged by consumer preferences or the costs of production and distribution. Within a metropolitan district there are different locations, sections, or areas, where low-income, middle-income, and upper income consumers try to satisfy their wants. The varieties of products to be found differ among locations and within locations between types of establishment. found differ among locations and within locations between types of establishment.

So do the prices, for what appears to be equivalent articles or services. Changes in the prices of different varieties of a product are not likely to be unlarges in the prices of unferent varieties of a product are not men, to be uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants appear at different uniform over a metropolitan district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and district because new variants are district because new variants and annothing over a metropolitan district because new variants appear at different messing the locations where the various classes of consumers do their shopping. The new variants may and probably do affect the prices of the product in those locations. Under the circumstances consumers have no way, presently, of knowing whether a price change is quite general or how persistent it is likely to be, or even, in some instances, whether a price change has taken place. If new brands appear and familiar brands disappear, the possibility of comparing prices is eliminated.

Within the present program for the collection of price statistics by the Bureau of Labor Statistics there are some methods for describing the variation in prices and in price changes that could improve the analytic potential and contribute

The range in prices for specific goods and services among different types of establishment in different locations in metropolitan districts could be used to describe the consumers' alternatives with respect to quality and varietal differences. Such summary descriptions might lead to questions on marketing practices that require explanation. If the range of prices for standard brands of coffee were higher consistently in supermarkets of middle-income suburbs than in central city locations catering to a similar population, the explanation might be

found in the relative number of brands that are stocked. Similar schemes for describing the ranges in price changes could be developed. When the prices for particular products change the effects on different classes in the population can be judged by such locational classifications of the reporting establishments. A knowledge of the concentration of price changes by location and two of catablishment could contribute to the product of the concentration of price changes by location and two of catablishment could contribute to the product of the concentration o establishments. A knowledge of the concentration of price changes by rocation and type of establishment could contribute to our understanding of the impact

¹ Professor of economics, University of Pennsylvania.

of the different classes on consumers on the evolution of product design and on the structure of prices. When consumers' incomes increase, they seek for better quality and more variety in what they buy. In the long run greater variety means higher prices relative to, say goods that are as standardized as salt and sugar. Knowing how price changes are distributed by location could throw light on the process by which they spread and affect wider areas and other products.

The value of publishing current releases on the ranges in prices and price changes within locations and types of establishment would be greatly increased if benchmark studies of prices could be undertaken. Such benchmarks would involve a general survey on the qualities, varieties, and prices of representative products in the market at intervals of three and not more than 5 years. The surveys would cover more establishments and greater detail on products and prices than is feasible in the monthly collection of data for the Consumer Price Index. Observations would have to be made several times in the year on commodities or services affected by significant seasonal movements in prices. Such benchmark surveys could reveal whether the sources of differences in prices or in price changes between low-, middle-, and high-income shopping locations are in the changes between low-, middle-, and nign-income snopping locations are in the types of goods sold and services offered. Such a series of benchmark surveys could show how much of differential price changes over time can be traced to shifts in the kinds of goods offered by various types of establishments, and how much might be attributed to widening the quality range or to increases in the number of varieties of particular products.

Consumers need to know whether price declines are real, as in "white sales"

and whether rises in prices are temporary or localized. By giving attention to various means of describing the distribution of price changes among various classes of consumers, the economic profession could contribute to its own bene-

PREPARED STATEMENT OF THE NEW YORK CITY COUNCIL ON CONSUMER AFFAIRS

The New York City Council on Consumer Affairs was set up on April 23, 1967, by executive order of Mayor John V. Lindsay to take affirmative action to protect the consumer interests of the citizens of New York. It is composed of commissioners of major city departments with special responsibilities in the consumer field. The council is concerned with all matters affecting the interest of the citizens of New York City as consumers.

The council favors efforts to obtain and disseminate full information to consumers. Federal Government purchasing standards, formulated at taxpayer expense, surely should be available to aid him shop knowledgeably in an increasingly complex market. One Federal agency, perhaps the General Services Administration, should be responsible for organizing and publishing all existing standards in a form useful to consumers. A system, such as the "Info-Tag" proposal of H.R. 7114 (90th Cong., first sess.), which will let manufacturers tell the consumer whether their products meet Federal standards, would also be highly desirable.

The need for more consumer information is beyond dispute. The Truth in Packaging Act and the pending truth in lending bill demonstrate the concern of Congress and of the Nation for the bewildered buyer. American business has succeeded in producing a wide range of high quality consumer goods, but the poor and uneducated shopper—and especially the welfare recipient—is often deceived by inferior goods sold at inflated prices by some unscrupulous merchants. If manufacturers and merchants could advertise that their products met Federal standards, even the unsophisticated shopper would have concrete information about

The New York City Council on Consumer Affairs urges that Federal purchasing standards be made public. We support appropriate administrative action or legislation to accomplish this objective.

Mr. Rosenthal. The subcommittee stands adjourned. (Whereupon, at 12:10 p.m., the subcommittee was adjourned.)

APPENDIX

EXHIBIT 1

FEDERAL SPECIFICATIONS

Specifications are descriptions of the technical performance requirements for materials or products to be used by the Government. They specify the minimum requirements for quality and construction of materials and equipment necessary

Development of specifications often involves extensive research and testing.

The following is a collection of abstracts of Federal specifications prepared by for an acceptable product. the Federal Supply Service, General Services Administration (GSA). This rep resentative sample was selected from a list of over 900 GSA consumer-type prod-

Information has been abstracted from each specification which was thought by ucts on which specifications have been developed. the committee staff to be useful to the consumer in his selection of similar

The original specifications too voluminous for reprinting are being held in products in the marketplace. committee.

Federal Specification—00-M-00681c, Mowers; Lawn, Power

1.1. Scope.—This specification covers lawnmowers with gasoline-engine powerdriven cutting devices, which are self-propelled, also rotary flat-knife type which

3.2. Material.—Materials used in the construction of lawnmowers, gang cutting are hand pushed. units and attachment units, shall be of the highest grade. Castings shall be smooth and free from blowholes, pits, foreign material, or other defects.

3.3.2. Guards.—Effective guards shall be provided to overcome hazards created by reciprocating, rotating, or moving parts such as chains, belts, sprockets, gears,

3.4.2. Operation on level grounds.—All self-propelled lawnmowers shall be capetc., that are exposed to contact by the operator or others. able of continuous cutting at a speed of 3 miles per hour on firm and fairly level grounds or lawns. [This requirement might seem unnecessary when relating it to consumer needs, but it might be worthwhile if a buyer wants to know if the mower can maintain a steady speed or if he would have to keep giving it more

3.4.4. Adjustable operating speeds.—The cutting speed of self-propelled mowers on level lawn and on grades shall be readily varied over a range of speeds which shall include 2 miles per hour. There shall be multiple ground travel speeds at a constant engine RPM. The relation of cutter blade speed and engine speed shall be constant. All cutting speeds specified herein, and any additional speeds at which the mower may be designed to operate continuously, shall be controlled either by a throttle, an automatic or manually adjustable speed governor, gear-

3.5. Balance.—Lawnmowers shall not tip over of their own accord when placed shift transmission or a combination thereof.

3.6. Engine.—Engines shall be so mounted that the air passages of the cooling in either direction of travel across a 30-degree slope. system will not become clogged with cut grass of clippings thrown by the cutting device. The engine shall not stall, excessively overheat, or unduly smoke.

3.6.1. Fuel system.—Exhaust shall be directed to the right or left, away from

3.8. Controls.—Handle-grip controls and lever controls shall be positive in action and shall remain locked or fixed in any required position under all operating and handling conditions of the mower.

3.10. Handle frame.—The handle frames shall be of metal construction and shall be sufficiently rigid to prevent whipping action or noticeable deformation

3.11. Lubrication.—Gears and bearings shall be accessible for lubrication.

3.12. Riding mower or detachable sulky.—When riding mowers are furnished, an operator's seat and footrest shall be provided as integral parts of the mower. A suitable steering wheel or steering mechanism and controls shall be provided within easy reach of the operator (when seated). Locking of the sulky when the mower is operated in reverse shall be provided. When the detachable type of riding sulky is furnished, it shall have a durable saddle-type seat and a footrest, and be substantially constructed throughout. The sulky chassis and drawbar shall be of steel and shall be readily attachable and detachable.

3.14. Instruction book.—The contractor shall furnish with each lawnmower, either a booklet or pamphlet giving complete instructions for the operation, lubrication, adjustment, and care of the engine, mower, and attachment units.

A pamphlet listing repair parts shall also be furnished with each lawnmower. 3.16.1. Cutting requirements.—Rotating-reel-type mowers shall be capable of cutting heavy, thick-growth grass, 3 inches in height above the bed knife, in a single pass. The cut shall be smooth and even for all heights of cut above the ground to which the bed knife is adjusted or elevated. The mowers shall not slip

3.17.1. Cutting requirements of rotary flat-knife-type power mowers.—The lawnmowers shall be capable of cutting cleanly, in a single pass, the hardiest of annual growth of buckhorn, crowfoot, dandelion, milkweed, thistle, tung grass, Bermuda, foxtail, and Johnson grass, wire grass, ragweed, foxgrass, and similar field growths. They shall also be capable of cutting lawn grass on developed lawns

3.17.1.1. Height of cut above the ground.—Except for Rotary flat-knife, medium duty type II, class 1 mowers, the height of cut above the ground shall be adjustable and located conveniently so that the setting can be made by hand

3.17.2. Cutter blades.—Cutter blades for type II rotary mowers shall be of one piece and fastened to the vertical drive shafts with screws or bolts, or other

3.17.7. Comformance to ASA Standard.—The contractor shall submit proof to the purchasing agency that the type II mowers he proposes to furnish under this specification conform to American Standard Safety Specification for Power Lawn Mowers. ASA B71.1-1964.

Federal Specification—GG-C-551b, coffee-maker set, vacuum, (gas or electric)

1.1. Scope.—The coffee makers covered by this specification consist of twobowl units (metal or glass, or combinations thereof), of 12-cup brewing capacity. They are heated by means of gas or electric hot-plate-type stoves or ranges.

3.1 Fire and casualty hazards.—The bidder shall submit to the purchasing agency proof that the appliance he proposes to supply under this specification conforms to the standards of the Underwriters' Laboratories, Inc. parts of American Gas Association's Appliances Z21.31 for gas-heated appliances regarding fire

3.2.2. Glass.—The glass shall be properly annealed, heat-resistant, and thermal shock-proof glass capable of being heated in an oven to 300° F., then plunged into ice water 32° to 40° F. without damage. [Although this Government requirement is much higher than a consumers, it would be to the consumers advantage to know that the glass when extremely hot will not crack when placed into cold

3.3. Coffee makers or brewers, (nonautomatic)—materials I and II.— I, metal bowls; II, metal upper bowl, glass lower bowl. Each bowl shall be of 12-cup usable brewing capacity. A handle shall be provided on the lower bowl to prevent the operator's hand from coming into contact with the bowl during normal use.

The handle shall be fitted to the neck of the bowl in a manner to prevent

3.3.1. Material I (metal).—Coffee makers (brewers) made of material I shall consist of upper and lower bowls made of corrosion-resisting steel.

3.3.1.1. Design—metal upper bowl.—The upper bowl shall be provided with a stem for insertion into the lower bowl. It shall be fitted with a bushing (gasket) that provides an effective seal with any lower bowl within the specified dimensions. When assembled with any such lower bowl, the bottom of the stem of

the upper bowl shall be not more than 1 inch or less than one-half inch above the

inside bottom of the lower bowl.

3.3.2. Material II (metal upper bowl and glass lower bowl).—Coffee makers made of material II shall consist of an upper bowl made of metal and a lower

3.3.2.1. Design—metal upper bowl.—The metal upper bowl shall have a stem with approximately 1-inch clearance between end of tube and bottom of lower bowl made of glass. bowl when placed in brewing position. It shall be provided with a rubber bushing (gasket) to effect a leakproof seal when the bowl is nested in the lower bowl.

3.4. Method of operation.—The vacuum-type coffee maker shall heat fresh tap water to the boiling temperature in the lower bowl by means of gas or electric heat, as specified in the invitation for bids. The pressure generated in the lower bowl shall then force the water up the stem of the upper bowl, through the filter, and into the upper bowl containing the ground coffee. After removal from heat and into the upper bowl containing the ground conce. After removal from heat source, vacuum generated in the lower bowl shall draw the brewed coffee through the filter to the lower bowl. Brewing time shall not exceed 5 minutes. Brewing time is defined as the time lapse (after the upper bowl containing filter and coffee is inserted into the lower bowl of boiling water) to raise the water to the upper bowl and, by condensation vacuum in the lower bowl, return the

prewed corree to the lower bowl.

3.5.2.1. Electrically heated heating elements.—Elements shall have a life of not less than 1,000 hours operating time when used with name plate voltage.

3.5.2.2. Switches.—Each electrical heating element shall be controlled by a shall be controlled.

make and break indicating rotary-type switch. Switches shall have "high," "warm" or "low," and "off" positions. At the option of the contractor, additional

3.5.2.3. Wiring and connections.—Wiring and connection between parts shall heating positions may be supplied. be concealed and enclosed or adequately protected from spillage. Electrically heated type coffee makers shall be furnished with flexible heater cord 31/2 feet long minimum with cord grip, moulded plastic, or rubber cap on free end.

Federal Specification-W-H-00193a Heater, Space, Electric (Portable)

1.1 Scope.—This specification covers portable electric space heaters.

3.1 Portable space heaters.—Portable space heaters furnished under this specification shall conform to the requirements of UL 573.

3.1.1 Handles.—All heaters shall be equipped with a suitable carrying handle.

3.2.1. Each contractor shall submit to the contracting officer proof that the portable electric heaters he proposes to supply under this specification conform to portable electric heaters he proposes to supply under this specimeation comorn to the requirements of the Underwriters' Laboratories, Inc., Standard UL573, Electric Space-Heating Equipment. The label, or listing with reexamination, of the Underwriters' Laboratories, Inc., may be accepted as evidence that the electric bestews conform to this requirement.

3.2.4. Tipover switch.—Type I, forced air; type II base board; type III radiant electric heaters conform to this requirement. convection—Unless otherwise specified, types I, II, and III heaters shall be furconvection—timess otherwise specified, types 1, 11, and 111 fleaters small acturer. nished with or without a tipover switch at the option of the manufacturer. when specified types I, II, and III heaters shall be furnished with a tipover when specified types 1, 11, and 111 heaters shall be furnished with a dipoter switch that will automatically cut off the power supply when the heater is accidently turned over from its natural operating position. Tipover switch shall automatically reactivate the power supply when the heater is returned to its

3.3. Type forced air.—Heaters shall be thermostatically controlled and shall be equipped with a suitable fractional horsepower motor and fan for circulating normal operating position.

the heat. Heaters shall be equipped with a minimum of 6 feet of cord.

Federal Specification—00-M-671c Lawnmower, Hand

1.1 Scope.—This specification covers standard cutting reel and hand lawnmowers that are pushed or propelled by manual effort. It is used for cutting grass ordinarily grown on lawns. Average-duty mowers are for use on ordinary lawns, and heavy-duty mowers are for lawn areas with extra-tough, matted or high grasses.

3.3.1. Average duty.—Average-duty mower shall be so designed and constructed that it will cut grass ordinarily encountered on lawns. It shall cleanly cut grass from fine shade grass to matured crab grass.

3.6 Drive wheels.—The lawnmower shall have two drive wheels arranged so that the cutting reel will operate when either wheel is rotated. The wheels shall have plain, ball, or roller bearings, at the option of the contractor. Wheels shall be fitted with semipneumatic or solid rubber tires. Solid tires shall be cushioned and form-fitting or otherwise attached to the wheel in a manner to prevent slippage on the wheel. Plain wheels or plain wheels with slipover rubber tires will

3.12. Handle and handle grip.—The handle shall be constructed of steel or hardwood. The handle braces shall be constructed of steel and shall be attached to the handle by not less than two bolts with nuts. When wood is used, the handle grip shall be securely bolted to the handle through plates or brackets. When metal is used, the handle grip shall be securely fastened to the handle and shall be covered with rubber or a suitable composition.

3.12.1. Handle length.—The handle shall be of sufficient length, and angularly adjustable without the use of tools to allow an operator (tall or short) to push the mower in a comfortable walking position (without bending).

3.14. Lubrication.—The lawnmower shall have a covered oil or grease fitting arranged for lubrication of reel bearings, unless sealed ball or roller bearings, packed in grease, are used. The lawnmower shall be fully lubricated prior to

3.16. Identification marking.—Each lawnmower shall be permanently marked with the model number and manufacturer's name or trademark of such known

character that the source of manufacture may be readily determined.

3.18. Finish.—The exterior surfaces of the lawnmower shall be properly painted unless of noncorrosive material or finish. Wood handles shall be either

Federal Specification—GG-B-0060-c Ballpoint Pen, Single Cartridge

1.1. Scope.—This specification covers single cartridge ballpoint pens and replaceable ink cartridges (refills).

3.2.1. Plastic.—Plastic shall be of good quality and of suitable hardness and rigidity, and have low moisture absorption under wide humidity and temperature conditions. The plastic shall retain its design contours without warping, crazing, cracking, or discoloring in service or in storage. Plastic used in pen barrels shall be such that the barrels remain straight and rigid * * * and shall be nonfiam-

3.2.2.2.1. Writing tip.—The writing tip shall be of metal which is compatible with all other components.

3.2.2.2.3. Ink tube.—The ink tube shall be brass.

3.2.3. Ink.—The ink shall be of such chemical composition as to be compatible with all components with which it comes in contact.

3.4.1. Barrel.—The barrel shall be designed and constructed to fit and function satisfactorily with the ink cartridge. The barrel shall be made of plastic or metal, or a combination of these materials, and shall be smoothly finished. The barrel may be round, hexagonal, or octagonal. The center line of the barrel shall be straight. The barrel shall be smoothly tapered, from the maximum diameter to the writing end, to form a comfortable finger grip. Barrel shall be so constructed as to provide continuous equalization of air pressure between the nonwriting end of installed refill and the outside of the barrel. The barrel shall consist of two sections. The sections shall be provided with matching external and internal threads; which, when joined, form a rigid barrel. Threads shall be of such size and pitch to produce smooth action in joining barrel sections and withstand ordinary conditions of use. Where strength of the joint is dependent upon the threaded parts only, the threaded portion of each section shall be a minimum of three-eighths inch. Where the design of the sections includes a device in addition to threaded parts for the purpose of maintaining rigidity and other performance functions, the manufacturer's standard length of threaded parts will be acceptable. When made of plastic, the writing end of the barrel shall be provided with a metal tip. The outer surface of the metal tip shall be flush with the plastic, shall be tapered, and shall extend beyond the plastic at least onefourth inch. The metal tip shall be securely and permanently attached to the plastic.

3.4.2. Refill (ink cartridge).—The design and construction of the refill (ink cartridge) shall be adequate to prevent retraction of the writing tip when the pen is in use. Refill (ink cartridge) shall consist of ink tube, writing tip, and ink. 3.4.2.1. Ink tube.—The ink tube shall be made of brass.

3.4.2.3. Ink.—Ink in sufficient quantity to write a line not less than 5,000 feet

3.5.5. Drying time.—Writing shall dry within 5 seconds and shall not smear. in length, shall be contained in the ink tube.

3.5.7. Penetration.—After 48 hours writing shall not have penetrated to the 3.5.6. Feathering.—Writing shall not feather or spread.

3.5.12. Reproduction capability.—All colors shall be capable of reproduction by microfilming and black ink shall be capable of reproduction by thermography, dry copying, and direct-image offset processes. The writing shall be distinct and legible.

Federal Specification H-T-560, Toothbrush (Adults and Child's)

1.1 Scope.—This specification covers the requirements for toothbrushes suit-

3.1.1 Handle stock.—The handle stock for the adult's and children's toothable for use by adults and children. brushes shall be made of suitable plastic, fire retardant, impact resistant, solid 3. REQUIREMENTS. or transparent in color, and free from objectionable odors. The finished handles

3.1.2.2.1. Fastness to boiling water stiffness.—The plastic bristle stock shall show no marked discoloration or appreciable change in stiffness when tested. shall not soften when tested.

3.2.1.1. Adult's toothbrush.—The handles for the adult's toothbrush shall be

3.2.1.2. Child's toothbrush.—The handles for the child's toothbrush shall be not less than 6 inches in length.

3.3 Finish.—The bristle stock shall be neatly and evenly trimmed according to type and the handle stock shall be smoothly finished with rounded corners. $4\%\pm\%$ inches in length. 3.4 Identification marking.—Each toothbrush shall be permanently and legibly marked with the manufacturer's name or easily identified trademark

3.5 Workmanship.—All surfaces of the finished toothbrushes shall be smooth embossed or stamped on the handle stock. and uniform in texture. The toothbrushes shall be clean and free from sharp

$Federal\ Specification\ W-F-421b,\ Flashlights,\ Electric,\ Hand$

1. Scope.—This specification covers flashlights of tubular construction for 1. Scope and Classification. general use and for rough service.

1.2 Classification.

Classes and sizes. Class 2: General Service. 1.2.1

Size 1 : Two cell. Size 2 : Three cell.

General.—The flashlights shall be of tubular construction and shall project their beam longitudinally. They shall be furnished complete with lamps

3.3.3 Switch.—The switch shall be mounted on the side of the case and shall be a slide type which provides a locked "off" and a positive "on." When specified, a "flashing" position shall be provided. Switches shall resist accidental movement to the "on" position. The switch slide or button, shall be designed so as to permit to the "on" position with one hand but without dry cells.

3.3.7 Finish and workmanship.—The finishes of all components and of the assembled flashlights shall be equal to or better than those recognized as good easy manipulation with one hand. commercial practice for the material in the same or similar applications, and shall evidence no indication of deterioration when the flashlights are subjected to Test cell selection.—The flashlight shall be loaded with the required

number of selected size D mercury cells (Mallory No. RM42R or equal). Note:— It has been determined that mercury-type cells provide a more stable the tests. current supply than regular zinc-type dry cells for determining the light-producing performance of flashlights.

Federal Specification P-D-220a, Detergent, General Purpose

1.1. Scope.—This specification covers general maintenance commercial cleaning compounds containing synthetic detergents. Typical uses are in removing

occupational soil from painted surfaces and in general soil removal from flooring, ceilings, and equipment, by application from solution with a cloth, mop,

3.1 The compound shall be a uniform product, free from any objectionable odor, and shall contain synthetic organic detergents. It shall contain no abrassives on fotty soid soons and shall be maintained to the shall be said to the outer, and shall contain synthetic organic detergents. It shall contain no autasives or fatty acid soaps and shall be nonirritating to the skin. It shall be satisfied by the satisfied of the skin in the satisfied of the factory for use in floor and wall maintenance cleaning operations with soft or

Liquid; regular (10 percent active) type II, class 1.—A solution of 1 percent by volume (one volume of compound to 99 volumes of synthetic hard water) shall exhibit a cleaning efficiency of not less than 80 percent.

3.6.2.2 Liquid; concentrate (20 percent active) type II, class 2.—A solution of one-half percent by volume (one-half volume of compound to 99.5 volumes of synthetic hard water) shall exhibit a cleaning efficiency of not less than 80

3.10 Labeling.—
3.10.1 For powder or flake; liquid; concentrate (20 percent active); paste. For type I; type II, class 2; and type III.—Each container of detergent of specifled type and class, where applicable, shall be durably and legibly marked with the following information, precautions, and directions for use:

A nonabrasive detergent for use in hard and soft water for the general maintenance and cleaning of floors, walls, and woodwork. Caution: do not use on aircraft surfaces.

Directions for use.—Add ½ to 1 ounce of detergent to each gallon of warm water used. Increase this amount of detergent but not to exceed 4 ounces of detergent to each gallon of warm water if required to clean in hard water solution or to clean heavily soiled surfaces. Prepare fresh solutions when cleaning solution becomes dirty. Rinse the washed surfaces with fresh water to remove loosened

3.10.2 For liquid, regular (10 percent active). For type II, class 1.—Each container of detergent of specified type and class, where applicable, shall be durably and legibly marked with the following information, precautions, and directions for use:

A nonabrasive detergent for use in hard and soft water for the general maintenance and cleaning of floors, walls, and woodwork. Caution: do not use on

Directions for use.—Add 1 to 2 ounces of detergent to each gallon of warm water used. Increase this amount of detergent but not to exceed 6 ounces of detergent to each gallon of warm water if required to clean with hard water or heavily soiled surfaces. Prepare fresh solutions when cleaning solution becomes dirty. Rinse the washed surfaces with fresh water to remove loosened soil.

6.1 Intended use.—The detergent covered by this specification is intended for use in hard and soft water for general maintenance and cleaning of floors, walls, and woodwork. It is a nonabrasive type cleaner and is safe to use on painted surfaces, linoleums, asphalt, and rubber tile flooring.

Federal Specification P-D-425c, Dishwashing Compound, Machine

1.1 Scope.—This specification covers free-flowing, solid form dishwashing compounds suitable for use in spray-type mechanical dishwashing machines.

3.1 Material.—No agents shall be used which contribute to excessive foaming under conditions of use. dry form.

3.2 Odor.—Dishwashing compound shall be free from objectionable odor in

3.3 Foaming.—Compound shall not foam to the extent as to interfere with soil removal and rinsing of utensils and dishes during dishwashing.

3.15 Fineness.—The particle size of mechanical mixture of ingredients shall be normally uniform in order to minimize segregation of the ingredients.

3.17 Workmanship.—The material shall be thoroughly mixed and present no evidence of segregation of individual constituents or of lumping or caking.

Two pounds.—Each box shall be lined with a sealed glassine or wax paper or other suitable liner material to prevent contents from sifting, and for

Federal Specification P-S-311c, Scouring Powder

1.1 Scope.—This specification covers powdered scouring compounds for the cleaning of porcelain surfaces (vitreous types) and for general kitchen use.

1.2.1 Types and classes.—Scouring powder covered by this specification shall

be of the following types:

Type I—with bleaching agent. Type II—without bleaching.

3.1 Material.—Scouring powder shall be a white or of an attractive pleasing

color, scented or unscented, and of uniform composition. 3.4 Excluded material.—The scouring powder shall not contain any bentonites. The contractor will be required to furnish the contracting officer a certificate of compliance that bentonites are excluded from the finished product. The product shall contain no ammonia forming compounds.

Federal Specification P-S-3206, Scouring Powder (Glass Cleaning)

1.1 This specification covers one type and grade of scouring powder for cleaning highly polished glass surfaces which must transmit light efficiently.

3.1 Materials.—The scouring powder shall be a mixture of detergents, alka-

3.3 Soil removal.—The scouring powder shall remove all soil leaving no line salts, and abrasives.

3.4 Labeling.—Each unit container shall have the following label clearly and scratches or streaks.

Scouring Powder (Glass Cleaning) Specification P-S-320, 14 ounces, Stock legibly lithographed or stenciled on its face: Directions for use.—Apply the scouring powder to a clean dampened cheesecloth and rub onto the soiled glass surface with a circular motion. Let it dry and number.

then wipe off the dried film with a clean, soft, dry cloth. Manufacturer's name; manufacturer's address; contract number; date.

3.5 Workmanship.—The scouring powder shall be uniform, homogeneous, lump free, free from foreign matter, white or light gray in color, clean, and of pleasant odor.

6.1 Intended use.—Scouring powder covered by this specification is intended for safe cleaning of glass or other vitreous surfaces.

EXHIBIT 2

QUALIFIED PRODUCTS LIST

As a means of expediting contract awards and deliveries of certain products the manufacturers are sometimes required by the Federal Government to have their products pretested, either by a Government or a designated independent laboratory, to determine whether the products meet Government specifications. If a product meets specification requirements, the manufacturers' product may be placed on a qualified products list (QPL). Assurance that the proper quality is being maintained is achieved by adequate retesting of deliveries under each

Widespread publication of products identified as "qualified" would, with certain important qualifications, provide consumers with an important indicator of product acceptability in the commercial marketplace. Presently, manufacturers are not permitted to advertise or publicize the fact that their product appears on a qualified products list.

In order to determine the value of the QPL to consumers consideration must first be given to whether the specifications for a consumer-type product represents a level of performance identical to or substantially the same as that desired by private consumers. If it does, then products found on a qualified products list can properly be understood to have been found effective performancewise by the Government. Failure of a product to appear on a QPL might only indicate that its manufacturer, not interested in doing business with the Government, never submitted his product for testing. It might also indicate, on the other hand, that the product failed to meet the level of performance required by the U.S. Government. To date, public access to the identities of products

QPL-JJ-B-185-6 December 11, 1963 SUPERSEDING OPI-JJ-B-185-5 July 10, 1962

FSC 2540

FEDERAL QUALIFIED PRODUCTS LIST

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

JJ-B-185a

BELT; SEAT, PASSENGER TYPE, AUTOMOTIVE

This list has been prepared under the authority of the General Services Administration for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product listing of a product is not intended to and does not equalified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change as specified in the latest effective issue of the applicable specification. This listing of a product does not release the supplier from compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification requirements. Use of the information for advertising or publicity purposes is expressly forbidden, and such use will be grounds information for advertising or publicity purposes is expressly forbidden, and such use will be grounds.

The activity responsible for this Qualified Products List is the Federal Supply Service, General Services Administration.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Type I	A5100 Lyfe Belt	FSO/8-1-61	Alofts Mfg. Co., 345 32nd Street, S. W. Grand Rapids 8, Michigan American Safety Equipment
	AS-1960-1	FSO/11-9-61	American Sates, Corporation 216 Madison Avenue New York 16, New York (Distributor) Planti Hickok Mfg. Co., Inc. Rochester, New York
	_{SM-19} 60 Н х-15	FSO /6-21-62 FSO /4-25-62	do. Atlas Safety Equipment Company, Inc. 175 N. 10th Street Brooklyn 11, New York
	Stock 100, Model BN 3-1501	FSO/8-8-61	Plant: Same Address Auto-Crat Mfg. Co. 2425 San Fermando Road, Los Angeles 65, Calif. Plant: Same Address
	FOMO © C2AZ 6261200A	FSO/8-24-61	do.
	Stock 250 Model EN3-7001	FSO/6-15-62	2850 Tyler Road Ypsilanti, Michigan
	u500	FSO/4-26-62	Auto Safe Corporation 633 E. St. Clair Street Indianapolis 2, Indiana Flant: Same Address
			Page 1 of 8

QPL-JJ-B-185-6 <u>December 11, 196</u> SUPERSEDING QPL-JJ-B-185-5 July 10, 1962

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufa Desig	cturer's Ination	Test or Gualification Reference	Manufacturer's
ype I	Ulo			Name and Address
		FSO	/10-14-63	
				Auto Safe Corporation 633 E. St. Clair Stree Indianapolis 2
	U300			Indianapolis 2, Indian
	B1000	FSO/	⁷ 5-10-63	Plant: Same Address
		FSO/	5-10-63	do.
	Style No. HB-1		6-27-62	do.
				Barlow Mfg. Company
	J _D .			Amsterdam Street
	Premium #100	FS0/8	-8-61	Same Address
				Beam's Mfg. Company 1327 North Robinson
	Deluxe #200			Oklahoma City, Oklahoma
		FSO/8_	8-61	Plant: Same Address
	∮ 500	FSO/8-	10-61	do.
	200 SH	FSO/4-2		do.
	Impact A	FS0/6-1		do.
			<i>)</i> -02	Ray Brown Automotive
				Los Andren Orange Drive
	Impact B	FS0/6-15	5-62	Plant: Same Address
Impact C Impact D		FS0/6-15		do.
		FSO/8-10.	The state of the s	do.
	Impact E	FS0/12-22		do.
	FDC-2700F1			do.
		FSO/7-28-	61	Davis Aircraft Products,
				Scudden
	FDC-4200F1			Northport, L. I., N. Y. Plant: Same Address
	Model 1000	FS0/7-28-6	a	- Address
	1000	FSO/2-13-6	3	do.
			2	rielich Bros. Corporation 9 West Fourth Street
	Safemaster #707		Þ	ew York 12, New York lant: Same Address
		FSO/10-12-6	* In	16 O
			21	ne Greenfield Company 00 Estes Avenue
	700	PSO /0 =:		k Grove Village, Ill. ant: Same Address
	707-20	FSO/2-21-62		do.
	707-40	FSO/2-21-62		do.
	707-70	FS0/3-27-63	1	
	707-80	FS0/3-27-63		do.
	7,-0	FSO/3-27-63		do.
				do.
이 강화 하네다				

QPL_JJ_B-185-6 December 11, 1963 SUPERSEDING QPL_JJ_B-185-5

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET 10, 1962

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Type I	Model 66	FSO/1-9-63	The Herton Co., Inc. 260 Fifth Avenue New York 1, New York Plant: Delinarva Narrow Fabrics, Inc. Easton, Maryland
	5032	FSO/8-13-62	Hinson Mfg. Company Waterloo, Iowa Plant: Same Address
	5036 5037 5038 5039 Model No. 579A	FSO/8-13-62 FSO/8-13-62 FSO/8-13-62 FSO/8-13-62 FSO/7-6-62	do. do. do. do. Hubsch Mfg. Company 3856 Grant Road Jacksonville, Florida Plant: Same Address Irving Air Chute Co., Inc. 1315 Versailles Road
	ID-51-198-1 Model 66ST-C Model 77ST-C Model 99ST-G JA-45C Safe-T-Mate	FSO/1-31-63 FSO/1-31-63 FSO/6-27-63 FSO/5-21-62	last versal Lexthaton, Kentucky Plant: Same Address do. do. do. Jeffery-Allan Industries, Incorporated 11.39 South Wabash venue, Chicago 5, Illinois Plant: Same Address
	JA-55 Lifemate JA-55FW Lifemate JA-65 Lifemate JA-75 Trav-L-Mate Model 60158	FSO/5-21-62 FSO/5-21-62 FSO/5-21-62 FSO/5-21-62 FSO/11-14-62	do. do. do. do. Jervis Corporation P. O. Box 86 325 Duffy Avenue Hicksville, New York Plant: Same Address Lapstrap, Incorporated
	Model #40 Model #20	FSO/11-7-62	P. O. BOX 1072 Whichita, Kansas Plant: Kansas Foundat For The Blind, Inc., Whichita, Kansas

December 11, 10 SUPERSEDING QPL-JJ-B-185-5 July 10, 1962

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufacture Designatio	n Quali	st or fication erence	Manufacturer's Name and Address
Type I	SB100-200			Adress
	CF-77991 Model #100	FS0/12-21-61 FS0/5-16-62 FS0/6-21-62		Market Forge Company 35 Garvey Street Everett 49, Mass. Plant: Same Address Mine Safety Appliance Co., 201 North Braddook Ave., Plattsburgh 6, Fennsylvania Plant: Same Address Intional Industries for The Blind 120 Avenue of The America: MY York 36, New York 136, New York 36, New York
	Model A	FS0/1-29-63	5	Lant: Industrial Home for the Blind Willoughby Street cooklyn, New York do.
	Model A	FS0/1-29-63 FS0/1-30-63		do.
	fodel AO fodel A	FSO/1-30-63 FSO/2-8-63	Nati tilizonew Nati trilizonew Plan Gali	the Blind O Avenue of the Americas York 36, New York the Kansas Foundation or the Blind, Inc. hita, Kansas do. onal Industries for e Blind Avenue of the Americas York 36, New York U San Diego Center, Cornia Industries for
			1344	F Ct.
	del AC	FSO/2-8-63 FSO/10-21-63	San I	nego 2, California do.
		FSO/12-6-63		do.
	100	FSO/4-16-63	Philad	do. al Safety Belt Corp. Dauphin Street elphia 25, Penn.
B-7	50	FSO/6-27-62	Produc- Cumming 2900 De	S Research Co. S & Sander Division
Mode	1 3-700	FSO/6-19-63	Plant:	edes 39, Calif. Same Address do.

QPL-JJ-B-185-6

QPL-JJ-B-185-6 <u>December 11, 19</u> SUPERSEDING QPL-JJ-B-185-5 July 10, 1962 FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Designation Type I	Model M-200	FSO/9=17-63	Ratsey Safety Belts, Inc. East Schofield Street City Island New York 64, New York Plant: Same Address
	Rayco #3	FSO/4-3-62	Rayoo Mfg. Co., E221 State Highway 4, Paramus, New Jersey Plant: Same Address
	R.M.C. Model 1-C	FSC/4-24-62 FSC/5-10-62	do. The Roberk Co. Norwalk, Connecticut Plant: Same Address
	#850	FSO/8-9-61	Rose Mfg. Co. 2700 West Barberry Place Denver 4, Colorado Plant: Same Address
	#858-G 1991-1	FSO/8-9-61 FSO/1-16-62	do. Shore-Galnevar, Inc. 7701 E. Compton Elvd., Paramount, Callf. Plant: Same Address
	Federal Model 3095	FSO/14-4-62	Service Belt Co. Inc., 810 Broadway New York 3, New York Plant: Same Address
	5000K	FSO/3-13-62	Star-Lite Industries 1026 South Santa Fe Ave., Los Angeles 21, Calif. Plant: Same Address
	5200 6000K 6200K 3000K UTK 5600	F50 /3-13-62 F50 /6-4-62 F50 /6-4-62 F50 /6-4-62 F50 /4-2-62	do. do. do. Sturges Mfg. Co., Inc. P. O. Drawer 59 Utica, New York Plant: Utica, New York
	UTK5600-1 Model 980	FSO/11-7-62 FSO/6-11-62	do. Superior Industries In 14721 Keswick Street Van Nuys, Calif. Plant: Same Address
	Model 985	FSO/11-15-62	do
			Page 5 of

QPL-JJ-B-185-6 <u>December 11, 196</u> SUPERSEDING QPL-JJ-B-185-5 July 10, 1962

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufa Desig	acturer's Ination	Test or Qualification Reference	Manufacturer's
Type I	SAF_1	120		Name and Address
	SCR_1		×0/6-5-62	Sutone Corporation 7701 E. Compton Blvd. Paramount, Calif. Plant: Same Address
	150 Guardian		0/7-6-62	do.
	200 Crash Guar		//3-12-62 /3-12-62	Tulareloft, Inc. 330 East San Joaquin P. O. Box 248 Inlare, Calif. Plant: Same Address
	175	FSO/	9-16-63	do.
	200	FS0/9	9-16-63	do.
	300		P-16-63	do.
Pe II		FS0/9	-16-63	do.
	A5200 Lyfe Belt	FSO/8.		do,
	SM-1960H2	FSO/6-;	21-62	Alofs Mrg. Co. 345 32nd Street, S. W. Grand Rapids 8, Michigan Plant: Same Address
	X-15-2 Stock loox, Model BN3-1501X	FSO/4-25		American Safety Equipment Corporation 216 Madison Avenue New York 16, New York (Distributor) Plant: Hickok Mfg. Co., Inc. Rochester, New York Atlas Safety Equipment Company, Inc. 175 N. 10th Street Brooklyn 11, New York Plant: Same Address
	> -2017	FS0/8-8-6	1	Auto C
	Stock 250X, Model EN3-7001X	FSO/7-6-62		Los Angeles 65, Calif. Plant: Same Address
	COOSH-Woff	FS0/5-18-62		do and 2850 Tyler Road (psilanti, Michigan
Ŀ	npact_4_1	FSO/6-15-62	O P	eam's Mfg. Co. 327 North Robinson Alanti Same Address
	Pact_B_2	FS0/6-15-62	I Io	Ny Brown Automotive O North Orange Drive s Angeles 38, Calif. ant: Same Address
	Pact-G-3	FSO/6-15-62		do.
	act_D_4	FSO/2-20-62		do.
Imp	act_E_5	FS0/12-22-61		do.

Page 6 of 8

SUPERSEDING OFL-JJ-B-185-5 FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET 10, 1962

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Monutacturer's Name and Address
Type II	FDC-2700F2	FSO/5-18-62	Davis Aircraft Products, Inc. Scudder & Woodbine Aves., Northport, L. I., N. Y. Plant: Same Address
	Model 77ATH	FSO/10-30-62	Irving Air Chute Co., Inc. 1315 Versailles Road Lexington, Kentucky Plant: Same Address
	JA-45C-SH	FSO/6-15-62	Jeffrey-Allan Industries, Inc. 1139 South Wabash Ave. Chicago 5, Illinois Plant: Same Address
	JA-55-SH	FSO/6-15-62	do.
	JA-55-PW-SH	FSO/6-15-62	do.
	과 화화를 보고 그 전환 하는 사람	FSO/6-15-62	시민들이 얼마면 사람들이 나가요?
	JA-65-SH	FSO/6-15-62	do.
	JA-75-SH Model 200	FSO/6-21-62	National Industries for the Blind 1120 Avenue of the Americas New York 36, New York Plant: Industrial Home for the Blind 57 Willoughby Street Brooklyn, New York
	Model A-1 Model A-10 Model A-1	FSO/1-29-63 FSO/1-29-63 FSO/1-30-63	do. National Industries for the Elind 1120 Avenue of the Americas New York 36, New York Plant: Kansas Foundation for the Elind, Inc. Wichita, Kansas
		FSO/1-30-63	do.
	Model A-10	FSO/2-8-63	National Industries for the Blind
	Model A-1	Ran I San-an	the Hind 1120 Avenues of the America New York 36, New York Plant: San Diego Center, California Industries for the Hind 1944 F. Street, San Diego 2, California
			do.
	Model A-1C B-070	FSO / 2-8-63 FSO / 6-27-62	Products Research Co. Cummings & Sander Division 2900 Denby Avenue Los Angeles 39, Calif. Plant: Same Address
	500R	FSO/5-10-62	The Roberk Company Norwalk, Connecticut Plant: Same Address

QPL-JJ-B-185-6 <u>December 11, 1963</u> SUPERSEDING QPL-JJ-B-185-5 July 10, 1962

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Manufacturer's Designation Designation		Test or Qualification Reference	Manufacturer's Name and Address	
Type II	858 - S	FS0/8-10-61	Rose Mfg. Company	
	5200-1	FS0/8-2-62	2700 West Barberry Place Denver 4, Colorado Plant: Same Address Starlite Industries 1026 South Santa Fe Ave. Los Angeles 21, Calif.	
	6200-1	FSO/8-2-62	Plant: Same Address	
	Model UTK5600-2	F50/11-7-62	Sturges Mfg. Co., Inc. P. O. Drawer 59 Utica. New York	
	Model 980-70	FSO/6-11-62	Utica, New York Plant: Utica, New York Superior Industries, Inc. 14721 Keswick Street Van Nuys, California Plant: Same Advisor	
	Model 985+70	FS0/11-27-62	Plant: Same Address do.	
		1		
		그리는 아내가 하나는 다른 바퀴 계획 없다.		

QFL-0-A-5\\\\^8a-6\\
October 17, 1966\\
SUPERSEDING\\
QPL-0-A-5\\\\^8a-5\\
September 18, 196\\\

FSC 6850

FEDERAL QUALIFIED PRODUCTS LIST

OF

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

0-A-548a

ANTIFREEZE, ETHYLENE GLYCOL, INHIBITED

TYPE II

This list has been prepared under the authority of the General Services Administration for use by or for the Government in the procurement of products covered by the subject specification and such issuing of a product is not intended to and does not connote indorsement of the product listing of a product listed herein have been qualified under the requirements for the product of the product sisted herein have been qualified under the requirements for change Government. All products listed herein have been qualified under the requirements for change as specified in the latest effective issue of the applicable specification. This lists subject to change as specified in the latest effective issue of the applicable specification. This lists under a product one such as the subject of the without notice; revision or amendment of this list will be issued as necessary. This listing of a product does not release the supplier from compliance with the specification requirements. Under the product specification of the product s

The activity responsible for this Qualified Products List is the Standardization Division, Federal Supply Service, General Services Administration.

Government	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address Union Carbide Corporation,
Designation Antifreeze	Prestone	g-3653h	Union Carbide Corporations Consumer Products Division 270 Park Avenue New York 17, New York do.
	UC-300 UC-375 Carbide G-109	Q-35372 Q-35372 NBS-G-2h622 (Part 2) QT-3(S2)	do. Olin, Organics Division h60 Park Avenue New York 22, New York
do.	Permanent Pyro	0-36534 0-36534 0-26072	do- do- do-
do•	73-B Pyro Permanent (1959) TX-5887, BlulO-5	G-3653h	Texaco Inc. 135 East h2nd Street New York 17, New York
do.	тх-5888, въц96-5	g-3653h	do.
do.	Startex J.B. 1259-5 Jefferson J-53	QT-5(S2)	Jefferson Chemical Company, p. 0. Box 303 Houston 1, Texas
do.			
	1		
			1 of 2 QPL-0-A-5h
	지않아 없다는 사람이 있는 것들이 사람이다.		
			FSS "Com

QPL-0-A-548a-6 October 17, 1966 SUPERSEDING QPL-0-A-548a-5 September 18, 1964

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Antifreeze			- Judiess
do.	D514-171 D514-172	QT-10(S2)	
do.	D514-173 D533-100 Wyandotte E. D.	QT-10(S2) QT-10(S2) G-26073	The Dow Chemical Company Midland, Michigan do. do. do.
do.	Wyandotte Chemical	QT-4(82) NBS - G-24622 (Part 1)	Michigan Alkali Division Sales
do.	Specification 877-1011 U-3538D Gulf Antifreeze and Summer Coolant	G-35372 7.5/756-69	do. Gulf Time
do.	Zerex Anti-Rust Anti-Freeze	G-26304	Pittsburgh 30, Pennsylvania
do.	Telar Anti-Freeze and Summer Coolant	G-2630L	a. 1. du Pont de Nemours & Company Incorporated Industrial and Biochemicals Department Wilmington 98, Delaware do.
or 2 0-4-548a-6			

GSA DC 67.7021

FSS FORM 339 AUGUST 1962

QUALIFIED PRODUCTS LIST OF PRODUCTS QUALIFIED UNDER SPECIFICATION (AR 715.10)

MILITARY OF FEDERAL

W-8-506

QPL-W-S-506-9 8 April 1967 SUPERSIDING QPL-W-S-506-8 14 May 1965

PSC-2920

This list has been prepared for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not comnote indorsement of the product by the Department of Defense. All products listed herein have been qualified under the reductments for the product as specified in the latest effective issue of the applicable specification. This continues the product as specified in the latest effective issue of the applicable specification. This is subject to change without notice; revision or assendent of this list will be issued as necessary. The listing of a product does not release the supplier from compliance with the specification requirements. The listing of a product does not release the supplier from compliance with the specification requirements. Use of the information for advertising or publicity purposes is expressly forbidden.

The activity responsible for this Qualified Products List is U. S. Army Mobility Command, Army Tank-Automotive Center, Warren, Michigan 48090.

The activity respective Center, Warren GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
ype I, Classes A & B			Champion Spark Plug Company
(See Notes on Page 3)			Champion Spark
(See no see	XMJ-1/4	9050 4226	Ford Motor Company Ford Motor Master Product Co. (Distr) Motor Master Product Co. (Distr)
MS-35909-1	AR-58		Motor Master Production of CHC.
M3-3/707 -	MSE-6F20	+337	
	MSE-CF20	4556	Zeller Corporation
	WR-44	4337	
	SR-6F20		Champion Spark Plug Company
		9230	Ford Motor Company
	XXI-17	4226	Ford Motor Company Motor Master Product Co. (Distr) Motor Master Product Co. (Distr)
MS-35909-2	AR-78	14627	
	MSR-6F-15	7311	Zeller Corporation
	₩R-46	14627	Zeller Corporation
	SR-6F15	4021	Champion Spark Plug Company
	Sk-or 17		Champion Spark File
		9230	Ford Motor Company (Distr)
a = 000 3	XM2-50	9076	Motor Master Product don of CMC.
MS-35909-3	AR-98	4627	
	MBR-6F13	7311 4627	Zeller Corporation
	WR-47	4627	
	SR-6F13		Champion Spark Plug Company
		9230	Ford Motor Company
	XML-12	h226	Ford Motor Company Motor Master Product Co. (Distr)
MS-35909-4	AER-3SA	¥627	
	MSR-8F23B	4021 4287	Zeller Corporation
	WR-43L	4201 4627	Zeller Corporation
	sr-8F23B	4021	
	SK-OF&35		a. man Company
			Champion Spark Plug Company
	기 강점적시다. 이번 11 회에다.	9230	Ford Motor Company
	X)6D-21	7513	a Control Pille Division
MS-51009-1	er95	7524	Zeller Corporation
	¥R-87	7709	
	gr8113		Champion Spark Plug Company
		9230	Ford Motor Company
	mp-18	7513	Ford Motor Company A. C. Spark Plug Division of GM
MB-51009-2	BR78		A. C. Spara Fine
F72)101) -	WR-86	7524	Zeller Corporation
	wr.=oc gn8x1.50	7709	물이 살으면 보았다면 그 말을 하게 되었다면 하다.
	SHORTA		그는 그는 사람이 되고 있는 것이 그래의 하는 것이다.
			1 of 4 QPI_W-S-506-9
			QPL-W-5-700-7

OTA FORM 974

QPL-W-S-506-9 8 April 1967

AR 715-10)

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	TEST O QUALIFICAT REFERENCE	ION MANUFACTURED'S
Type I, Classes A at (See Notes on Page	nd B (Conft)	_1	AND ADDRESS
	• 3/		
M S-51009-3	XXXX-15		
	BR5s	9230	
	WR-84	4945	Champion Spark Plus Company Ford Motor Company
	SR8E20B	7524	Ford Motor Company
10863369	나 많이 그 보인 그렇게 많이다	7709	A. C. Spark Plug Division of G
	XMF-12	9230	
	AGR3s	8457	Champion Spark Plug Company Ford Motor Company
Type I, Class B			하는 경기로 하고 가게 됐다면 하나요?
8668752			
37,72	RML-1 2		
	AER-3s	4280	' 보고 있는 보 <mark>다.</mark> 보고 있는 사람들이 있는 것이 되었다. 그
	WR-43LR	4226 4287	Champion Spark Plug Company Ford Motor Company
		4207	A. C. Spark Plug Division of CMC
ype II, Classes A and (See Notes on Page 3] B)		July Division of CMC
MS-35908-1			
	XEJ-11		
	AR-8s	4883 4889	Champion o
	SR-47E SR-6F14	7435	Champion Spark Plug Company Ford Motor Company
MS-35908-2	ov-oli14	7444	A. C. Spanie To
wo-35508-5	Xej-7		Zeller Corporation of Car.
	AR-4S	4883	
	SR-44g	4889	Champion Spark Plug Company
경기가 하시다.	SR-6F20C	7435 7444	Ford Motor Company
MS-35908-3	XEH-11	1444	A. C. Spark Plug Division of CMC. Zeller Corporation
	ARL-8s	4883	
	SR-471E	4889	Champion Spark Plug Company Ford Motor Company
	SR-7F14	7435	Ford Motor Company
MS-35911-1		7444	
	*XED-16	li Coli	Zeller Corporation
	*BR-6s	4674 4678	Champion Court
	**SR-86E *SR-8E15B	7035	Champion Spark Plug Company . Ford Motor Company
MS-35911-2	- OK-OKT 2B	4914 - 7010	A. C. Snauli mi
33ATT-5	XED-14		Zeller Corporation of CMC.
	BR-48	4674	
	SR-842	4941	Champion Spark Plug Company
	SR-6220	7035 4914 - 7010	Ford Motor Company A. C. Spark Plug Division of CMC. Zeller Corporation

CONTINUATION PAGE 2014-8-506-9

OTA FORM 975

(AR 715-10)

April G	OVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
Type I		Autolite Motor Master Prestolite Blue Crown	4280 4226 4337 - 7303 8240 4287 4337 - 7303	Champion Spark Flug Company Ford Motor Company Motor Master Products Co. (Distr) Motor Master Products Co. (Extra A. C. Spark Flug Division of CMC. Zaller Corporation Champion Spark Flug Company Ford Motor Company Ford Motor Company Ford Motor Company
Class B	Class B	Autolite Motor Master Prestolite	4226 7727 4627 - 7303 8240	Motor Master Products Co. (Distry Motor Master Products Co. (Distry The Prestolite Company Div of Eltr Robert Bosch Corporation
	IMEP 175 - 210 IMEP above 210 IMEP 185 - 210 IMEP above 210	W14573 W17573 AA58 - 7368 DEMSO-M-14P DEMSO-W-17F DEMSO-W-17ES DEMSO-W-17 Blue Crown	8239 8239 8972 8974 8974 4287 8974 8974 4627 - 7303	Robert Bosch Corporation Robert Bosch Corporation Auburn Spark Plug Company ITC Trading Corporation (Distr) ITC Trading Corporation (Distr) ITC Trading Corporation of GMC A. C. Spark Plug Division of GMC ITC Trading Corporation (Distr) ITC Trading Corporation (Distr) Zeller Corporation

NOTE: Listing under any Military Standard (MS) spark plug covers any non-MS spark plug of the same type.

Flugs tested in Continental Engine Model FE-150
 Flugs tested in Continental Engine Model FE-90.

3 of 4 QPL-W-8-506-9

CONTINUATION PAGE

OTA FORM 975

QPL-W-S-506-9 8 April 1967

MULTIPLE ADDRESS LISTING MITTER NUMBERS LIBITED (MITTER) and Federal Qualified Products Lists)

(AR 715-10)

REFERENCE NUMBER

MANUFACTURER'S NAME, ADDRESS AND PLANT

REFERENCE NUMBER

MANUFACTURER'S NAME, ADDRESS AND PLANT

Auburn Spark Plug Company 89 York Street Auborn, New York Plant: Same Address

Champion Spark Flug Company 901 Upton Toledo 1, Chio Flant: Same Address

Ford Motor Company Dearborn, Michigan Plants: North Union Street Fostoria, Ohio

General Battery & Ceramic Corporation Box 1262 Box 1262 Reading, Pennslyvania Plant: Same Address

Plant: Same Acc...

Mippon Denso Company LTD.

Karija Pre, Japan

Plant: Same Address

Distributed by: ITC Trading Corporation

Long Island City, New York

The Prestolite Company Division of Eltra Corporation Toledo, Ohio Plant: Decatur, Alabama

Robert Bosch Corporation 40-25 Crescent Street Long Island City 1, New York Plant: Bamberg, West Germany

A. C. Spark Plug Division of General Motors Corporation 1300 North Dort Highway Flint 2, Michigan Plant: Same Address

Plant: Name
Zeller Corporation
Fost Office Bor 96
Post Office Bor 96
Periance, Onio

Distributed by: Motor Master Product Company
Defiance, Chio

4 or 4 QPL-W-S-506-9

LISTING OF MANUFACTURER'S CONTINUATION PAGE

OTA FORM 976

*U.S. OGVERNMENT PRINTING OFFICE: 1967-251-518/8

NOTICE: This list may be made available to contractors, prospective bidders or suppliers who are required to procure items listed hereon to fulfill the requirements of a contract. Requests for this list shall include the number of the contract or Invitation for Bid for which it is required for this list shall include the number of the contract or Invitation for Bid for which it is required MILITARY QUALIFIED PRODUCTS LIST

PRODUCTS QUALIFIED UNDER MILITARY SPECIFICATION

W-B-131

FSC-6140

QPL-W-B-131

NOTICE-1 21 Jamesy 1965

BATTERY, STORAGE: VEHICULAR, IGHTICH, LIGHTING, AND STARTING This list has been prepared for use by or for the Government in the procurement of products covered by the subject specification.

All products listed herein have been qualified under the requirements for the product as specified in the latest issue of the applicable specification. Revision or meandment of this specified in the latest issue of the applicable specification. Revision or meandment of this specified in the latest as necessary. The listing of a product does not release the manufacturer list will be issued as necessary. The listing of a production of this list in whole remove the production requirements. Reproduction of this list in whole rin part, except by the Government, or use of the information shown for advertising purposes in approximately forbidden. is expressly forbidden.

The activity responsible for this Qualified Products List is

U. S. Army Mobility Command, Army Tenk-Automotive Center, Warren, Michigan 48090.

	Mobility Command, Army Tank-Autom Manufacturer's Designation	Test or Qualification	Manufacturer's Name and Address
Government Designation	pesignation	Reference	Pending the establ

As of 21 January 1965, no batteries have been qualified under Federal Specification V-B-1311. Pending the establishment of a Qualified Products List or the approval of a product for inclusion on a Qualified Products List, the qualification requirement (paragraph 3.1) of Federal Specification W-B-1311 shall be waived; however, the products furnished Federal Specification in-B-1311 shall be acaphic or the expectation that the product of the products and procuring agencies may require constructors to furnish specimens of the betteries that they propose to supply for Government inspection and contractual approval. Procurement agencies shall specify the particular tests necessary for contractual approval.

When a Qualified Products List is established for Federal Specification W-B-1311, this Notice should be destroyed.

The responsibility for establishment of a Qualified Products List for Federal Specification V-B-1311 has been assigned to Department of the Army, Weshington 25. D. C. Information pertaining to qualification of products for listing on this to Department of the Army, Weshington 25. D. C. Information pertaining to qualification of products are made obtained from the Commanding General, U. S. ARMY MOBILITY COMMAND, ARMY TARK-ANYOMOTIVE CEMTER, WARRES, MUCHIGAN 18090.

1 of 1 QPL-W-B-131 NOTICE-1

ROTICE: This list may be made available to suppliers or prospective bidders who require the list in furnishing supplies to the Federal agencies. Reproduction or use of the list in whole or in part for other purposes is prohibited, and violation with be cause for resoval from this list. OPI-22-8-617-3

FEDERAL QUALIFIED PRODUCTS LIST

OF

OF

OPI-22-8-617-2

18 ROVEMBER 1958

HOSE, RUBBER; WINDSHIELD WIPER

FSC-4720

This list has been prepared for use in connection with Government procurement of products covered by the subject specification.

products covered by the subject specification.

All products listed herein have been qualified under the requirements for the product as specified in the latest issue of the specification. Revisions of the specification requirements. Reproduction of or the specification requirements. Reproduction of or the specification requirements. Represents for this product list is a presently forbidden. The activity responsible for this Qualified Products List is a represent forbidden. Tank-Automotive Command, Detroit Arsenal, Center Line, Michigan.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Hanufacturer's Name
Type I, Class I, Sizes 5/32 and 7/32 inches I.D.	59V1883	L	and Address
Type II, Class II, Sizes 5/32 and 7/32 inches I.D.	59VB84	4819	B, F. Goodrich Company (The 500 South Main Street Akron, Ohio Plant: Same Address
Pype II, Class I Sizes 5/32 and 7/32 Inches I.D.		43 69	
ype I, Class II, izes 5/32 and 7/32 nches I.D.	¹ 4251 GA	4153	Crown Products Company Raiston, Nebraska Plant: Same Address Gates Rubber Company Denver, Colorado Plant: Same Address
rpe II, Class II, zes 5/32 and 7/32 ches I.D.	. 4251 GB	4153	
pe II, Class I, ses 5/32 and 7/32 thes I.D.	4851.00	4153 4257	

Sheet 1 of 1 QPL-ZZ-H-617-3

FEDERAL QUALIFIED PRODUCTS LIST

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

RRAKE FLUID, AUTOMOTIVE

QPL VV-B-680-3 10 June 1966 SUPERSEDING QPL VV-B-680-2 2 November 1965

FSC 9150

This list has been prepared for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product by the Department of Defense. All products and does not connote indorsement of the product product as specified in the listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. The listing without notice; revision or amendment of this list will be issued as necessary. The listing without notice; revision or amendment of this list will be issued as necessary. The listing without notice; revision or amendment of the product does not release the supplier from compliance with the specification requirements. Use of the information shown hereon for advertising or publicity purposes is expressly forbidden.

The activity responsible for this Qualified Products List is US ARMY COATING AND CHEMICAL LABORATORY, ABERDEEN PROVING GROUND, MARYLAND

COATING	AND CHEMICAL LABORATORY, ABERDEEN PROVIN	Test or Qualification	Manufacturer's Kame and Address
Government	Manufacturer's Designation	Reference	
Designation		M-9265	All Car Motor Parts Corporation VENDOR ONLY
Call Barrier	All Car Heavy Duty		All Car Motor Parcs
	Hoavy Duty	M-9263	VENDOR UNLT
	All Car Super Heavy Duty		The Bendix Corporation
**	Bendix Heavy Duty Brake	M-9266	ING Some
	Fluid #115597		The Bendix Corporation
	est.d 1155988	M-9275	Chrysler Corporation
	Bendix Brake Fluid 115598B	M-9244	
	Chrysler Parts HI-Temp MS 4146		Chrysler Corporation
		M-9233	out year.
	Chrysler HD-619		Continental Oil Company
	Probe Fluid		
	Conoco Hydraulic Brake Fluid	M-9262	Delco Moraine, Div. of General Motors
190 P. C. 1995	Super Heavy Duty	M-9232	Delco Moraine, Div. of General Motors Delco Moraine, Div. of General Motor
	DELCO 11 D	M-9254	
	DM 614	M-9271	Delco Moraine, Div. of General Motor
	DM-616D		Delco Moraine, Div. O.
		м-9274	Delco Moraine, Div. of General Motor
	DM-619	M-9276	De Ico Horannes
	(19)		Delta Petroleum Company, Inc.
	DM-618A	н-9264	
	A-64	-051	Dow Chemical Company
		M-9251	Dow Chemical Company
	HD 20-6	M-9260	
			Dow Chemical Company
	HD 20-7	M-9230	
	HD 30-3		Dow Chemical Company
		M-9252	Dow Chemical Company
	HD 35-6	M-9261	
	할머니는 사람들이 가장이 하나는 점점하다		Dow Chemical Company
	HD 35-7	M-9246	Namours & Co., Ir
	HD 717		E. I. duPont de Nemours & Co., Ir
		u 00F2	
	duPont No. 7 Super Heavy	M-9252	E. I. duPont de Nemours & Co., I
	Duty Brake Fluid		VENDOR ONLY
	duPont No. 7 Heavy Duty	M-9251	genous -
	Brake Fluid		Grey Rock Div. of Raybestos-
	n and Duty	6027	
	Grey-Rock Super Heavy Duty	M-9237	VENDOR ONLY
	Brake Fluid		1 of 4 QPL VV-B-680
			Obf AA-8-000

0P1 PV-8-680-3 10 Jine 1966

Governmen Designati	on Manufacturer's Designation	[Quali	st or fication erence	Manufacturer's Name and Address	
	72597В				
	72940c	M-92	13 R. M. Ho	lingshead Corporation	
	72607A	M-925	7 R. M. Hot	li	
	72975-c	M-923	8 R. M. Hal	lingshead Corporation	
	72884 _B	M-926	R. M. H.	lingshead Corporation	
 -	72398c	M-9253	R M II	Ingshead Corporation	
••••	73 109A	M-9235	" n. noil	Ingshead Corporation	
• •	HD-P-45A	M-9270	М. М. НОП	ngshead Corporation	
	HDS-70(842906)	M-9256	u. Holli	ngshead Corporation	
		M-9278	oiin Mathie	son Chemical Corporate	
	HDS-70(844415)	M-9277	oiin mathle:	son Chemical Corporati	
	HDS-71(844488)	M~9280	offin Mathles	on Chemical Corporati	
	HDS -73	M-9267	ourn Mathies	on Chemical Corporation	
	HDS-74 (689 192)	M-9269	o in Mathles	on Chemical Corporati	
	X-817	M-9273	Will Mathleso	n Chemical Corporati	
	Raybestos Super Heavy Duty Brake Fluid	11-32/3	. ormatex Comp	any, inc.	
	Reybestos Formula 48 Heavy Duty Brake Fluid	M-9237	Raybestos Div Manhattan, Inc VENDOR ONLY		
	July brake Fluid	M-9279	5		
	Mobil Hydraulic Brake Fluid Super Heavy Duty		Manhattan, Inc. VENDOR ONLY	sion of Raybestos-	
	Prestone Super Heavy Duty	M-9243	Socony Mobil O	11 Company, Inc.	
'하다면 이 그 분이 됐다. - 이 		M-9263			
	Prestone Heavy Duty		Union Carbide Co VENDOR ONLY	Prporation	
	Pressure	M-9265	Union Carbide Co VENDOR ONLY	CDOra+1a-	
	Prestone Super Heavy Duty (W) (WIII be removed 15 Aug 66)				
		M-9237	Division of Union VENDOR ONLY	nsumers Products Co.,	
	Prestone Heavy Duty (W) (will be removed 15 Aug 66)		THOOK ONLY	- обгр.	
	UCON 102661C	M-9279	Union Carbide Con Division of Union	Sumers Products Co.,	
	UCON 11265	M-9248			
	UCON 51561A5	M-923 I	Chemicals no.	Union Carbide Corp.	
	UCON 50164	M-9263	Chemicala De	Union Carbide Corp.	
	UCON 102661C-4	M-9265	Chemicals Div., of	Union Carbide Corp.	
	UCON 102661E	M-9258	originicals Div., of	Union Carbida o	
	, 14200 IE	M-9250	of Div., of	Union Carbido C-	
80 3			Chemicals Div., of	Union Carbide Corp.	

QPL VV-3-680-3 10 June 1921

Government Designation	Manufacturer!s Designation	Test or Qualification Reference	Manufacturen's Name and Address
		M-9201	Chemicals Div., of Union Carbice Corp
	ucnn 81542	M-9272	Chemicals Div., of Union Carbide Cor
	chs-6M		United Parts Division
	United Super Heavy Duty Brake Fluid	м-9237	United Parts Division The Echlin Manufacturing Company VENDOR ONLY
	United Heavy Duty Brake Fluid	M-9279	United Parts Division The Echlin Manufacturing Company VENDOR ONLY
		M-9237	Wagner Electric Corporation
	Wagner Lockheed H-58	M-9279	Wagner Electric Corporation
	Wagner Lockheed H-61a	M-9268	Wagner Electric Corporation
	Wagner Lockheed H-63	M-9200	

3 of 4 QPL VV B-680-3 QPL VV-B-680 10 June 1366

MULTIPLE ADDRESS LISTING (Military and Federal Qualified Products Lists)

Reference Number

Manufacturer's Name Address and Plant

Reference Number

Manufacturer's Name Address and Plant

All Car Motor Parts Corp. Chemicals Division of Union Carbide Corp. 270 Fark Avenue New York 17, New York Plant: Same address

Bendix Corporation South Bend 20, Indiana Plant: Same address

Chrysler Corporation PO Box 1718 Detroit 31, Michigan Plants: 7000 E. Eleven Mile Road Centerline, Michigan

Continental Oil Company R. M. Hollingshead Corp. Camden 2, New Jersey Plants: Camden 2, New Jersey Sunnyvale, Calif.

Delco Moraine Division of General Motors Corp. 1420 Wisconsin Blvd, Dayton 1, Ohio Plant: Same address

Delta Petroleum Company, Inc. PO Box 10397 New Orleans, Louisiana 70121 Plant: Same address

Dow Chemical Company Abbott Road Buildings Midland, Michigan Plant: Same address

E. I. duPont de Nemours & Co., Inc. Dow Chemical Company Abbott Road Buildings Midland, Michigan Plant: Same address

Grey Rock Div. of Raybestos-Manhattan, Inc. Magner Electric Corporation 6400 Plymouth Avenue St. Louis 33, Missouri Plant: Same address

R. M. Hollingshead Corporation Camden 2, New Jersey Plants: Camden 2, New Jersey Sunnyvale, Calif.

Olin Mathieson Chemical Corp. Organics Division 275 Winchester Avenue New Haven 4, Connecticut Plant: Same address

Permatex Company, Inc. 1720 Avenue Y Brooklyn 35, New York Plants: Brooklyn, New York Kansas City 15, Kansas

4 of 4 . QPL VV-B-680-3 Raybestos Division of Raybestos-Manhattan, Inc.
Wagner Electric Corporation
6400 Plymouth Avenue
St. Louis 33, Missouri
Plant: Same address
Socony Mobil Oil Company
R. M. Hollingshead Corp.
Canden 2, New Jersey
Plants: Canden 2, New Jersey
Sunnyvale, Calif

Union Carbide Consumers Products Co-Division of Union Carbide Corporation 270 Park Avenue New York 17, New York Plant: S. Charleston 3, W. Va.

Chemicals Division of Union Carbide Corp. 270 Park Avenue New York 17, New York Plant: S. Charleston 3, W. Va.

United Parts Div - The Echlin Mfg. Co. Wagner Electric Corporation 6400-Plymouth Avenue St. Louis 33, Missouri Plant: Same address

Wagner Electric Corporation 6400 Plymouth Avenue St. Louis 33, Missouri Plant: Same address

QPL-P-F-00430-2 September 26, 1966 SUPERSEDING QPL P-F-00430-1 November 19, 1965

FEDERAL QUALIFIED PRODUCTS LIST

OF

PRODUCTS QUALIFIED UNDER INTERIM FEDERAL SPECIFICATION

P-F-00430 (GSA-FSS)

FLOOR FINISH, WATER EMULSION

(FOR USE ON LIGHT COLORED FLOORS)

This list has been prepared under the authority of the General Services
Administration for use by or for the Government in the procurement of products
covered by the subject specification and such listing of a product is not
coverned to and does not connote indorsement of the product by the Federal
intended to and does not connote indorsement of the product by the requirements
Government. All products listed herein have been qualified under the requirements
for the product as specified in the latest effective issue of the applicable
for the product is is it is subject to change without notice; revision or
specification. This list is subject to change without notice; revision or specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. This listing of a product does not release the supplier from compliance with the specification requirements. Use of the information for advertising or publicity purposes is expressly forbidden, and such use will be grounds for removal of the product so advertised from the list.

The activity responsible for this Qualified Products List is the Federal Supply Service, General Services Administration.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Int. Fed. Spec. P-F-00430 (GSA-FSS),	Candy "CC-12015"	R3-3	Candy & Co., Inc. 2515 West 35th St. Chicago, Illinois
lated 10/8/64	P- 0430	R3- ¹ 4	Purex Corp. Ltd. 5134 Lancaster Ave. Philadelphia, Pa. 19131
	Solarine "G-25"	R3-5	The Solarine Co. 4201 Pulaski Highway Baltimore, Md.
	Borax-"Columbia Products G"	R3-7	United States Borax & Chemical Corp. 530 Riverdale Drive Glendale, California
	Tumbler "No. 501"	R3-8	J. A. Tumbler Laboratories Suite 1211 One Charles Center Baltimore, Md.
	Formula #6551	R3-10	Buckingham NuLife Co., Inc Van Dam & Borden Ave. Long Island City, N. Y.
	Columbia Product	s "C" R3-12	Texize Chemical, Inc. P. O. Box 368 Greenville, South Caroline
	Barrier "G-33"	R3-2A	Barrier Chemicals, Inc. Route #515, Box 11 Vernon, New Jersey
			Page 1 of 1 QPL P-F-0043

GSA DC 67-7748

FSC 7930

QPL P-W-155-14 September 26. QPL P-W-155-13 July 9, 1965

FEDERAL QUALIFIED PRODUCTS LIST

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

FSC 7930

P-W-155a

WAX, FLOOR, WATER-EMULSION, SLIP-RESISTANT

This list has been prepared under the authority of the General Services parameters of the ground of the subject specification and such listing of a product so covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product by the Federal Government. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is be issued as necessary. This listing of a product does not release the information for advertising or publicity purposes is expressly forbidden, and such use will be grounds for removal of the product so advertised from the list.

The activity responsible for this Qualified Products List is the Standardization Division, Federal Supply Service, General Services Administration.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Menufacturer's Name and Address
Percent Oncentration	Candy's No. 1012	404	Candy & Co., Inc. 2515 West 35th Street
	Candy's No. 1012-B	451	Chicago 32, Illinois
	Candy's No. 1012-C	467	do
	Candy's No. 1012-D		đo
	Columbia Saf-T-Pol	248	đo
	12 Columbia Snug 12	188	Texize Chemical Company 530 Riverdale Drive Glendale 4, California
		311	(1) do
	Du-Ev Anti Slip Wax 12	426	Du-Ev Products Co., Inc. 630 Driggs Avenue Brooklyn 11, New York
	W 12% Wax	431	
1	£230C	476	do
			Purex Corporation 2244 Elston Ave. Chicago, Illinois

Page 1 of 3 QPL P-W-155-14

QPL P-W-155-14 September 26, 1966 SUPERSEDING QPL P-W-155-13 July 9, 1966

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufacturer's Designation	Test or qualification Reference	Manufacturer's Name and Address
2 Percent Concentration	Franklin 783-C	488	Purex Corporation, Ltd. 5134 Lancaster Avenue Philadelphia 31, Pa.
	Franklin 1172A-12	551	do
	Test Wax 12	435	Texize Chemical Company Lisbon Road Cleveland 4, Ohio
	Johnson's W-2633-12	429	S. C. Johnson & Son, Inc. Racine, Wisconsin
	Shurstep	590	C. B. Dolge Company Westport, Connecticut
	6-08705-A22420	501	Texize Chemical Company Lisbon Road Cleveland 4, Ohio
	155-12	325	Purex Corporation, Ltd. 25920 Belle Porte Ave. Harbor City, California
	703 ¹ H	601	do
	4512 Wax	595	Purex Corporation, Ltd. 2244 Elston Avenue Chicago 14, Illinois
	4612 Wax	228	.4o
	Hollingshead 72705-C	059	R. M. Hollingshead Corp. 16th and Mickle Streets Camden, New Jersey
	Sanisheen	307	Sanitek Products Inc. 3959 Goodwin Avenue Los Angeles 39, California
	Floor Mate	355	Hysan Products Co. 919 W. 31st. Street Chicago, Illinois
16 Percent Concentrati	Candy's No. 10	16 3104	Candy & Company, Inc. 2515 West 35th Street Chicago 32, Illinois
	Candy's No. 1016-B	452	đo
	Candy's No. 1016-D	250	do

Page 2 of 3 QPL P-W-155-14

QPL P-W-155-14 <u>September 26, 1966</u> <u>SUPERSEDING</u> QPL P-W-155-13 July 9, 1965

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

overnment esignation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
	Columbia Saf-T- Pol 16	202	Texize Chemical Company 530 Riverdale Drive Glendale 4, California
	Columbia Snug 16	315	, do
	Floor Wax 6-08512	377	Texize Chemical Company Lisbon Road Cleveland 4, Ohio
	Du-Ev Anti Slip Wax 16 Blue Label	4012	Du-Ev Products Co., Inc. 630 Driggs Avenue Brooklyn 11, New York
	Ruff-Sheen Synthetic Floor Finish	: 212	Sanitek Products 3959 Goodwin Ave. Los Angeles 39, California
	Johnson's W-2634-16	430	S. C. Johnson & Son, Inc. Racine, Wisconsin
	Dura Sheen Super	473	Pine International Chemical 3140 So. Canal St. Chicago, Illinois
	73173c	470	Hollingshead Corp. 932 Kifer Road Sunnyvale, California
	6-08704-A22390	503	Texize Chemical Co. Lisbon Road Cleveland 4, Ohio
	7166 c	605	Purex Corporation, Ltd. 2244 Elston Ave. Chicago 14, Illinois

Page 3 of 3 QPL P-W-155-14

QPL-W-B-101-12 September 30, 1966 SUPERSEDING QPL-W-B-101-11 December 30, 1965

FSC-6135

FEDERAL QUALIFIED PRODUCTS LIST

OF

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

W-B-lolf

BATTERY, DRY

This list has been prepared under the authority of the General Services Administration for use by or for the Government in the procurement of products covered by the subject specification and such issing of a product is not intended to and does not connote indorsement of the product by the Federal Government. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This lists subject to change as specified in the latest effective issue of the applicable specification. This list is subject to change as pecified in the latest effective issue of the applicable specification or the latest effective in the compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification requirements.

The activity responsible for this Qualified Products List is the Federal Supply Service General Services Administration.

Government Designation	Manufacturer's Designation	Test or Qualification Reference 3/	Manufacturer's Name and Address 1/ 2/
AAA-Size Cells Do Do Do C- Size Cells Do D- Size Cells	veready No. 912 veready No. 691 key-O-Vac No. 7R farathon 170 veready No. 915 Eveready No. 693 Eveready No. 693 Eveready No. D99 Ray-O-Vac No. 2D Bright Star 10M Marthon 121 Eveready No. 950	FS/9-27-66 FS/9-27-66 FS/9-27-65 FS/12-2-65 FS/9-27-66 FS/9-27-66 FS/9-27-66 FS/9-27-66 FS/12-2-65 FS/12-2-65 FS/12-2-65	Union Carbide Consumer Products Company (E) Do (A) Ray-O-Vac Company Marathon Battery Co. Union Carbide Consumer Products Company (E) Union Carbide Consumer Products Company (A) Union Carbide Consumer Products Company (A) Union Carbide Consumer Products Company (C) Ray-O-Vac Company Bright Star Industries Marathon Battery Co. Union Carbide Consumer Products Company (A)
Industrial Flashlight Cell D- Size Cell Do Do Do Do	Eveready E 94 Eveready E 95 Ray-O-Vac 3 D Bright Star 10M0 Eveready No. 1150	FS/12-2/65 FS/12-2/65 FS/12-2-65 FS/9-27-66 FS/12-2-65	Union Carbide Consumer Products Company (A) Do Ray-O-Vac Company Bright Star Industries Union Carbide Consumer Products Company (S)
Reilroad Lantern Batteries Type 4Fd Do Do Type 4F2d	Marathon 490RR RBy-O-Vac WN20 Eveready No. 409 Eveready No. 731	FS/12-2-65 FS/9-27-66 FS/9-27-66 FS/12-2-65	Marathon Battery Co. Rey-O-Tac Company Union Carbide Consumer Products Company (0) Do
Footno	te 1/ See Page 3 2/ See Page 3 ote 3/ See Page 3		1 of 3 QPL-W-B-101-12 FSS

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufacturer's Designation		Test or Qualification Reference 3/		Manufactu Name and A	irer's kddress
Photoflash Cells		100	 		1/ 2	2/
C- Size Cell	Eveready No. 815		F_2 : v			
D- Size Cell	Theready No. 835		FS/12-2-65			
	Eveready No. 850		FS/9-27-66		Do	(E)
14 B. S. H. H. H. H.			FS/9-27-66		Do Do	(A) (C)
Radio "A" Batteries					D0	(C)
Type F2 Type 5F96	Eveready W353					
Type F4D	Everendy 717	1.443)	FS/9-27-66	r P		
Type F4D	Eveready 7/2		FS/12-2-65		Do	(c)
Type 3D		V 18	15/9-27-66		Do	(B)
	Eveready 726		FS/9-27-66 FS/9-27-66		Do	(c)
Type 3G			19/9-21-66	Union Co	Do .	(C) sumer Produc
	Eveready 746	0.40	FS/9-27-66	Company	(C)	sumer Produc
Padta Imi			-, , ~,-00		Do	(0)
Radio "B" Batteries Type 15F 15		1000				(0)
	Eveready No. 505			-1		
Type 15F 20			FS/12-2-65	linton a-		
Type 15F 20	Eveready No. 412		FS/12-2-65	Company	olde Cons	umer Produc
Type 15F 80			PS/5-2-65		`_D_	
	Eveready No. 763	11	18/9-27-66	Burgess B		(F)
Type 30 AA Type 30 AA	Ray-O-Vac No. 205			United Car	Dide Cone	umer Product
Type 30 AA	Eveready No. 738	F	8/12-2-65	Company	(B)	
Type 30F 40		F	S/ 9-27-66	Ray-O-Vac	Company	
ype 30F 90	Eveready No. 455	-	e /o oo	Company (ide Consu	mer Product
ype 30F 96	Aveready No. 783	P.	S/9-27-66 S/9-27-66	oompany (Do	
	Eveready 484	F	5/9-27-66 5/9-27-64		D	(B)
ype 30F 96	Eveready No. 7628			Union Carb	ide Cone	(B) mer Products
ype 30F 100 ype 30G		FS	12-2-65	Company (B)	mer ironucts
Vpe 45F 25		FS	/12-2-65		Do	(B)
	Eveready No. 477	FS	/9-27-66	Rev-O V	Do	(3)
pe 45F 30		115	/12-2-65	Ray-O-Vac (100
pe 45F 30	Ray-0-Vac 203	ES	/12-2-65	Company (F	de Consum	er Products
	Eveready No. 457	FS	/9-27-66			
pe 45F 40	Eveready No. 467			CHION Carbi	de Con-	er Products
pe 60 F 40		FS/	12-2-65	Company (B)	or irounders
F0 00 1 40	Eveready No. 490			Union Carbi	de Consum	er Products
		15/	¹ 9-27 - 66	Company (B	Do .	
lio "A"-"B" Batteries				Transfer to	DO .	(B)
e (6CD/6OF 6O)	Eveready No. 756					
		FS/	L2-2-65		1-46 112	
io "C" Batteries				l de la company	Do	(B)
8 30	Promise of					
5B	Eveready No. 781 Eveready No. 773	FS/9	-27-66	t iga Chilota		
9 15B 9 200 F20	Eveready No. 773	FS/9	-27-66	1	00	(c)
200 LS0	Eveready No. 493	FS/9	-27-66	1	00	(c)
	1	FS/9	-27-66)o	(c)
sistor Batteries				D	0	(F)
orse Cell	Lander de la lace de lace de la lace de lace de lace de lace de la lace de la lace de la lace de lace de lace de lace de lace de la lace de l					
C- Size Coll	Eveready No. 1015	FS/12	2-2-65			
D- Size Cell	Eveready No. 1035 Eveready No. 1050	FS/12	-2-65	Do	δ	(P)
3F 12-2 3L 01	Eveready No. 1050	FS/9-	27-66	. Do	0	(E) (A)
6F 22	Eveready No. 333 Eveready No. 523	FS/9-	27-66	Do		(c)
6F 24		FS/12	-2-65	Do		(Ľ)
	Eveready No. 226	FS/12 FS/12	-2-65	Do Do		(A)
	[요집 : 10 : 10 : 10 : 10 : 10 : 10 : 10 : 1	1 .0/12	-4-0)	Do		(F)
3 -B-101-12	[요즘 20] 시민 그림을 빼는 시간함.	1				(T)
-p-101-15		1 34 10	Alteria de la maior de la contra del contra de la contra del la contra del la contra del la contra de la contra del la contra de la contra de la contra del la contra			

FSS FORM 339 AUGUST 1962

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufacturer's Designation	Test or Qualification Reference 3/	Manufacturer's Name and Address <u>1</u> / <u>2</u> /
No. 6 Cells General Purpose Do Do Do Industrial	Bright Star No. 6 CP Ray-O-Vac No. 6 Ign. Eveready No. 6 Ign. Eveready 6RR and IND	FS/9-28-66 FS/12-2-65 FS/12-2-65 FS/9-27-66	Bright Star Industries Ray-O-Vac Company Union Carride Consumer Products Company (D) Do (D)
Regular Grade Telephone Cells Do Do Do	Bright Star No. 6. Tel. Ray-O-Vac No. 6. Tel. Eveready Columbia Gray Label	FS/12-2-65 FS/12-2-65 FS/9-27-66	Bright Star Industries Ray-O-Vac Company Union Carbide Consumer Products Company (D)
Alarm	Bright Star 6AL	FS/9-28-66	Bright Star Industries
2/ Letter de Consumer See foot 3/ The nume	Products Co. " indicates spec	cific plant address.	rp., Ashecoro, N. C. (A) rp., Charlotte, N. C. (B) rp., Clawland, Ohic (C) rp., Credeland, Ohic (C) rp., Fremont, Ohic (D) rp., Greaville, N. C. (E) Oak, José (F) rp., Labbratory, Benning to Vt. (L) rp., St. Albans, Vt. (S)

QPI-W-F-421-5

Superseding QPI-W-F-421-4 June 30, 1964

FEDERAL QUALIFIED PRODUCTS LIST

OF

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

FLASHLIGHTS: ELECTRIC, HAND

W-F-421b

This list has been prepared under the authority of the General Services Administration for use by Or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product by the Federal Government. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This lists subjects change without notice; revision or amendment of this list will be issued as necessary. This listing of a product does not release the supplier from compliance with the specification requirements. Use of the for removal of the product so advertised from the list.

The activity responsible for this Qualified Products List is the Federal Supply Service, General Services Administration.

Government Designation		Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Class 1 - Size 1	Rough Servi	ce 1818	FS/7-9-56	Bright Star Industries
đo	đo	5590	FS/6-21-65	Clifton, New Jersey
do	đơ	38	FS/5-16-60	Bridgeport 5, Connecticut
Size 2 .	- Three Cell	1825	FS/12-7-56	Bright Star To
do	do	F-34	FS/7=9-56	600 Getty Avenue Clifton, New Jersey Fulton Mfg. Corp.
lass 2 - G Size 1 -	eneral Servi Two Cell	e 235–8	F5/4-20-62	"auseon, Ohio 43567
do	do	Eveready 319-9	FS/7-28-59	Fulton Mfg. Corp. Wauseon, Ohio 43567
do	do	Eveready 2251		Union Carbide Corp. Consumer Products Division 270 Park Avenue New York, New York 10017
	1		FS/7-10-57	Union Carbide Corp. Consumer Products Division 270 Park Avenue
do	do	5198	FS/6-26-59	New York, New York 10017 Bridgeport Metal Goods Mfg. Co. Bridgeport 5, Conn.
				1 of 2 QPL-W-F-421

QPL-W-F-421-5

Superseding QPL-W-F-421-4 June 30, 1964

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Class 2 - General Service (Continued) Size 2 - Three Cell	335B	FS/7-9-56	Fulton Mfg. Corp. Wauseon, Ohio 43567
do do	2351	FS/8-15-62	Union Carbide Corp. Consumer Products Division 270 Park Avenue New York, New York 10017
do do	5397	FS/5-14-63	Bridgeport Metal Goods Manufacturing Co. Bridgeport 5, Connecticut
Size 3 - Five Cell	535B	FS/7-9-56	Fulton Mfg. Corp. Wausson, Ohio 43567
			1 of 2 QPL-W-F-421

FSS FORM 339 AUGUST 1962 MOTICE: This List is available to persons employed by the Federal Government who require it in the procurement of supply items listed herein. Federal Qualified Products Lists shall not be made available to any other person except as provided herein. Qualified Products Lists may be furnished to prime contractors who supply items or services, or a combination thereof, procured by the Federal Government, only if the prime contractor is required to procure from chers, materials, parts, of the prime contractor is required to procure from Froducts List in the production of the item(s) covered by his prime contract. Reproduction of this List in whole or in part is expressly prohibited.

QPL-W-L-314-4 August 15, 1960 SUPERSEDING SUPERSEDIA OPI-W-L-314-3 June 29, 1950

FEDERAL QUALIFIED PRODUCTS LIST PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

W-L-314e

LIGHTS; HOUSEHOLD

Any product listed herein has been qualified under the requirements for the product as specified in the latest issue of the applicable specification. Revisions of this list from compliance with the specification requirements. Reproduction of, or reference to this list in whole or in part for advertising purposes is expressly forbidden.

Designation	Manufacturer's Designation 2/	Test or Qualification Reference	Manufacturer's Name and Address
Type I- Large floor lamp, incandescent 300/200/100 watt Style A- Conventional design do	9-39-76 2/4/0394 8N44 N2-102 0-39-254-89 0-39-1007 049-18-4 18-18-4 18-18-18-18-18-18-18-18-18-18-18-18-18-1	FS/5-21_40 FS/5-21_50 FS/5-23-56 FS/4-8-57 FS/5-24-60 FS/5-23-56 FS/5-23-50	Artistic Lamp Mfg. Co., Inc. Marlo Mfg. Co., Inc. Marlo Mfg. Co., Inc. Stadler-Neumdrth, Inc. Mutual-Sunset Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Calpa Froducts Company G. Fol Mfg. Co., Inc. Stadler-Neumdrth, Inc. Artistic Lamp Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Stadler-Neumdrth, Inc. Stadler-Neumdrth, Inc. Stadler-Neumdrth, Inc. Stadler-Neumdrth, Inc. GF.C Mfg. Co., Inc. Marlo Mfg. Company, Inc. GF.C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Mutual Sunset Lamp Mfg. Co., Mutual Sunset Lamp Mfg. Co., Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. GP.C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. CP.C Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. CP.C Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Lomp Mfg. Co., Inc. CP.C Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. CP.C Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Lomp Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Lomp Mfg. Co., Inc. CP.C Mfg. Co., Inc. Artistic Company, Inc.

OPI-W-I-314-4 August 15, 1960 SUPERSEDING OPI-W-I-314-3 June 29, 1959

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Type I- Large floor lamp, incandescent 300/200/100 watt (Cont'd) Provincial design do do do do Rattan and Wood	M2-103 09-1008 8450 00 039-1010 0.S.L.38	FS/5-12-59 FS/5-24-60 FS/6-1-59 FS/11-19-59 FS/5-24-60 FS/6-10-60	Nutual-Sunset Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Stadler-Neudrith Inc. G-F-C Mfg. Co., Inc. Artistic Lamp Mfg. Co. Golden State Lamp and Shade Co.
Type II - Large table lampineandescent 300/200/L00 watt Style A- Conventional design do do do do do Style B- Modern design do	M12-103 C-1601 MA-11 SN-68 CL607 L07 AC8T-AX M12-102 MA-12 CL599 AC-57 SN-98 L00 CL605 M12-101 CL602 MA-10 SN-78 L01 C-1606 AC8T-C M12-104 C-1608 SN-55 L422	FS/4-8-57 FS/5-24-60 FS/5-3-57 FS/5-14-50 FS/5-24-60 FS/12-24-59 FS/3-18-60 FS/12-24-59 FS/5-21-60 FS/12-25-59 FS/5-12-59 FS/5-12-59 FS/5-12-59 FS/5-24-60 FS/5-24-60 FS/5-3-57 FS/5-24-60 FS/5-12-59	Mutual-Sunset Lamp Mfg. Co., Inc. Inc. Inc. Artistic Lamp Mfg. Co., Inc. Mario Mfg. Co., Inc. Stadier-Newdrith, Inc. Artistic Lamp Mfg. Co., Inc. CaP-O Mfg. Co., Inc. CaP-O Mfg. Co., Inc. Calpa Products Co. Mutual-Sunset Lamp Mfg. Co., Inc. Calpa Products Company Stadier-Newdrith, Inc. G-F-C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Mario Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Mario Mfg. Co., Inc. Stadier-Newdrith, Inc. G-F-C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc.
Type III - Junior floor lamp, incandescent 150/100/50 watt Style A- Conventional design do do do do do do Style B- Modern design do do	MO-102 056-254-SP 056-1005 056-1007 0RF37-A MA22 112 0-56-524 100 MO-103	FS/5-24-56 FS/5-24-60 FS/5-24-60 FS/5-24-60 FS/5-29-59 FS/6-1-59 FS/12-24-59 FS/5-24-56 FS/5-24-65	Mutual-Sunset Lamp Mfg. Co., Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Calpa Products Company Mario Mfg. Co., Inc. C-P-C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. C-P-C Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc.

QPI-W-I-314-4 August 15, 1960 SUPERSEDING QPI-W-I-314-3 June 29, 1959

Type II	Government Designation	Manufacturer's Designation	Test or Qualificatio Reference	n Manufacturer's Name and Address
1.00/100/20 uset (Control of Style B - Modern design of CSS-1002	Type III - Junior floor			Nume and Address
Style designation	150/100/50			
Style C- Colonial design Style C- Colonial d	Style B - Modern (Cont'd)			
Style C - Colonial design do	do design	056-1002		
Style C - Colonial design do	do	C56-478	PS/5-24-60	Andreas .
Style C - Colonial design do	do	CRP37-B		Artistic Lamp Mfg. Co., Inc
Mario Mig. Co., Inc.		MA23	FS/5-29-59	Calma Danie
do do do MO-100 MO-105 MO-106 MO-107 MO-106	Style C- Colonial design	C_54 #1	rayo=1-59	Mario Mre. Co Ton
Colorial design Color			F8/5-2/Kn	-s. w., me.
Control Cont	원리 사람이 생각 생활을 가능하는 것.		PS/5-24-56	Artistic Lamp Mike Co. The
C5-L006 F35-22-59 C4-C05 C5-L006 C5-	do		PS/4-8-57	Mrs. Co., Inc.
C5-L006 F35-22-59 C4-C05 C5-L006 C5-		C56-1004		The Tree Sunset Lamp Mrg. Co.
Artistic Lamp Mfg. Co., Inc. MASA Provincial design MO-105 MO-105 PS/5-12-99 NO-105 PS/5-12-99 NO-105 PS/5-12-99 NO-105 PS/5-12-99 No do C55-1008 PS/5-12-50 PS/5-20-60 PS			Pa/s 25-60	Attiatio Tamara
Provincial design do do do do do do do do do d		CRIPSA O	1 1/8/5_01 Zo	G-F-C Mfg. Co., Inc.
Mario Mg. Co., Inc.		MAZL	PS/5-29-59	
do do 055-1008	Provincial design		PS/6-1-59	Calpa Products Company
Mathematical Company	7 702-84	MO-105		Mario Mfg. Co., Inc.
## Style designation	do		FS/5-12-59	Mittag a
## Style designation	ma do	U56-1008	Pe/s or co	Inc. Lamp Mfg. Co.,
PS/S-21-60 PS/S-21-50 PS/S-21-50 PS/S-21-50 PS/S-21-50 PS/S-21-50 PS/S-21-50 PS/S-21-50 PS/S-21-50 PS/S-21-60 PS/S-21-60 PS/S-21-60 PS/S-21-60 PS/S-21-60 PS/S-21-60 PS/S-21-60 PS/S-21-60 PS/S-21-60 PS/S-21-50 PS/S-21-60 PS/	an style designation		PS/12-21-50	Artista 7
PS/5-24-60 PS/5-23-56 PS/5-23-56 PS/5-23-56 PS/5-23-56 PS/5-23-56 PS/5-23-56 PS/5-23-56 PS/5-23-56 PS/5-24-60 PS/5-24-60 PS/5-24-60 PS/5-24-60 PS/5-24-60 PS/5-24-60 PS/5-24-60 PS/5-24-60 PS/5-24-60 PS/5-24-50 PS/	"No style dead		FS/5-20-60	G-F-C Mrg. Co., Inc.
Section Sect		C56-1011	기가 되는 사람들이 가는 사람들이 없다.	
SP/LOV/50 watt SP/LOV/50 SP/LOV/50 Mario Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Mario Mfg. Co., Inc. Ma	The V- Swing-arm floor	2005년 1일 : T. 2002년 10	PS/5-24-60	ino
### Style A Conventional design CDB-76				artistic Lamp Mfg. Co., Inc.
design do				
do	DOYLE A- COnventionel			하다는 바람은 사람들이 들어가는 나라를 했다.
do	restRU	CDR_74		
do		2/470393	F8/5-24-60	
do		3042	PS/5-23-56	Artistic Lamp Mfg. Co. Tro
do do do do DB-1005 PS/-24-60 Artistic Lamp Mfg. Co., Inc. CDB-1007 PS/-24-60 Artistic Lamp Mfg. Co., Inc. CDB-1007 PS/-24-60 Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. CDB-1007 PS/-24-60 SM13 PS/-24-60 Artistic Lamp Mfg. Co., Inc. CDB-1003 PS/-24-60 Artistic Lamp Mfg. Co., Inc. Martio		M3-105	PS/5-23-56	Stad? Mrg. Co., Inc.
According Acco		ann an	FS/4-8-57	Mutual Sunat h, Inc.
Artistic Lamp Mfg. Co., Inc.		CDB-1004 CDB-524-2B	PS/5_21_40	Inc. Lamp Mfg. Co
131		CDB-1007	1 PR/5 0) (a	1 4 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
SN13 FS/12-24-59 FS/2-1-60 Galpa Froducts Company FS/2-1-60 Galpa Froducts Company FS/2-1-60 Galpa Froducts Company FS/2-1-60 Artistic Lamp Mfg. Co., Inc. Stadler-Neudrth, Inc. Stadler-Neudrth, Inc. Artistic Lamp Mfg. Co., Inc. Mutual-Sumset Lamp Mfg. Co., Inc. Galpa Froducts Company Artistic Lamp Mfg. Co., Inc. Galpa Froducts Company Galpa Froducts Company Galpa Froducts Company Artistic Lamp Mfg. Co., Inc. Galpa Froducts Company Galpa Frod			I FS/5-24-60	Artistic Lamp Mfg. Co. The.
tyle B- Modern design do			1 10/5-24-50	Artistic Lamp Mig. Co., Inc.
Staller-Neudrich, Inc. Staller-Neudrich, Inc.		SN0.3	FS/12-24-59	G-R-C Me-
do do do SSI2 FS/-23-56 HS-104 FS/4-8-97 do do AC-2 do GDB-1002 FS/4-8-97 do do GDB-1003 FS/5-24-60 do do GDB-1003 FS/5-24-60 Artistic Lamp Mfg. Co., Inc. Mutual-Sumset Lamp Mfg. Co., Inc. Calpa Products Company Artistic Lamp Mfg. Co., Inc. Calpa Products Company Mario Mfg. Co., Inc. Tropical Sun Company	yle B- Modern design	mn	L2/2-T-90	Stadler Nonday Inc.
do SH12 F3/-23-56 G2-104 F3/-23-56 F3/-23-56 F3/-23-56 Ario Hg. Co., Inc. Mario Hg. Co., Inc. Tropical Sun Company	40]	2/1/70204	PS/5-21-40	Inc.
do do do AC-2 GDB-1002 FS/4-8-57 Mutual-Sumset Lamp Mfg. Co., Inc. Calpa Products Company do do GDB-1003 FS/5-24-60 Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Calpa Products Company Artistic Lamp Mfg. Co., Inc. Calpa Products Company do GDB-71 FS/5-22-56 Mutual-Sumset Lamp Mfg. Co., Inc. Calpa Products Company do GDB-71 FS/5-24-60 Artistic Lamp Mfg. Co., Inc. Calpa Products Company Artistic Lamp Mfg. Co., Inc. Calpa Products Company Mfg. Co., Inc. Calpa Products Company Artistic Lamp Mfg. Co., Inc. Stadler-Neudrith, Inc. Mutual-Sumset Lamp Mfg. Co., Inc. Calpa Products Company Artistic Lamp Mfg. Co., Inc. Stadler-Neudrith, Inc. Mutual-Sumset Lamp Mfg. Co., Inc. Galpa Products Company Artistic Lamp Mfg. Co., Inc. Galpa Products Company Artistic Lamp Mfg. Co., Inc. GEP12 FS/5-24-60 GP-C Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. GP-C Mfg. C		SN12	FS/5-23-56	Artistic Lamp Mes Co -
do do do do GDB-1002 GDB-1003 GDB-1003 GDB-1003 GDB-1003 GDB-1003 GDB-1003 GDB-1003 GDB-1003 GDB-1003 GDB-1004 GDB-1004 GDB-105pec. GDB-10	40	M3-104	PS/5-23-56	Mario Mfg. Co. Inc.
CDE-1002 F3/1-28-58 Inc. Callpa Products Company Artistic Lamp Mfg. Co., Inc. Callpa Products Company CDE-1003 F3/5-21-60 Artistic Lamp Mfg. Co., Inc. Callpa Products Company CDE-715pec. F3/5-29-99 G.F.C. Mfg. Co., Inc. Callpa Products Company CDE-715pec. CDE-1004 F3/5-21-60 Artistic Lamp Mfg. Co., Inc. CDE-1006 F3/5-25-59 Artistic Lamp Mfg. Co., Inc. CDE-1006 F3/5-25-59 Artistic Lamp Mfg. Co., Inc. CDE-1006 CDE-1006 F3/5-25-59 Artistic Lamp Mfg. Co., Inc. CDE-1006 CDE-1006 F3/5-29-59 Artistic Lamp Mfg. Co., Inc. CDE-1006 CDE-	do		FS/4-8-57	Stadler-Neuwirth, Inc.
Go do CDE-1003 FS/S-21-60 Artistic Lamp Mfg. Co., Inc. 300, FS/S-21-60 Artistic Lamp Mfg. Co., Inc. 478, CDE-1004 Artistic Lamp Mfg. Co., Inc. 478, CDE-71 Spec. CDE-71 Spec. CDE-71 Spec. CDE-71 Spec. CDE-72-66 Artistic Lamp Mfg. Co., Inc. CDE-72 Spec. CDE-72 Spec. CDE-73 Spec. CDE-74 Spec. CDE-74 Spec. CDE-74 Spec. CDE-1004 FS/S-21-60 Artistic Lamp Mfg. Co., Inc. 478, CDE-1004 FS/S-23-60 Artistic Lamp Mfg. Co., Inc. 478, CDE-1004 FS/S-23-60 Artistic Lamp Mfg. Co., Inc. 478, CDE-1004 FS/S-23-60 Artistic Lamp Mfg. Co., Inc. 478, CDE-1004 CDE-1006 FS/S-25-59 GDE-1006 CDE-1006 CDE-1006 FS/S-25-59 GDE-1006 CDE-1006 CDE-1006 FS/S-25-59 GDE-1006 CDE-1006 CDE-1006 FS/S-25-59 GDE-1006 CDE-1006 C			Park as	
do do 300, FS/-20-99 FS/-22-99 CDB-71Spec. FS/5-22-99 CDB-71Spec. FS/5-22-99 CDB-71Spec. FS/5-22-60 Artistic Lamp Mfg. Co., Inc. CIPA Products Company Artistic Lamp Mfg. Co., Inc. CIPA Products Company Artistic Lamp Mfg. Co., Inc. CIPA Products Company Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Matual-Sunset Lamp Mfg. Co., Inc. Matual-Sunset Lamp Mfg. Co., Inc. Stadler-Neudrit, Inc. Artistic Lamp Mfg. Co., Inc. Stadler-Neudrit, Inc. Artistic Lamp Mfg. Co., Inc. Go., Inc. Go., Inc. Graph Mfg. Co., Inc. G		GDB-1002	F3/4-28-58	Calma Denduction
Colondal design CDB-71Spec. FS/5-24-50 Calpa Froducts Company Colondal design CDB-71Spec. FS/5-24-56 Artistic Lamp Mfg. Co., Inc. Colondal design CDB-71 FS/5-24-56 Artistic Lamp Mfg. Co., Inc. CDB-1004 FS/5-23-56 Artistic Lamp Mfg. Co., Inc. CDB-1004 FS/5-24-60 Artistic Lamp Mfg. Co., Inc. CDB-1004 FS/5-25-59 Artistic Lamp Mfg. Co., Inc. CDB-1006 FS/5-25-59 Artistic Lamp Mfg. Co., Inc. CDB-1006 FS/5-25-59 CDB-1006 CDB-1006 FS/5-25-59 CDB-1006		300 mp=1003	P8/5-21-40	Artistic Temp Wen
Colondal design CDB-71Spec. FS/5-24-50 Calpa Froducts Company Colondal design CDB-71Spec. FS/5-24-56 Artistic Lamp Mfg. Co., Inc. Colondal design CDB-71 FS/5-24-56 Artistic Lamp Mfg. Co., Inc. CDB-1004 FS/5-23-56 Artistic Lamp Mfg. Co., Inc. CDB-1004 FS/5-24-60 Artistic Lamp Mfg. Co., Inc. CDB-1004 FS/5-25-59 Artistic Lamp Mfg. Co., Inc. CDB-1006 FS/5-25-59 Artistic Lamp Mfg. Co., Inc. CDB-1006 FS/5-25-59 CDB-1006 CDB-1006 FS/5-25-59 CDB-1006	qo l	304	FS/4-29-50	Artistic Lamp Meg. Co., Inc.
do d	le Co Colomia		PS/5-29-59	G.F.C. Mr. A. T. W., And.
do do DB-71 STS-24-56 do SS32 FS/5-24-56 do DB-1004 FS/5-23-56 do DB-1004 FS/5-23-56 do DB-1004 FS/5-23-59 do DB-1006 FS/5-25-59 DB-1006 DB-1006 FS/5-25-59 DB-1006 DB-1006 FS/5-25-59 DB-1006 DB-1006 FS/5-25-59 DB-1006 DB-1006 DB-1006 FS/5-25-59 DB-1006 DB-1006 DB-1006 FS/5-25-59 DB-1006 DB-1006 DB-1006 DB-1006 DB-1006 DB-1004 DB-1004 DB-1004 DB-1006 DB-1006 DB-1004 DB-1	do design	CDB-71Spec.	트리 문항 그는 이 시간에 가지 그 그렇게 됐	Calpa Products Company
do CIB-1004 FS/5-23-56 Artistic Lump Mfg. Co., Inc. do 303 FS/5-24-60 Stadler-Neudrich, Inc. Mfg. Co., Inc. do 305 FS/4-29-59 Artistic Lump Mfg. Co., Inc. do CIB-1006 FS/5-25-59 CIB-20-60 CIB-20 CIB	do	NJ-103	FS/5-24-60	Lame and a
do CIB-1004 FS/5-23-56 Artistic Lump Mfg. Co., Inc. do 303 FS/5-24-60 Stadler-Neudrich, Inc. Mfg. Co., Inc. do 305 FS/4-29-59 Artistic Lump Mfg. Co., Inc. do CIB-1006 FS/5-25-59 CIB-20-60 CIB-20 CIB		CDB-71	FS/5-24-56	Mutual Sunas Mfg. Co., Inc.
do 303 FS/5-24-60 Articlet Newarth, Inc. 186. do 305 FS/4-29-59 Articlet Lamp Mfg. Co., Inc. 6 GDB-1006 FS/5-25-59 G-Ref. Mfg. Co., Inc. 6 GPD2 FS/5-24-59 Artistic Lamp Mfg. Co., Inc. 6 GPD2 FS/5-24-59 Artistic Lamp Mfg. Co., Inc. 6 FS/3-29-60 FS/5-25-59 Hario Mfg. Co., Inc. 7 Tropical Sun Company			FS/5-22 =/	Artistic
do 305 FS/h-29-59 Artistic Lamp Mrg. Co., Inc.		303	PS/5-21-40	Stadler Warms
do GRP12 FS/5-24-60 G-F-C Mfg. Co., Inc. do MA25 FS/5-29-59 Galpa Products Company FS/5-1-59 Galpa Products Company FS/3-29-60 FS/5-29-60 Tropical Sun Company		305	PS/4-29-50	Artietia Tamana Allo
do MA25 F5/5-29-50 Artistic Lamp Mnc. Co., Inc. Calpa Nnc. Co., Inc. Tropical Sun Company		CDB-1006	PS/5-25-59	U-F-C Mfg. Co., Inc.
do MA25 FS/5-29-59 Galpa Products Company Mario Mfg. Co., Inc. Capa Froducts Company Mario Mfg. Co., Inc. Tropical Sun Company	do	CRP12	FS/5-24-60	Artists Co., Inc.
FS/3-29-60 Mario Mg. Co., Inc. Tropical Sun Company	do		FS/5-29-59	Cal no Product Mrg. Co., Inc.
현사사이 교회의 (1) - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		/ws	PS/3-20_60	Mario Mee Co
[218] 상화다니 경영관시대, 125. 그네고 그리고 있다고 61. 2011년 62일은 그리고 있다고 18. 2015년 18. 2016년 19. 2016년 19. 2016년 19. 2016년 1				Tropical Sun Company

OPL-W-L-314-4 August 15, 150 SUPERSEDING OPL-W-L-314-3 June 29, 1959

Government Manufacturer's C Designation Designation		Test or Qualification Reference	Monufacturer's Name and Address
Nype V- Swing-arm floor lamp; incandescent 150/100/50 weth (Cont'd) Provincial design do do do Rattan and Wood	M3-106 CDE-1008 SN52 305 G.S.L. 39 R9-5107	FS/5-12-59 FS/5-24-60 FS/6-1-59 FS/12-24-59 FS/6-10-60 FS/6-13-60	Mutual-Sunset Lamp Mfg. Co., Inc. Inc. Artistic Lamp Mfg. Co., Inc. Stadler-Neuwirth, Inc. G-F-C Mfg. Co., Inc. Golden State Lamp and Shade Co. Artistic Lamp Mfg. Co., Inc.
Type VI- Large table lamp, incandescent 150/100/50 watt Style A- Conventional do	SN28 M6-106 GTB-4,002 227 A06T-B 1B/50 0-1.564, 0-8028 550283 M6-104 SN38 M6-107 228 GTB-4,003 A06TC M6-108	FS/5-23-56 FS/5-24-56 FS/5-24-60 FS/5-24-50 FS/5-24-50 FS/5-24-50 FS/5-24-50 FS/5-24-50 FS/5-23-56 FS/5-23-56 FS/5-23-56 FS/5-24-60 FS/5-24-59 FS/5-24-50 FS/5-24-60 FS/5-24-50 FS/5-24-50 FS/5-24-50 FS/5-24-50 FS/5-24-50	Artistic Lamp Inc. Stadler-Neuwirth, Inc.

Government Designation	Manufact Designa	rer's tion	Test or Qualificati	on	Monet
Type VI- Large tab incandescent 150/ watt (Contid)	100/50		Reference		Manufacturer's Name and Address
"No style designs	ition" 5112				
"No style designa			FS/5-20-60		
Type UTT or	0.0-4007				Mutual-Sunset Lamp Mfg. Co.
Mat+/T(AU/50 I		PS/5-24-60		Artistic Town
Style 4- 0					Artistic Lamp Mfg. Co., Inc.
design do	2/5400				
đo	2/5609 2/sw4,5		FS/5-23-56		
do	M5-107		F3/5-22-EC		Mario Mfg. Co., Inc.
do	CT5-3001		FS/4-8-57		Stadler-Neuwirth, Inc. Mutual-Sunset Lamp Mfg. Co., Inc.
do do	075-3004 211		PS/5-24-60	1.	Inc
Style B- Modern desig	AC7T-A		FS/5-24-60 FS/12-24-59		Artistic Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. G-F-C Mfg. Co., Inc.
	m 2/201		FS/3-18-60		
do	2/470373 W5-106		PS/5-24-56	Arton Maria III.	
do			PS/5-23-56 PS/5-24-56	M	Ario Mfg. Co., Inc.
do do	2/SN25 GT5-3002		PS/5-23-56	100	ario Mfg. Co., Inc. ario Mfg. Co., Inc. utual-Sunset Lamp Mfg. Co.,
do	0000				
Style C- Colonial design			PS/5-24-60 PS/5-29-59	Ar	tistic Lamp Mfg. Co., Inc.
do do				Ca	tistic Lamp Mfg. Co., Inc. tistic Lamp Mfg. Co., Inc. lpa Products Company
do	9-8025 2/200 2/550342 2/8035		18/5-24-60 18/5-24-60	Am	
do do	2/550342 2/8035			Art	tistic Lamp Mfg. Co., Inc. iistic Lamp Mfg. Co., Inc. -C Mfg. Co., Inc.
do	M5-108	P	5/5-23-56 8/5-23-56 3/4-8-57		
do	203	, P	3/4-8-57	Ste	At C To a Anc.
do do	CT5-3003 AC7T-C	PS	15-25-59		
Provincial design	17	PS	/5-24-60 /5-29-59 /3-29-60	Arti	C Mfg. Co., Inc. stic Lamp Mfg. Co., Inc. a Products Company
design	M5-109	FS,	/3-29-66	Calp	a Products Company
do do		PS/	15-12-59	14 - Land 18 /	- our company
do	CT5=3005 SN51			Mutus	il-Sunset Lamp Mfg. Co.,
attan and Wood	147	FS/	5-24-60 6-1-59	APT	
	G.S.L.40	1 10/	c=25=60	G-F-C	or-Neumirth, Inc. Mrg. Co., Inc.
candescent 100 watt yle A- Conventional		PS/6	-10-60	Golden Compa	State Tau
do	MAL5				
	M8-106	PS/5_ PS/5_	3-57	Va-	[발생 기념] 경기교회 회
yle B- Modern design	CU 1 mm	1 .2/>	<1-59	Mutual-	fg. Co., Inc. Sunset Lamp Mfg. Co.,
do	CH-1571 MA13	PS/5-2	9/K0		
	M8-104	10/5-1	_57	Artistic	g. Co., Inc.
de C- Colonial design		PS/5-2	7-59	Mutual-9	g. Co., Inc., g. Co., Inc., hunset Lamp Mfg. Co.,
dodosign	MA-14 M8-103	FS/5-3-		Inc.	Mrg. Co.,
vincial design		PS/4-28	-57 1-58	Mario Mf	S. Co., Inc.
design	M8-105			Inc.	S. Co., Inc. unset Lamp Mfg. Co.,
		FS/5-27	-59		
				Inc.	nset Lamp Mfg. Co.,

Magast 15, 1960 SUPERSEDINI OPL-4-I-314-3 June 29, 1959

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Provincial design	MALS M9-106 CH-1573 MALT M9-104 MAL6 M9-103 M9-105	FS/5-2-51 FS/5-27-59 FS/5-23-50 FS/5-3-51 FS/5-27-59 FS/5-3-51 FS/4-28-58 FS/5-27-59	Mario Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. Artistic Lamp Mfg. Co., Inc. Mario Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. Mario Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc.
Type I- Tall table lamp, incandescent 150/100/50 west Style A- Conventional design do	1gn (CP) 100 (NA - 29 (NA - 29 (NA - 29 (NA - 110 (NA - 27 (NA - 113 (NA - 238 (NA - 113 (NA - 258 (NA - 111 (NA - 258 (NA -258 (NA	FS/3-10-60 FS/3-11-60 FS/3-11-60 FS/3-13-60 FS/3-13-60 FS/3-10-60 FS/3-11-60 FS/3-11-60 FS/3-11-60 FS/3-11-60 FS/3-13-60	Calpa Products Company C-F-C Mfg. Co., Inc. Mario Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. Stadler-Neuwirth, Inc. Calpa Products Company C-F-C Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. Stadler-Neuwirth, Inc. Calpa Products Company C-F-C Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. Hario Mfg. Co., Inc. Mario Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. C-F-C Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. C-F-C Mfg. Co., Inc. C-F-C Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. C-F-C Mfg. Co., Inc. Mutual-Sunset Lamp Mfg. Co., Inc. Colden State Lamp Afg. Co., Inc. Colden State Lamp Mfg. Co., Inc. Calpa Products Company Artistic Lamp Mfg. Co., Inc. Calpa Products Company C-F-C Mfg. Co., Inc.

OPI-W-L-314-4 August 15, 1949 SUPERSEDING OPI-W-L-314-3 June 29, 1959

Designation	Manufacturer's Designation	Test or Qualification	Manufacturer's
Type XI. Extra tall table Iamp, incardescent 120/100/50 watt (Cont'd) Style A. Conventional do do do do do do do do do d	MXI-116 SN-34,8 MA-32 CEP11TB TOT MXI-114, 390 410 5N-328 SN-328 SN-328 SN-315 MXI-5114 MXI-5115 MXI-5113 MA-30 CEP11TC TOI TOI MXI-117 SN-338 MA-31 TO5 NXI-115 SN-358 Plants are: 109 Eighth Street, Fassife 6-28 Faschall Avenue, Prilade Meet 21st Street, Brocklyn 2 tz 26th Street, New York 10, Log. 100, Ne Beaudry Avenue, Inc., Empire State Building Co., 875 Folsom Street, San 6-22nd Street, Logs Typh Street, San 6-22nd Street, Logs Typh Street, San	FS/3-15-60 FS/3-14-60 FS/3-14-60 FS/3-14-60 FS/3-14-60 FS/3-15-60 FS/3-15-60 FS/3-15-60 FS/5-16-60 FS/5-16-60 FS/5-16-60 FS/5-16-60 FS/5-16-60 FS/5-16-60 FS/5-16-60 FS/5-16-60 FS/3-14-60 FS/3-14-60 FS/3-14-60 FS/3-14-60 FS/3-14-60 FS/3-16-60 FS/3-1	Mone ond Address Name and Address Name and Address Inc. Inc. Inc. Stadler-Neuwirth, Inc. Stadler-Neuwirth, Inc. Stadler-Neuwirth, Inc. Mutual-Sunset Lamp Mfg. Co. Inc. Modeline Co. of Calif., Inc. Modeline Co. of Calif., Inc. Modeline Co. of Galif., Inc. Modeline Co. of Galif., Inc. Modeline Co. of Galif., Inc. Mutual-Sunset Lamp Mfg. Co. Inc. Inc. Mutual-Sunset Lamp Mfg. Co. Inc. Mutual-Sunset Lamp Mfg. Co. Inc. Mario Mfg. Company, Inc. Mario Mfg. Company, Inc. Mario Mfg. Company, Inc. Stadler-Neuwirth, Inc.

NOTICE.—This list may be made available to contractors, prospective hidders or suppliers who are required to procure items listed between to fulfill the requirements of a contract. Requests for this list shall include the number of the contract or lavitation for Bid for which it is required.

QPL-W-T-0070-16 AMENDMENT-2 14 April 1967 SUPERSEDING QPL-W-T-0070-16 AMENDMENT-1 2 March 1967

QUALIFIED PRODUCTS LIST PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

PSC

TAPES, RECORDING, SOUND AND INSTRUMENTATION, MAGNETIC OXIDE COATED, GENERAL SPECIFICATION FOR

This he has been proposed for use by or for the Government in the procurement of products covered by the subject specification. All products listed herein have been qualified under the requirements for the product a specified in the latest effective issue of the applicable specification. Revision or amendment of this list will be issued as necessary. The listing of a product does not release, the manufacturer from compliance with the specification requirements. Reproduction of this list, in whole or in part, except by the discovered production of the information above thereon for advertising purposes is expressly forbidden.

ment, or use of the design of this Qualifi	ner as specturer from compliance with one hown thereon for advertising purposes is ed Products List is the Naval Ship Er	TEST OR QUALIFICATION	MANUFACTURER'S NAME AND ADDRESS
	MANUFACTURER'S DESIGNATION	RFTERE	
GOVERNMENT DESIGNATION	-W-T-0070-16	5 January 1967	
	S A PART OF QFL	DATED	
THIS AMENDMENT FORD			Ampex Corporation
Page 5: Delete the fo	ollowing products:	NY 5991-9, Final Report	
Page 3.	Ampex Cat. No. 737		Marvyn Rodu Opelika, Alabama 36801 Plant: Same address
TIT-A-HR			
		in Part 4	Ampex Corporation Marvyn Road
	Ampex Cat. No. 747	NY 5991-1B, Part 4	a lika Alabama 30002
TIT-A-HT	Ampex Gac.		plant: Same address
		나라 중심하다 하다 하는데 보다	Ampex Corporation
		NY 5991-10, Final Report	Marvyn Road
	Ampex Cat. No. 731		Opelika, Alabam Plant: Same address
TIT-B-HR			Ampex Corporation
		NY 5991-1B, Part 4	
	Ampex Cat. No. 741		Marvyn Rosu Opelika, Alabama 36801 Plant: Same address
TIT-B-HT			planti Same -
			[등학생기가 나타기 시기 시기
	moduct:	하는 없는 사람들이 되었다. 그리고 하는	Audio Devices, Incorporated
Page 5: Aud the	following product:	N.Y. 9200-222	235 E. 42nd Street New York, New York 10017 New York, New York Conn. 06
	#51 - 7	Final Report	New York, New 1012 Plant: Glenbrook, Conn. 06
TIT-B-HR			
			aport Minnesota Mining & Mfg. C
	e following products:	N.Y. 9200-225, Final Re	
Page 7: Add the	Scotch Brand 870	N.Y. 9200-225, Final R	St. Faul, wold. N. J.
TIT-B-HA			Camarillo, Calif
			negota Mining & Mfg.
		N.Y. 9200-224, Final I	
	Scotch Brand 871	N+1+ /-	St. Fauly
TIT-B-HT			Plants: Freehold, Cali

NOTICE.—This list may be used a malicule to contractors, prospective bidders or suppliers who are required to procure stems itseed between to fulfill the requirements of a contract. Requests for this list shall include the number of the contract or Invitation for Bid for which it is required.

QPL-W-T-0070-16 5 January 1967 SUPERSEDING QPL-W-T-0070-15 12 July 1966

PSC 5835

QUALIFIED PRODUCTS LIST PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION OF

W-T-0070

TAPES, RECORDING, SOUND AND INSTRUMENTATION, MAGNETIC OXIDE COATED, GENERAL SPECIFICATION FOR

This list has been prepared for use by or for the Government in the procurement of products covered by the subject specification. All products listed herein have been the Government, or use of the information shown thereon for advertising purposes is expressly footbidden.

Reproduction of this list, in whole or in part, except by

TAT-A-FR Ampex Cat. No. 611 Ampex Cat. No. 618 Ampex Cat. No. 618 Ampex Cat. No. 618 Ampex Cat. No. 618 Ampex Cat. No. 619 Ampex Cat. No. 628 Ny 6399-2.4 Ampex Cat. No. 628 Ny 6399-2.5, Final Report Ampex Cat. No. 628 Ny 6399-2.5, Final Report Ampex Cat. No. 628 Ny 6399-2.5, Final Report Ampex Corporation Marvyn Road Opelika, Alabama 36801 Plant: Same address Plant: Same address Plant: Same address Plant: Glenbrook, Conn. Audio Devices, Inc. 250 East 42nd Street Mary York, New York Plant: Glenbrook, Conn. Presport, Illinois Plant: Same address	GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	TEST OR GUALIFICATION	
SPECIFICATION W.T-0070/1 Ampex Cat. No. 611 Ampex Cat. No. 611 Ampex Cat. No. 618 Ampex Cat. No. 628 Ampex Cat. No. 628 NY 6399-2.4 Ampex Corporation Maryyn Road Opelika, Alabama 3680 Plant: Same address Plant: Same address Plant: Same address Plant: Same address Audio Davices, Inc. Davices, Inc. Davices, Inc. Davices, Inc. Plant: Glembrook, Conn. Plant: Glembrook, Conn. Plant: Game address NY 9200-61, Final Report Burgess Battery Co. Presport, Illinois Plant: Same address Plant: Same address Plant: Same address NY 9200-61, Final Report Ampex Corporation Maryyn Road Opelika, Alabama 3680 Plant: Same address Plant: Same address Plant: Same address Nw York, New York Plant: Glembrook, Conn. Presport, Illinois Plant: Same address NY 9200-14, Final Report Maryyn Road Opelika, Alabama 3680 Plant: Same address Plant: Same address Plant: Same address Plant: Same address NW 9200-61, Final Report Maryyn Road Opelika, Alabama 3680 Plant: Same address NY 9200-61, Final Report Maryyn Road Opelika, Alabama 3680 Plant: Same address NY 9200-61, Final Report Maryyn Road Opelika, Alabama 3680 Plant: Same address NY 9200-61, Final Report Maryyn Road Opelika, Alabama 3680 Plant: Same address NY 9200-61, Final Report Maryyn Road Opelika, Alabama 3680 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 3680 Plant: Same address NY 9200-61, Final Report Maryyn Road Opelika, Alabama 3680 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 3680 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 3680 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 3680 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 3680 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 3680 Plant: Same address Audio Davices, Inc. No. 5336-75, Final Report Mary Roa			REPERENCE	MANUFACTURER'S NAME
TAT-B-FR Ampex Cat. No. 618 Ampex Cat. No. 618 Ampex Cat. No. 618 Ampex Cat. No. 618 Ny 6399-2.4 Ampex Cat. No. 628 Ny 6399-2.5, Final Report Ampex Cat. No. 628 Ny 5336-8, Final Report Ampex Cat. No. 628 Amp	TAT .	SPEC	TETCATE	AND ADDRESS
TAT-B-FR Ampex Cat. No. 618 Ampex Cat. No. 618 Ampex Cat. No. 618 NY 6399-2.4 Ampex Cat. No. 628 NY 6399-2.5, Final Report TAT-B-FT Ampex Cat. No. 628 NY 6399-2.5, Final Report TAT-A-FR Audiotape 24-5 NY 5336-8, Final Report TAT-A-FR Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report NY 5336-1, Part 4, Final Report Mat. Lab. Spoiltr, Spoiltr, Spoiltr, Spoiltr, Spoilts, Spoiltr, Spoilts, Alabama 36801 Plant: Same address Audio Davices, Inc. 229 East 42nd Street New York, New York Plant: Glenbrook, Conn. Burgess Battery Co. Freeport, Illinois Plant Same address Final Report AT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mat. Lab. Spoiltr, Spoilt	IAI-A-FR	Ampay C	271CATION W-T-0070/1	
TAT-B-FR Ampex Cat. No. 618 Ampex Cat. No. 618 Ampex Cat. No. 628 NY 6399-2.4 Ampex Cat. No. 628 NY 6399-2.5, Final Report Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address Audio Devices, Inc. 239 East 43nd Street New York, New York Plant: Glenbrook, Conn. Burgess 111 NY 5336-75, Final Report NY 9200-61, Final Report AT-A-FR A-303 NY 9200-61, Final Report Final Report Mart. Lab. Spoiltr. Mart. Alabama 36801 Plant: Same address Maryyn Road Opelika, Alabama 36801 Plant: Same address Address Plant: Same address Maryyn Road Opelika, Alabama 36801 Plant: Same address Maryyn Road Opelika, Alabama 36801 Plant: Same address Mart. Paul Mart. Same address Mart. Paul Mart. Same address Mart. Paul Mart. Same address Minnesota Mining & Mfg. Co 2501 Hudson Road Sc. Paul, Minnesota Still Plants: Mutchilanop. Minnesota Still Plants: Mutchilanop. Minnesota Still Plants: Mart. Paul Mart. Same address Mart. Paul Mart.		Ton Cat. No. 611	NY 5336-24	그는 나를 하게 하는 사람이다.
TAT-B-FR Ampex Cat. No. 618 NY 6399-2.4 Ampex Cat. No. 628 NY 6399-2.5, Final Report TAT-A-FR Audiotape 24-5 NY 5336-8, Final Report TAT-A-FR Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mathematical Report Minimatical Report Minimatical Report Minimatical Report AT-A-FR Scotch Brand 111 NY 9336-1, Part 4, Final Report Minimatical		[발표] 등 그러는 모두 주시다	Final Report	Ampex Corporate
Ampex Cat. No. 618 NY 6399-2.4 Ampex Cat. No. 618 NY 6399-2.4 Ampex Corporation Maryyn Road Opelika, Alabama 36800 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address Ampex Corporation Maryyn Road Opelika, Alabama 36801 Plant: Same address NY 5336-8, Final Report Mary Tork, New York Plant: Glenbrook, Conn. Burgess Battery Co. Freeport, Illinois Plant: Same address Plant: Same address Plant: Same address Rochester, New York 14650 Plant: Same address Plant: Sa	TAT-B-Fo	그리다 하는 것 같아요? 그 아니다 하다.		Marvyn Road
TAT-B-FT Ampex Cet. No. 628 NY 6399-2.4 Ampex Cot. No. 628 NY 6399-2.5, Final Report TAT-A-FR Audictage 24-5 NY 5336-8, Final Report TAT-A-FR Burgess 111 NY 5336-75, Final Report A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report A-303 NY 9200-14, Final Report Ampex Corporation Ampex Corporation Ampex Corporation Ampex Corporation Marvyn Road Opelika, Alabama 36801 Plant: Same address Audic Devices, Inc. 239 East 42nd Street New York, New York Plant: Generhook, Conn. Burgess Rattery Co. Freeport, Illinois Plant: Same address Eastman Kodak Company 343 State Street Rochester, New York 1650 Plant: Same address Minnesota Mining & Mfg. Co 2501 Hudson Road St. Paul, Minnesota Mining & Mfg. Co 2501 Hudson Road Minnesota Mining & Mfg. Co 2501 Hudson Road St. Paul, Minnesota S5119 Plants: Hutchinson, Minn Freehold, N. J. Camarilio, Calif. Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address		Ampex Cat. No. 610		Plant, Cara 36801
Ampex Cet. No. 628 NY 6399-2.5, Final Report TAT-A-FR Audictage 24-5 NY 5336-8, Final Report TAT-A-FR Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report NY 5336-1, Part 4, Final Report Miny Same address Final Report NY 5336-1, Part 4, Final Report Miny Same address Final Report Miny Same address NY 9200-61, Final Report Minesota Mining & Mgc, Comparation Miny Same address Final Report Minesota Mining & Mgc, Comparation Miny Same address Final Report Minesota Mining & Mgc, Comparation Miny Same address Minnesota Mining & Mgc, Comparation Minute Minute Mi		018	NY 6399-2.4	cama address
TAT-B-FT Ammex Cet. No. 628 NY 6399-2.5, Final Report TAT-A-FR Audiotape 24-5 NY 5336-8, Final Report TAT-A-FR Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report NY 5336-1, Part 4, Final Report Marvy Road Opelika, Alabama 36800 Plant: Same address New York, New York New York,				Ampex Corporation
TAT-A-FR Audiotape 24-5 NY 5336-8, Final Report NY 5336-8, Final Report TAT-A-FR Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report NY 5336-1, Part 4, Final Report Minesoft Minesoft Street NY 5336-1, Part 4, Final Report Minesoft Mine	TAT-B-FT			
TAT-A-FR Audiotape 24-5 Audiotape 24-5 NY 5336-B, Final Report NY 5336-B, Final Report Audio Devices, Inc. 235 East 42md Street New York, New		Ampex Cat. No. 628		Plant: Same and
TAT-A-FR Audiotape 24-5 NY 5336-8, Final Report TAT-A-FR Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mat. Lab. Spadtr., 931sSiniam Sc69/15 dtd. 23 Dec. 1983 dtd. 23 Dec. 1983 MY 9200-14, Final Report TAT-A-FR 15A NY 9200-15, Final Report Maryy, Road Opelika, Alabama 36801 Opelika, Alabama 36801 Plant: Same address Audio Devices, Inc. 228 East 42nd Street New York 11 Incise Plant: Same address Minnesota Mining & Mfg. Co 2501 Mucdon St. Paul, Minnesota 55119 Plants: Intelniano, Mining America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address		1	NY 6399-2.5, Final Ra	
TAT-A-FR Audiotape 24-5 NY 5336-B, Final Report TAT-A-FR Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mat. Lab. Spditr, 931 Shiras S65/15 dtd. 23 Dec. 1993 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indianapolis 2, Indianapolis 1, Indianapolis 1, Indianapolis 2, Indianapolis 2, Indianapolis 3, Indianapolis 1, Indianapolis 1, Indianapolis 1, Indianapolis 1, Indianapolis 2, Indianapolis 3, Indianapolis 3, Indianapolis 1, Indianapolis 1, Indianapolis 1, Indianapolis 1, Indianapolis 2, Indianapolis 3, Indianapoli			```	Ampex Corporation
TAT-A-FR Burgess 111 NY 5336-8, Final Report Audio Devices, Inc. 25 East 42nd Street New York, New York Plant: Glenbrook, Conn. Burgess Battery Co. Freeport, Illinois Plant: Same address NY 9200-61, Final Report A-303 NY 9200-61, Final Report A-303 NY 5336-1, Part 4, Final Report Mat. Lab. Spditr, 931:51Mas S65/15 dtd, 23 Dec. 1993 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-14, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Audio Devices, Inc. 220 East 42nd Street New York, New York Plant: Same address Minnesote Burgess Battery Co. Freeport, Illinois Flant Same address Minnesote Mining & Mfg. Co 250 I Nudson Road St. Paul, Minnesote S5119 Flant: Same address NY 9200-14, Final Report Radio Corp. of America 6600 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6600 East 30th Street	TAT-A-PR	1		Opelika Al
TAT-A-FR Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mat. Lab. Spdit., 931:51M:asm 565/1.5 dtd. 23 Dec. 1903 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indianapolis 1, Indianapolis 2, Indianapolis 2, Indianapolis 3, Indianapolis 3, Indianapolis 2, Indianapolis 3, Indianapolis 1, Indianapolis 3, Indianapolis		Audiotape 24-5	NIV con	Plant: Same address
Burgess 111 NY 5336-75, Final Report TAT-A-FR A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Met. Lab. Spditr. 9315I.M:am S65/15 dtd. 23 Dec. 1953 TAT-A-FR 15A NY 9200-14, Final Report New York, New York Plant: Same address Eastman Kodak Company 343 State Street Rochester, New York 1650 Plant: Same address Minneacta Mining & Mfg. Co 2501 Hudson Road St. Paul, Minneacta 55119 Plants: Hutchinson, Minn. Freehold, N. J. Canazilio, Calif. Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address ANY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plants: Same address ANY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plants: Same address And Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plants: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plants: Same address		실내하고 하다 한 학생은 학생은	NI 5336-8, Final Repor	t Audio n
Burgess 111 NY 5336-75, Final Report A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mat. Lab. Spdir. 931:51M. am ScO/15 dtd. 23 Dec. 1993 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indianapolis 2, Indianapolis 2, Indianapolis 3, Indianap	TAT-A-E			235 East 42nd Stand
TAT-A-FR A-303 A-303 NY 9200-61, Final Report NY 9200-61, Final Report NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mat. Lab. Spditx. 9315IN:sam S65/15 dtd. 23 Dec. 1993 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address		Burgess 111	레이크 막하다 그 사로 있다.	
TAT-A-FR A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mat. Lab. Spdit., 931:51Ntam S65/15 dtd. 23 Dec. 1953 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indianaplate 1, Indianaplate 2, Indianaplate 3, India			NY 5336-75. Final D.	Glenbrook, Conn.
A-303 NY 9200-61, Final Report TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Mx 1. Jab. Spdit., 931:SLM:am S65/15 dtd. 23 Dec. 1953 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Flant: Same address	TAT-A-Fo		, that Report	Burgese Date
TAT-A-FR Scotch Brand 111 NY 9200-61, Final Report Eastman Kodak Company 343 State Street Rochester, New York 14650 Flant: Same address Minnesota Mining & Mfg. Co 2501 Hudaon Road St. Paul, Minnesota 55119 dtd. 23 Dec. 1993 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 2, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 3, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 3, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 5, Indiana Plant: Same address		A-303	그녀는 얼마는 것으로 가지를 들었다.	Plant, Illinois
TAT-A-FR Scotch Brand 111 NY 5336-1, Part 4, Final Report Matslab, Spditr. 931-Silman SS671.5 dtd. 23 Dec. 1993 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 3, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 3, Indiana Plant: Same address			NY 9200-61. Final B	Jame address
Scotch Brand 111 NY 5336-1, Part 4, Final Report Mat. Lab. Spditx. 99185Mrsm 565/15 dtd. 23 Dec. 1953 TAT-A-FR 15A NY 9200-14, Final Report NY 9200-15, Final Report NY 9200-15, Final Report NY 9200-15, Final Report Rochester, New York 14650 Plant: Same address Minnesota Mining & Mfg. Co 2501 Mudon Road St. Paul, Minnesota 55119 Plants: Hutchinson, Minn. Freehold, N. J. Camarilio, Calif. Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 2, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianacolis 3, Indiana Plants Same address			, that Report	Eastman Kodak Componi
Final Report Mat. Lab. Spdltr., 931 SLM:sam SG5/L5 dtd. 23 Dec. 1993 TAT-A-FR 15A WY 9200-14, Final Report NY 9200-15, Final Report WY 9200-15, Final Report Radio Corp. of America G800 East 30th Street Indianapolis 1, Indiana Plants: Muchanne America G800 East 30th Street Indianapolis 1, Indiana Plants: Same address Radio Corp. of America G800 East 30th Street Indianapolis 1, Indiana Plants: Same address	TAT-A-FR			343 State Street
Final Report Mat. Lab. Spoltr., 931 SLM:sam SG5/L5 dtd. 23 Dec. 1993 TAT-A-FR 15A WY 9200-14, Final Report F-B-FR 15A WY 9200-15, Final Report WY 9200-15, Final Report Radio Corp. of America G800 East 30th Street Indianapolis 1, Indiana Plants: Much Street Indianapolis 2, Indiana Plants: Succession of Street Indianapolis 1, Indiana Plants: Same address Radio Corp. of America G800 East 30th Street Indianapolis 1, Indiana Plants: Same address		Scotch Brand 111		Plant: Same add 14650
Mat. Lab. Spditx. Mat. Lab. Mat. Mat. Mat. Spditx. Mat. Lab. Mat. Mat. Mat. Spditx. Mat. Lab. Mat. Mat. Mat. Mat. Mat. Mat. Mat. Mat			NY 5336-1, Part 4,	audress
TAT-A-FR 15A 15A St. Paul, Minneacte 55119 Plants: Nutchinson, Minn. Frenchold, N. J. Camarillo, Calif. Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plants: Same address NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plants: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 2, Indiana Plants: Same address			Ma+ t-	Minnesota Mining & Mfg. Co.
TAT-A-FR 15A 15A NY 9200-14, Final Report NY 9200-15, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street General Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana South Street Indianapolis 1,		[마루하다] 하는 모드라고		St David Road
Freehold, N. J. Camarillo, Calif. Radio Corp. of America 6800 East 30th Street Indianapolis J. Indian Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis J. Indian Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis J. Indianapoli	TAT-A-Fo	생물을 즐겁다면 살아 있어요?	dtd. 23 Dec. 1953	
NY 9200-14, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plants Same address NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plants Same address Radio Corp. of America 6800 East 30th Street Indiana		15A		
IT-B-FR 15A NY 9200-15, Finel Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Indianapolis 2, Indiana Indianapolis 3, Indiana Indianapolis 3, Indiana Indianapolis 4, Indiana Indianapolis 3, Indianapolis 4, Indiana			NY 9200-14, Final Renaut	Camarillo, Calif.
NY 9200-15, Final Report NY 9200-15, Final Report Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana			eport	Radio Corp. of America
NY 9200-15, Finel Report Radio Corp. of America 6000 East 30th Street Indianament	I-B-PR			Indiana Street
Radio Corp. of America 6800 East 30th Street Indianant.		15A		Plant: Same address
6800 East 30th Street			NY 9200-15, Final Report	
Indiananal				6800 East 30th Cherica
Plant: Same address				Indiananati Street
이 되어는 그 회사들은 소리에는 전하는 하면, 속이 시간을 낳는데 하는 그리는 이 시간이 되었다면 하는데 그는 동안 되었다. 유럽의 중심하는 사람들은 사람들이 되었다면 하는데 되었다면 살다면 하는데 되었다면 되었다면 하는데 되었다면 되었다면 되었다면 하는데 되었다면 하는데 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면		보다 이번째 보이 다시 어떻게 되니?		Plant: Same address
그들은 이번 경우 아들의 하는 살을 살아서 살아 하나 하는 것이 그를 가지 않는 것 같아야 한 점을 가는 다른 사람이 없다.				

L-W-T-0070	MANUFACTURER'S DESIGNATION	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
DESIGNATION	SPECIFICATION	W-T-0070/1	하는 경험 교회 기업
rat-a-Pr	Soundcraft S Series	NY 5336-7, Final Report	Reeves Soundcraft Div. of Reeves Industries Inc. Great Pasture Road Danbury, Conn. Plants Same address
	SPECIFICATI	ON W-I-0070/2	
TAT-A-HR	Ampex Cat. No. 631	NY 5336-24, Final Report	Ampex Corporation Marvyn Road Opelika, Alabama 36801 Plant: Same address
TAT-A-HT	Ampex Cat. No. 641	NY 5336-24, Final Report	Ampex Corporation Marvyn Road Opelika, Alabama 36801 Plant: Same address
TAT-B-HR	Ampex Cat. No. 638	NY 5336-54 Pt. 1, Final Report	Ampex Corporation Marvyn Road Opelika, Alabama 36801 Plant: Same address
тат-в-нт	Ampex Cat. No. 64B	NY 6399-2.3, Final Repor	Opelika, Alabama 30001 Plant: Same address
TAT-A-HR	Audiotape 24-7	NY 5336-8 & NY 5336-23 Final Reports	Audio Devices, Inc. 235 East 42nd Street New York, New York Plant: Glenbrook, Conn.
TAT-A-HT	Audiotape 24-6	NY 5336-8 & NY 5336-23 Final Reports	Audio Devices, Inc. 235 East 42nd Street New York, New York Plant: Glenbrook, Conn.
TAT-B-HT	Audiotape 13-6	NA 6362-e°2	Audio Devices, Inc. 235 East 42nd Street New York, New York Plant: Glenbrook, Conn.
TAT-A-HR	20-151	NY 9200-104, Final Re	port Mac Panel Company 2060 Brentwood Street High Point, N. C. Plant: Same address
TAT-B-HR	25-151	NY 9200-105, Final F	High Point, N. C. Plant: Same address
TAT-A-HR	53A-F	NY 6399-3.7 Final Report	Mamorex Corporation 1180 Shulman Avenue Santa Clara, California 9505 Plant: Same address
TAT-A-HT	53A-E	NY 6399-3.5 Final Report	Memorex Corporation 1180 Shulman Avenue Santa Clara, California 95 Plant: Same address
2 of ⁹			

Designer	fon Manufacturer's Designation		Test or Givelification Reference		Manufacturer's Name
	SI	PECIFICATI	DN W-T-0070/2		and Address
TAT-A-HR			" "-1-0070/2		1
	Scotch Brand 102		Mr eas		
		5.00	NY 5335-1, Part Final Report		d
					Minnesota Mining & Mfg. Co
					St. Paul "Gau
TAT-A-HT			dtd. 23 Dec. 195	3	Plants: Hutchinson, Minn.
	Scotch Brand 150		5556-22, Final	Report	
	-Adild 150		NY 5336-1, Part 4		Callif.
	그 하면 되었다. 그릇 먹은 것 않는				Minnesota Mining & Mfq. Co.
	되는 회의 기계 시설 경험하고 있다.		Mat. Lab. Spdltr. 931:SLW:sm S65/L5		2501 Hudson Road
 _					St. Paul, Minnesota 55119 Plants: Hutchinson, Minn,
TAT-B-HR	Scotch Brand B-102		NY 5336-22, Final R	enort	
	South Brand B-102		NY 5336-52, Part 1		Camarillo, Calif.
			Final Report		Minneents u
				- 1	2501 Hudson Road
TAT-B-HT					Freehold
	Scotch Brand B-150		MV pake		Camarillo, Calif.
	물이 있게 살아보았다면 얼마를 먹었다.	1	NY 5336-26, Final Rep	ort	Minnogate
		1		- 1	Minnesota Mining & Mfg. Co. 2501 Hudson Road
	그 이번 나는 마음을 먹으면 그 만나.	- 1			
TAT-A-HT				- 1	
	Scotch Brand 813				Freehold, N. J. Camarillo, Calif.
			NY 6399-3.5, Final Re	oort 1	Walle
	교육 기대에 가 났던지 않는다. 그				Minnesota Mining & Mfg. Co. 2501 Hudson Road
					St. Paul
tat-a-h _r					
	Scotch Brand 812			41.0	
	weat 10 10 15 15 15 15 15 15 15 15 15 15 15 15 15		WY 6399-5.6 Final Repo		Camarillo, Calif.
					Minnesota Mining & Mfg. Co.
				s	501 Hudson Road
				P	t. Paul, Minnesota 55119
AT-B-HR		1			
	Scotch Brand 812	NV	6000 a		Camarillo, Calif.
	하다 내 내가 되어 있다면 하셨다.	1 "	6399-5.6 Final Report	Mi	DDAgat- III
		APPRAY		25	Ol Hudson Road
		1			
T-B-HT	영 기존하는 요금 그리고 생각하는 것			1 718	nutvningen w
	Scotch Brand 813	1		1	Freehold, N. J. Camarillo, Calif.
		NY 6399-5.5 Final Report		M+	, valiri
	그리 그리아 하다 중심하다 그다.	1		2501	nesota Mining & Mfg. Co. Hudson Road
	하나 이 계계 하는 사람들이 없다.				
-А-H _R		lane in		Plan	
	15M			L	
		NY 53	336-70, Final Report		Camarillo, Calif.
			oport	Radio	Corp. of America
N-HT				India	Iname II
	10M				napclis 1, Indiana : Same address
		NY 5336	-71, Final Report		
			wahort	Radio	Corp. of America
			1	Indian	ast 30th Street
	4. 11. 11. 11. 11. 11. 11.			Plants	Same address
	[1] 이 나타고 시간 이렇게!				
					3 of 9

W-T-0070	MANUFACTURER'S DESIGNATION	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
DESIGNATION	SPECIFICATION W-	T-0070/2	
at-b-H _R	15M	NY 5336-70, Final Report	Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address
rat-B- H t	. Tow	NY 5336-71, Final Report	Radio Corp. of America 6800 East 30th Street Indianapolis 1, Indiana Plant: Same address
TAT-A-HR	Soundcraft L Series	NY 5336-13, Part 1 Final Report	Reeves Soundcraft Div. of Reeves Industries Inc. Great Pasture Road Danbury, Connecticut Plant: Same address
тат-а-нт	Soundcraft PL Series	NY 5336-13, Part 1 Final Report	Reeves Soundcraft Div. of Reeves Industries Inc. Great Pasture Road Danbury, Connecticut Plant: Same address
TAT-B-HR	Soundcraft GTM 1.5 Series	NY 6399-5.1, Final Report	Resves Soundcraft Div. of Reeves Industries Inc. Great Pasture Road Danbury, Connecticut Plant: Same address
TAT-B-HT	Soundcraft GTM 1.0 Series	NY 6399-1.2, Final Report	
	SPECIFICATI	ON W-T-0070/3	
TIT-A-FR	Ampex Cat. No. 717	NY 5991-9, Final Report	Ampex Corporation Marvyn Road Opelika, Alabama 36801 Plant: Same address
TIT-A-FT	Ampex Cat. No. 727	NY 5991-9, Final Repor	t Ampex Corporation Marvyn Road Opelika, Alabama 36801 Plant: Same address
TIT-B-F _R	Ampex Cat. No. 711	NY 5991-9, Final Repor	Ampex Corporation Marvyn Road Opelika, Alabama 36901 Plant: Same address
TIT-A-PR	Autotape 50-5	NY 5991-2A, Final Rep	
TYT-A-FR	Soundcraft ATA 1.5 Set	ries NY 5991-4, Final Rep	\mathbf{l}
4 of 9			

DESIGNATION	MANUFACTURER'S DESIGNATION	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME
	SPECIF	TICATION W-T-0070/4	AND ADDRESS
TIT-A-HR			그렇게 하셨다. 이 경험이다.
	Ampex Cat. No. 736	NY 9200-8, Final Rep	
강하다. 너무리를 보다는 하다.			ort Ampex Corporation Marvyn Road
TIT-A-HR			Onelika
	Ampex Cat. No. 737	NY 5991-9, Final Repo	Plant: Same address
		, rinal Repo	Ampex Corporation
44 <u>46</u>			Marvyn Road Opelika, Alabama 36801
TIT-A-HT	Ampex Cat. No. 746		Fidnt: Same add.
	740	NY 9200-9, Final Repor	
			Marvyn Road
TIT-A-H _T	Ampex Cat. No. 747		Opelity At-1
	pex Cat. No. 747	NY 5991-1B, Part 4	Same address
			Ampex Corporation Marvyn Road
TIT-B-HR			Opelika Alak
	Ampex Cat. No. 731	NY 5991-10, Final Repor	
병사를 하는 소리를 되었다. 경기가를		3991-10, Final Repor	
TIT-B-HR			
111-2-HB	Ampex Cat. No. 738		Opelika, Alabama 36801 Plant: Same address
		NY 9200-5 Final Report	Ampex Corporation
교 회사의 요금 당하다 경기에게		얼마나 하다 하다 얼마나 있다.	
TIT-B-HT	Ampex Cat. No. 741		Opelika, Alabama 36801 Plant: Same address
	74. Cat. NO. 741	NY 5991-1B, Part 4	
			Ampex Corporation Marvyn Road
ТІТ-В-НТ			Opelities At
[14] 14 전 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ampex Cat. No. 748	NY 9200-7 Final Report	Plant: Same address
		Final Report	Ampex Corporation
TT			Opelity And
TIT-A-HR	Audiotape 50-7	[[일 하고 말은 15] 게 되다	Plant: Same address
		NY 6399-6.3	
			Audio Devices, Inc. 235 East 42nd Street
TIT-A-HT	Aude		New York, New York Plant: Glenbrook, Conn.
	Audiotape 50-6	NY 5991-2, Final Report	
한 성상수없다 하다라 하네요.			Audio Devices, Inc. 235 East 42nd Street
TT-B-HT			
	Audiotape 51-6	NY 6300-4 1 m	riant: Glenbrook. Conn.
		NY 6399-4.1, Final Report	Audio Devices, Inc.
IT-B-HT			New York War Street
	CEC type SX 231	9200-154	Plant: Glenbrook, Conn.
		9200-154	Conected-1.
			Pasadena 15 Colle
			Eastman Kodak Company 343 State Street
			Plant: Same address (Manufacturer)
作りに投資と注意がACM (大名)。		그러난 이번 하는 그들은 점점에 걸린	5 of 9

ODT -W-T-0070

	 Section 1 and 1 a	
SPECIFICATION	N W-T-0070/4	
CEC type SX 233	9200-156	Consolidated Electro- Dynamics Corporation 360 Slerra Madre Villa Pasadena 15, California (Distributor) Eastman Kodak Company 343 State Street Rochester, New York 14650 Plant: Same address (Manufacturer)
CEC type 5X 331	9200-155	Consolidated Electro- Dynamics Corporation 360 Sierra Madre Villa Pasadena 15, Galifornia (Distributor) Eastman Kodak Company 343 State Street Rochester, New York 14650 Plant: Same address (Manufacturer)
CEC type SX 333	9200-157	Consolidated Electro- Dynamics Corporation 360 Sierra Madre Villa Pasadena 15. Galifornia (Distributor) Eastman Kodak Company 343 State Street Rochester, New York 14650 (Manufactures)
CEC Type SX-335	NY 9200-214 Final Report	Consolidated Electro- Dynamics Corporation 360 Sierra Madre Villa Pasadena 15, California (Distributor) Eastman Kodak Company 343 State Street Rochester, N. Y. 14650 (Manufacturer)
33A-F	NY 6399-3.4 Final Report	Memorex Corporation 1180 Shulman Avenue Santa Clara, California 95050 Plant: Same address
33A-E	NY 6399-3.1 Final Report	Memorex Corporation 1180 Shulman Avenue Santa Clara, California 9505 Plant: Same address
33B-F	NY 9200-132, Final Report	Namorex Corporation 1180 Shulman Avenue Santa Clara, California 9500 Plant: Same address
	CEC type SX 331 CEC type SX 333 CEC Type SX-335 33A-F	CEC type SX 331 9200-155 CEC type SX 333 9200-157 NY 9200-214 Final Report NY 6390-3.4 Final Report NY 6390-3.1 Final Report NY 6390-3.1 Final Report NY 9200-132,

QPL-W-T-0070

DESIGNATION	MANUFACTURER'S DESIGNATION		TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
	SPECIF	FICATION W-		AND ADDRESS
TIT-A-HT	Scotch Brand 459			하다. 나타를 하고 있는데 얼마 없다.
			NY 5849-7, Final Rej	port 8
	기가 되는 사람들이 되었다.		NY 5849-9, Final Re	2501 Huda Mining & Mfg. Co
	그 경제 고양하다 그 이상이 나왔다.			St. Paul W.
TIT-A-HR	Scotch Brand 408			Tagnota, New Jers
	. Frand 408		NY 5849-7, Final Rep	
	가격하 여기 등의 많은 것이	1200	NY 5849-9, Final Repo	
	경상 사람들이 가게 경찰 가다.			
				St. Paul, Minnesota 55119 Plants: Hutchinson, Minn.
TIT-A-HR				
	Scotch Brand 850	100	Inc. com-	
			NY 6399-2.9, Final Rep	port Minnesoto W.
				2501 Hude Milling & Mfq. Co.
	[18] [18] [18] [18] [18] [18]	t Hay		
TIT-A-HT	5. (P. 10년 1일) 공원 시간			Freehold Winn.
'' T	Scotch Brand 851			Freehold, New Jersey Camarillo, Calif.
			NY 9200-135, Final Repo	
	어머니의 얼마하다는 하다			2501 Hudeen D. Mfg. Co.
TIT-B-HR				
111-B-HR	Scotch Brand 860			rreenold. New Jersey
		N	Y 6399-2.7, Final Repor	- Calif.
				Minnesota Mining & Mfq. Co. 2501 Hudson Road
	음악하게 되는 그 학생님이 된			St. Paul W.
rit-b-h _t	Saleti L			
	Scotch Brand 861	NY	6399-2.6, Final Report	Camarillo, Calif.
			- vo, . Indi Kepor	Minnesota Mining & Mfg. Co.
				St. Paul. Minnesota 55119 Plants: Hutchinson. Minn.
IT-B-HR				
	Scotch Brand B-458	NY	5991-3A, Final Report	Camarillo, Calif.
	[발발] (11년 1년	1	on, Final Report	Minnesota w
		1.5		2501 Hudson Road
Г-В-Н _Т				St. Paul, Minnesota 55119 Plants: Hutchinson, Minn.
` * "	Scotch Brand B-459	1		Freehold, New Jersey
얼마는 경기를 들어 없다.	맛집 살이 되었다. 우리가 되는	NY 5	849-7, Final Report & 849-9, Final Report	Minnoss to
		1	., rinal Report	Minnesota Mining & Mfg. Co. 2501 Hudson Road
N-HR	15MI	1		
	*041	NY 92	00-16. Final Report	rreenold, New Jersey
	된 1. 1. 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-va rinal Report	Radio Corp. of America
	당하다 가는 게임 시 회사 회사를			Indianament Street
4÷HT	10MI			Plant: Same address
		NY 920	0-144	
	경기를 마음 모임을 잃었다. 🖡			Radio Corp. of America 6800 East 30th Street
	그리 얼마 하는데 울리다.		1	
				Plant: Same address
				7 of 9

-W-T-0070	MANUFACTURER'S DESIGNATION		TEST OR MALIFICATION REFERENCE	ANI	CTURER'S NAME D ADDRESS
DESIGNATION	SPECIFICATION	W-T-0070/	4		
rit-a-HT	TOWIR		200-144	6800 East	rp. of America ; 30th Street blis 1. Indiana Same address
TIT-B-HR	15MI	NY 9	200-17. Final Report	6800 Eas Indianas Plant:	orp. of America t 30th Street polis 1, Indiana Same address
тіт-в-нт	JOMI	NY	9200-145	6800 Ea Indiana Plant:	orp. of America st 30th Street polis 1. Indiana Same address
тт-в-нт	10MIB	NY	9200-145	6800 E	Corp. of America ast 30th Street apolis 1. Indiana Same address
TIT-A-HR	Soundcraft ATM 1.5 Seri	es NY	5991-4, Final Report	Div.	s Soundcraft of Reeves Industries Inc. Pasture Road rry, Connecticut : Same address
TIT-A-HR	Soundcraft HRMB-1.5 Se	ries 1	Y 6399-6.1, Final Rep	ort Reeve Div. Grea	es Soundcraft of Reeves Industries Inc. t Pasture Road ury. Connecticut t: Same address
TIT-A-HT	Soundcraft ATM 1,0 Se	ries	NY 5991-4, Final Repor	Div. Gre	res Soundcraft , of Reeves Industries Inc. at Pasture Road bury, Connecticut nt: Same address
TIT-B-HR	Soundcraft BTM 1.5 S	eries	NY 9200-33, Final Rep	Div Gre	ves Soundcraft , of Reeves Industries Inc. eat Pasture Road nbury, Connecticut ant: Same address
TIT-B-HR	Soundcraft HRMB 1.5	Series	NY 6399-6.1. Final F	Of Gi	eves Soundcraft Lv. of Reeves Industries Inc. reat Pasture Road anbury, Connecticut lant: Same address
TIT-B-HT	Soundcraft HRMB 1.4	O Series	NY 6399-6.2. Final	Report R	eeves Soundcraft Div. of Reeves Industries Ind Great Pasture Road Danbury, Connecticut Plant: Same address
n TIT-B-HT	Soundcraft BTM 1.0	D Series	NY 6399-5.3 Final	Report	Reeves Soundoraft Div. of Reeves Industries In Great Pasture Road Danbury. Connecticut Plant: Same address
8 of 9					

DESIGNATIO	MANUFACTI DESIGNAT	URER'S TEST TON QUALIFI REFER	CATION MAINTANAL
	9	PECIFICATION W-T-0070/5	
THR-E-H _T	Ampex Cat. No. 7	776 NY 9200-206, Final Report	
THR-E-HR	CEC Type N354	NY 9200-92, TM Final Report	Opelika, Alabama 36801 Plant: Same address 4 #5 Consolidated Electro- Dynamics Corp., 360 Sterm
тик-р-нт	62 D	NY 9200-592 Tech. Mamo #6	Peadens 15, Calif. (Distributor) Eastman Kodak Company 343 State Street Rochester, New York 14650 (Manufacturer) Memorex Corporation
THR-E-HT	62E	NY 9200-92 Tech. Mamo #6	Santa Clara, Calif. 95050 Plant: Same address
тик-е-ик	864	NY 9200-92, TM #4 Final Report	Santa Clara, Calif. 95050 Plant: Same address Minnesets W.
THR-E-H _T	888	NY 9200-92, TM #4 Final Report	St. Paul, Minnesota Plant: Hutchinson, Minn. Minnesota Mining & Mfg. Co.
HR-D-H _T	863	NY 6334 Tech. Memo No. 2, Final Report	Plant: Hutchinson, Minn.
			9 of 9
			[12] [14] [14] [14] [15] [15] [15] [15] [15] [15] [15] [15

QFL L-T-90-10 Movember 14, OPL L-T-90-9 June 16, 1966

FEDERAL QUALIFIED PRODUCTS LIST

OF

FSC 7510

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

L-T-90c(Interim Amendment 2)

TAPE, PRESSURE-SENSITIVE ADHESIVE

(CELLOPHANE AND CELLULOSE ACETATE)

This list has been prepared under the authority of the General Services Administration for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product by the Federal Government. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change as specified in the latest effective issue of the applicable specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. This listing of a prowithout notice; revision or amendment of this list will be issued as necessary. The listing of a prowithout notice; revision or amendment of this list will be specification requirements. Use of the duct does not release the supplier from compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification and such use will be grounds information for advertising or publicity purposes is expressly forbidden, and such use will be grounds for removal of the product so advertised from the list.

The activity responsible for this Qualified Products List is the Federal Supply Service, General Services Administration.

	ernment ignation	Monufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Туре І	Class A	300	NBS Report G-24070	Behr-Manning Company Watervliet, New York
ī	A	600	NBS Report G-24070	3M Company Bristol, Pennsylvania
ī	A	600	Extension of NBB Report G-24070	3M Company St. Paul, Minnesota
I	A	P_l/4	GSA-CCD Report 2640254 GSA-CCD Report 2650713	Permacel New Bruswick, New Jersey
Ι	A	Tuck #205B	GSA-QCD Report 2642466 GSA-QCD Report 2654026	Technical Tape Corp. Beacon, New York
1	A	Tuck #205B	GSA-QCD Report 2642729 GSA-QCD Report 2654024	Technical Tape Corp. Carbondale, Illinois
I	A	Black Wizard #405	Extension of GSA-QCD Report 2642466 Extension of GSA-QCD Report 2654026	Technical Tape Corp. Beacon, New York
1	A	Black Wizard #405	Extension of GSA-QCD Report 2642729 Extension of GSA-QCD Report 2654024	Technical Tape Corp. Carbondale, Illinois
			(1) 1	Page 1 of 3 QPL L-T-90-10
				FSS J

QPL L-T-90-10 November 14, 1966 SUPERSEDING QPL L-T-90-9 June 16, 1966

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Type Class I (All colors) I (All colors) II A II A II A II B II B II B	650 P-45 810 P-901 2046 6432 800 P-90	NBS Report G-24070 NBS Report G-24070 NBS Report G-24070 NBS Report G-24070 GSA-QCD Report 2610319 GSA-QCD Report 1 26614998 GSA-QCD Report 1 26714533 NBS Report G-24070 GSA-QCD Report GSA-QCD Report 1 26714533	Nome and Address 3M Company St. Paul, Minnesota Permacel New Brusnwick, New Jersey 3M Company St. Paul, Minnesota Permacel New Brunswick, New Jersey Le Page's, Inc. Gloucester, Massachusetts The Borden Chemical Company Nystik Tape Division Northfield, Illinois 3M Company St. Paul, Minnesota Permacel
I A II A II A II B II B II B II B II B	P-45 810 P-901 2046 6432 800	NBS Report G-24070 NBS Report G-24070 NBS Report G-24070 SSA-QCD Report 2610319 GSA-QCD Report 1 26514998 GSA-QCD Report 1 26714533 NBS Report G-24070 GSA-QCD Report	St. Paul, Minnesota Permacel New Brusnwick, New Jersey 3M Company St. Paul, Minnesota Permacel New Brunswick, New Jersey Le Page's, Inc. Gloucester, Massachusetts The Borden Chemical Company Nystik Tape Division Northrield, Illinois 3M Company St. Paul, Minnesota
(All colors) II A II A II A II A II B II B	810 P-901 2046 6432 800	NBS Report G-24070 GSA-QCD Report 2610319 GSA-QCD Report 2620738 GSA-QCD Report 1 26614998 GSA-QCD Report 1 26714533 NBS Report G-24070 GSA-QCD Report	St. Paul, Minnesota Permacel New Brusnwick, New Jersey 3M Company St. Paul, Minnesota Permacel New Brunswick, New Jersey Le Page's, Inc. Gloucester, Massachusetts The Borden Chemical Company Nystik Tape Division Northrield, Illinois 3M Company St. Paul, Minnesota
II A II A II B	P-901 2046 6432 800	NBS Report G-24070 GSA-QCD Report 2610319 GBA-QCD Report 2620738 GSA-QCD Report 1 26614998 GSA-QCD Report 1 26714533 NBS Report G-24070 GSA-QCD Report	3M Company St. Paul, Minnesota Fermacel New Brunswick, New Jersey Le Page's, Inc. Gloucester, Massachusetts The Borden Chemical Company Mystik Tape Division Northfield, Illinois 3M Company St. Paul, Minnesota
II A II B I B	2046 6432 800	2810319 G8A-QD Report 2620738 GSA-QD Report 1 26614998 GSA-QD Report 1 26714533 RBS Report G-24070 GSA-QCD Report	St. Paul, Minnesota Permacel New Brunswick, New Jersey Le Page's, Inc. Gloucester, Massachusetts The Borden Chemical Company Nyotik Tape Division Northrield, Illinois 3M Company St. Paul, Minnesota
I A I B I B	643≥ 800	GSA-QCD Report 1 26614998 GSA-QCD Report 1 26714533 NBS Report G-24070 GSA-QCD Report	The Borden Chemical Compan Mystik Tape Division Northfield, Illinois 3M Company St. Paul, Minnesota
I B	800	26714533 NBS Report G-24070 GSA-QCD Report	The Borden Chemical Compan Mystik Tape Division Northfield, Illinois 3M Company St. Paul, Minnesota
. B		GSA-QCD Report	3M Company St. Paul, Minnesota
1	P=90	GSA-QCD Report	
		GSA-QCD Report 2620739	New Brunswick, New Jersey
	C-43 and C-46	NBS Report G-24070	Behr-Manning Company
	144-90, 167-90, 157-90	NBS Report G-24070	Watervliet, New York *3M Company
A A	171-90	NBS Report G-24070	*3M Company Hutchinson, Minnesota
A	39M	GSA-QCD Report 1 26614998 GSA-QCD Report 26714604	LePage's, Inc. Gloucester, Massachusetts
	3960	GSA-QCD Report 1 26614998 GSA-QCD Report 1 26714605	LePage's, Inc. Gloucester, Massachusetts
, i	uck #1205B	GSA-QCD Report 2642467 GSA-QCD Report 2654026	Technical Tape Corp. Beacon, New York
A Tu		GSA-QCD Report 2642905 USA-QCD Report 2654024	Technical Tape Corp. Carbondale, Illinois
2 of 3 -T-90-10			

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Gov Des	vernment signation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
у <u>ре</u> 1	Class A	Tuck #1205C	GSA-QCD Report 2654026 GSA-QCD Report 26714606	Technical Tape Corporation Beacon, New York Technical Tape Corporation
Ī	A	Tuck #1205C	GSA-QCD Report 2654024 GSA-QCD Report 26714606	Carbondale, IIIII
ı	A	Black Wizard #1405	Extension of GSA-QCD Report 2642467 Extension of GSA-QCD Report 2654026	Beacon, New 1012
I	A	Black Wizard #1405	Extension of GSA-QCD Report 2642905 Extension of GSA-QCD Report 2654024	Technical Tape Corp. Carbondale, Illinois
				나를 가는 아내가 가능하는 다른 점점
1 This	; is a tentative aging by light r		m St. Faul plant used in dispe	
1 This the	; is a tentative aging by light r			
1 This the	; is a tentative aging by light r			
l This the	; is a tentative aging by light r			
1 This the	; is a tentative aging by light r			
1 This the	; is a tentative aging by light r			

FSS FORM 339 AUGUST 1962

QPL-TT-C-530-2 15 March 1963 SUPERSEDING QPL-TT-C-00530-1 26 March 1962

QUALIFIED PRODUCTS LIST PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION OF

PSC 8030

TT-C-00530

COATING COMPOUND, RUST INHIBITIVE, FISH OIL BASE

DESIGNATION	MANUFACTURIN'S DESIGNATION	TEST OR QUALIFICATION REPERBING	MANUFACTURES HAM
	HUST-CLEUM 769 Damp-Proof Red Primer	Robert W. Hunt Co. Rpt. K-4085 of 1/23/62	RUST-CLEUM Corp. 2425 Oakton Street Evanston, Illinois Plant: Same address
NOTE: NA			
	dditions or deletions of the ap	proved product have been made.	

NOTICE: This list may be made available to contractors, brespective bidders or subpliers who are required to procure items listed hereon to fulfill the requirements of a contract. Requests for this list shall include the number of the contract or Invitation for Bid for which it is required SUPERSIONED OF HILLITARY QUALIFIED PRODUCTS LIST 19 JULy 1965

PROMICTS QUALIFIED UNDER MILITARY SPECIFICATION FSC 9150

PRODUCTS QUALIFIED UNDER MILITARY SPECIFICATION VV-1-800

LUERICATING OIL, GENERAL PURPOSE, PRESERVATIVE, (WATER-DISPLACING, LOW TEMPERATURE)

MATING OIL, GENERAL PURPOSE, PRESERVATIVE, (WATER-DISPLACING, LOW TEMPERATURE) This list has been prepared for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product by the Department of Defense. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. The listing of a product does not release the supplier from necessary.

The activity responsible for this Qualified Products List is

Rook Island Government Designation	e activity Pesponatory Argent Laboratory, Rock Laland Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
	PQ Rust Preventive No. 172	N-6817	American Oil & Supply Co. 238-260 Wilson Avenue Newark, New Jersey 07105 Plant: Same address
	Brayco 300	M=6977	Bray 011 Co. 3344 Medford Street Los Angeles, California 9006. Flants: Los Angeles, Calif. Richmond, Calif.
	Nox Rust 518 Code R-62-203-1	M-6815	Daubert Chemical Co. 4700 S. Central Avenue Chicago, Illinois 60638 Plant: Same address
	Rust Foil #2675	M-6813	Franklin Oil Corp. 34-40 South Park Street Bedford, Ohio Plant: Same address
	Cosmoline 1116	N-6819	E. F. Houghton & Co. 303 West Lehigh Avenue Philadelphia, Fa. Plant: Franklin Oil Corp. Bedford, Ohio
	Octo11 90 Lot F-1804	% -6820	Octagon Process, Inc. 596 River Road Edgewater, New Jersey Plant: Same address
	petrotect 800	M-6814	Pennsylvania Refining Co. 2686 Lisbon Road Cleveland, Ohio Plant: Franklin Oil Corp. Bedford, Ohio
			Page 1 of 2 QPL-VV-L-800-7

QPL-VV-L-800-7 16 December 1966

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name
	Royco 308	M-6816	Royal Lubricants Co.
	Tectyl 893	M-6815	Hanover, New Jersey Plant: Same address Valvoline Oil Co. Division of Ashland Oil Refining Co. Freedom, Pa.
	Tectyl 800	M-6818	Plant: Franklin 011 Cor Bedford, Ohio Valvoline 011 Co. Division of Ashland 011 & Refining Co. Freedom, Pa. Plant: Same address

2 of 2 QPL-VV-L-800-7 QPL W-S-755-4 March 31, 1959

FSC 6250

FEDERAL QUALIFIED PRODUCTS LIST

OF

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

W-S-7550

STARTER, FLUORESCENT LAMP

This list has been prepared under the authority of the General Services Administration for use by or for the Government in the procurement of products covered by the subject specification and such issing of a product is not intended to and does not connote indorsement of the product bythe Federal Government. All products listed herein have been qualified under the requirements for the product specified in the latest effective issue of the applicable specification. This listis subject to change as specified in the latest effective issue of the applicable specification. This listis subject to change duct does not release the supplier from compliance with the specification requirement. Use of the duct does not release the supplier from compliance with the specification requirement. Use of the information for advertising or publicity purposes is expressly forbidden, and such use will be grounds for removal of the product so advertised from the list.

The activity responsible for this Qualified Products List is the Standardization Division, Federal Supply Service, Ceneral Services Administration.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Type I - Clow Switch, with lockout Class A-janual-reset 20 MG (15-20 vatt) " " " 30 MG (30 watt) "	FS-850 FS-850 COP-64	18/3-4-55 18/5-11-57 18/2-19-64 18/2-19-64 18/2-19-65 18/2-19-65 18/2-19-65 18/2-19-64 18/2-19-64 18/2-19-64 18/2-19-64 18/2-19-55 18/2-19-55 18/2-19-57 18/3-4-57 18/3-4-57 18/3-4-57 18/3-4-57 18/3-4-55 18/3-4-55 18/3-4-55 18/3-4-55 18/3-4-55 18/3-4-55 18/3-4-55 18/3-4-55	Bryant Electric Co. Dura Electric Lamp Company General Electric Go. Hub Electric Mfg. Co. Sylvania Electric Products, Inc. Bryant Electric Co. Dura Electric Co. Dura Electric Co. Bryant Electric Co. Bryant Electric Co. Bryant Electric Co. Bryant Electric Go. Dura Electric Lamp Co. Hub Electric Hamp Co. Hub Electric Hag. Co. General Electric Froducts, Inc. Sylvania Electric Froducts, Inc. Sylvania Electric Froducts, Inc. Sylvania Electric Froducts, Inc. Bryant Electric Lamp Company General Electric Co. Dura Electric Co. Dura Electric Co. Dura Electric Co. Dura Electric Co. Sylvania Electric Froducts, Inc. Bryant Electric Co. Dura Electric Co. Dura Electric Co. Sylvania Electric Froducts, Inc. General Electric Co. Sylvania Electric Froducts, Inc.
Type I - Clow switch, with lockout Class B-Automatic-res 20 AG (15-20 Matt) " " " 40 AG (AG Watt) " " "		FS/5-14-57 ·FS/122-66 FS/3-1-55 FS/5-14-57	Dura Electric Lamp Co. Sylvania Electric Products, Inc Bryant Electric Co. Dura Electric Lamp Co. 1 of 2 OFL-M-S-755-5 FSS

FEDERAL QUALIFIED PRODUCTS LIST CONTINUATION SHEET

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Type I - Glow switch, with lockout Class B-Automatic-reset cont'd			
40 AG. (40 Matt) 40 AG (30-40 Matt) 90 AG (85-90-100 Matt) " " 90 AG4 (85-90-100 Matt) " 4 Ph. " 4 Ph. " 1 " " 1 " " 1 " " 1 " " 1 " " 1 " " 24 Ph. " 4 Ph. " 5 Watth of the control	FS-4JNA FS-4/AOONA FS-49SNA FS-8SNA FS-8SNA FS-6SNA FS-6SNA FS-6SNA FS-6SNA FS-6SNAL FS-6SNAL FS-6SNAL FS-6SNAL	FS/la-22-66 FS/l-13-66 FS/l-2-56 FS/l-4-57 FS/l-13-66 FS/l-2-66 FS/l-2-66 FS/l-2-66 FS/l-2-66	Sylvania Electric Products, Inc General Electric Co. Hub Electric Mfg. Co. Huyant Electric Company General Electric Company General Electric Company Sylvania Electric Products, Inc. Bryant Electric Company General Electric Company General Electric Company General Electric Company Sylvania Electric Products, Inc.
40 MT (30-40 Watt) Type II - Thermal Switch with lockout Class B-Automatic-reset	TC-40(Verd-A-Ray)	FS/3-25-55	Industrial Starter Corp.
20 AT (15-20 Watt) 40 AT (30-40 Watt) 20 AT (15-20 Watt) 40 AT (30-40 Watt) Type III - Simple Glow Switch, without lockout (for shipboard use only)	TC-2 TC-4 TC0-2 TCC-4	FS/3-26-63 FS/2-13-63 FS/4-9-64 FS/2-13-64	Industrial Starter Corp. Industrial Starter Corp. Industrial Starter Corp. Industrial Starter Corp.
3C (4-6-8 Watt) 3C "	FS-5 FS-5 FS-5 FS-5 FS-2 FS-2 FS-2 FS-2 FS-2	FS/3-4-55 FS/5-14-57 FS/3-4-55 FS/11-13-56 FS/12-266 FS/3-4-55 FS/14-57 FS/1-21-58 FS/14-266	Bryant Electric Co. Dura Electric Lamp Co. General Electric Co. Hub Electric Mfg. Co. Sylvania Electric Products Co. Bryant Electric Co. Dura Electric Co. Hub Electric Co. Hub Electric Co. Sylvania Electric Co. Sylvania Electric Co.
(8 Watt)	AT-58	FS/11-7-58	Industrial Starter Corp.
Addresses of Namufacturers Bryant Electric Co., For I Dura Electric Lamp Co., Sha General Electric Co., 5 Na Huk Electric Mfg., Co., 523 ylvania Electric Products ndustrial Starter Corp., 3; urelite Products Co., Inc.,	are:), Barmum Station; Bridgep), 64-66 East Bigelow Str thaway Street; Providende, Medford Street; Charlest Ino.; Waldoboro, Maine 5 Dean Street; Brooklyn; N 2733 That Avenue.	ort, Connecticut 06602 bet; Newark, New Jersey 07 Rhode Island man, Massachusetts 02129 572 ew York 51, New York	11.

2 of 2

88A DC 67. 1220

QPL-W-F-101-6 December 27. 1966 SUPERSEDING QPL-W-F-101 May 13, 1966

FSC 4140

FEDERAL QUALIFIED PRODUCTS LIST

OF

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

W-F-101g

FANS, ELECTRIC: BRACKET AND DESK RIGID BLADES, (FOR SHORE USE)

This list has been prepared under the authority of the General Services Administration for use by or for the Government in the procurement of products covered by the subject specification and such issuing of a product is not intended to and does not connote indorsement of the product by the Federal Government. All products listed therein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change as specified in the latest effective issue of the applicable specification. This list is subject to change duct does not release the supplier from compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification requirements. Use of the duct does not release the supplier from compliance with the specification and such use will be grounds for removal of the product so advertised from the list.

The activity responsible for this Qualified Products List is the Federal Supply Service, General Services Administration.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
Type I, Size 3	Model No. CG-16 Cat. No. CG-1657	FS/3-13-61	Hunter Division Robbins and Myers, Inc. Memphis, Tennessee
Type 1, Size 3	Model No. CG-162 Cat. No. CG-162-361	FS/12-8-66	Hunter Division Robbins and Myers Memphis, Tennessee
Type 1, Size 3	Model No. CG-1645 Cat. No. CG-164-3628	FS/12-8-66	Hunter Division Robbins and Myers Memphis, Tennessee Emerson Electric Mfg. Co
Type 1, Size 3	Model No. 79648-BD-N	FS/3-13-61	Kennett, Missouri
Type 1, Size 3	Model No. 79648-BD	FS/3-13-61	Emerson Electric Mfg. C Kennett, Missouri

As of December 27, 1966, no type III, Size 5, Fans are qualified under Federal Specification W-F-101g.

1 of 1 OPL-W-F-101-6

May 16, 1966 Superseding QPL-W-F-97-6 December 15, 1964

FEDERAL QUALIFIED PRODUCTS LIST

FSC 4140

OF

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

W-F-97e

FAMS, CIRCULATING, COLUMN (ELECTRIC, RIGID BLADES NON-OSCILLATING, NOT FOR MARINE SERVICE)

This list has been prepared under the authority of the General Services Administration for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product by the Federal Government. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This lists usual to the product without notice; revision or amendment of this list will be issued as necessary. This listing of a product does not release the supplier from compliance with the specification requirements. Use of the for removal of the product so advertised from the list.

The activity responsible for this Qualified Products List is the Federal Supply Service, General Services Administration.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
30-inch size	Model No. PG-30P Cat. No. C-3058P	FS/3-13-61 FS/3-13-61	Chelsea Products, Inc. Plainfield, New Jersey Hunter Division Robbins and Myers, Inc.
30-inch size	Model No. K55-TT-6591	FS/3-13-61	Termessee
30-inch size	Model No. G3058C	FS/11-20-64	Emerson Electric Mfg., Co Kennett, Missouri Hunter Division Robbins and Myers, Inc. Memphis, Tennessee

FSS JUN 65 151

QPL-TT-R-00248-2 8 December 1965 Superseding QPL-TT-R-0: 248-1 6 July 1965

QUALIFIED PRODUCTS LIST PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION TT-R-00248

FSC 8010

REMOVER, PAINT AND LACQUER, SOLVENT TYPE

This list has been prepared for use by or for the Government in the procurement of products covered by the Inis list has been prepared for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product by the Department of Defense. All products listed herein have been qualified under the requirements for product by the Department of Detense. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change the product as specified in the latest effective issue of the applicable specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. The listing of a product does not without notice; revision or amenament of this list will be issued as necessary. The listing of a product does not release the supplier from compliance with the specification requirements. Use of the information shown hereon for

The activity rest	om compliance with the purposes is expressly forbidde consible for this Qualified Produ MANUFACTURER'S DESIGNATION	n. Ucts List is the Bureau of Naval W TEST OR QUALIFI- CATION REFERENCE	
DESIGNATION None	"Pennchem 2277- N-22"	Report No. NAEC-AML- 2082 dated 10 Feb 1965	Pennsalt Chemicals Corp. Three Penn Center Philodelphia 2, Pa. Plants: Los Angeles, Calif. Dallas, Texas Carnwell Heights, Pa. College Park, Ga.
None	Turco 4951-X	Report No. NAEC-AML- 2082 dated 10 Feb 1965	Turco Products, Inc. 24600 South Main St. Wilmington, Calif. Plants: Wilmington, Calif. Houston, Texas Joliet, Illinois Philadelphio, Pa. 19142
None	HARCO 96	Report No. NAEC-AML- 2321 of 24 Nov 1965	Harley Chemicals, Inc. 17th & Federal Sts. Camden, N. J. 08105 Plant: Same address

QPL TT-E-515-3 3. Herch 1965 SUPERMEDING QPL TT-E-515-2 15 June 1964

FSC 8010

FEDERAL QUALIFIED PRODUCTS LIST

PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

TT-E-515
ENAMEL, ALKYD, LUSTERLESS, QUICK DRYING

This list has been prepared for use by or for the Government in the procurement or proend does not connote indorsement of temperature by the Department of the product is not intended to
listed there been qualified under product by the Department of Defense. All products
listed there been qualified under requirements for the product as specified in the
of a product provided for a product of the product as pacified in the
of a product on trelease the supplier from compliance with the specification requirements. Use of the information shown hereon for advertising or publicity purposes is

The activity responsible for this Qualified Products List is Army Ordance Comp.

The activity responsible for this Qualified Products List is Army Ordnance Corps.

COATING AND CHEMICAL LABORATORY, ABERDEEN PROVING GROUND, MARYLAND

Designation	AND CHEMICAL LABORATORY, ABERI Manufacturer's Designation	Test or Qualification	Manufacturer's Man
Dull Red No. 30109 - Qua	lification out	Reference	and Address
	lification extended to Maroon I 380-30109	lo. 30111	
Red No. 31136	103-R-85	22,721	
		18,702	Enmar, Inc. W. P. Fuller & Company
ellou it	103-R-89		to Company
710m No. 33538 - Qualifi	cation extended	18,902	W. P. c. i.
	cetion extended to Orange No. 3	2246	W. P. Fuller & Company
	38B-33538	18,709	V 9
	300-33538	22,340	W. P. Fuller & Company
ive Drab No. X34087 - Qua	lification extended to Field D		Enmar, Inc.
0	extended to Field Di	ab No. 30118	
	6206036-c	77.80	Yellow No. 30257
	38B-X34087	18,472	
		22,344	DeSoto Chemical Coatings, Inc.
	103-6-591		Enmar, Inc.
	RGL-26157-C	18,710	W.P. Fuller & Company
	J-1340	18,538	
i i	971340	17, 999	The Gildden Company
	A-303		William Armstrong Smith Company
m Green No. 34102		19,805	Watson-Standard Company
11 34102 - Qual	fication extended to Green No. 38A-34102	AF-L-A	Company
	36A-34102	22,590	
	103-G-592		Enmar, Inc.
	그리다의 하고 함께 보았습니다. 그	18,895	W.P. Fuller & Company

1 of 3 QPL TT-E-515-3

OPL TT-E-515-3 3 March 1965

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
n u	Qualification extended to Medium Blue No- 1443-1 388-35193 103-K-503 X-1623A Qualification extended to Ocean Gray No- and Light Yellow 33711 388-36231 103-H-607 RGL-28074-0	22,345 18,705 21,294	W.P. Fuller & Company Suntry Paint & Chemical Company, Inc
Black No. 37038	E-2430 6202046A 388-37038 103-8-72 RGL-26284-A	17,930 22,342 18,707 18,536	DeSoto Chemical Coatings, Inc. Enmar, Inc. W. P. Fuller & Company The Glidden Company
	ualification extended to Sand No. 30277 6208128-C K-379-2 388-37875 103-W-95 RGL-26285-A E-1666	18,471 17,912 22,192 18,706 18,537 18,698	DeSoto Chemical Coatings, Inc. Durako Paint & Color Corp. Enmar, Inc. W. P. Fuller & Company The Gildden Company William Armstrong Smith Company

2 of 3 QPL TT-E-515-3

MULTIPLE ADDRESS LISTING (Military and Federal Qualified Products Lists)

Manufacturer's Name Address and Plant QPL TT-E-515-3 3 March 1965

Reference
Number

DeSorto Chemical Coatings, Inc.
1350 South Mostner Avenue
1350 South Mostner
Eastern Division
Pennsauken, N. J.
Carolina Division
Guerten Division
Guerten Division
Guerten Division
Guerten Division
Pacific Division

Reference Number Manufacturer's Name Address and Plant

Sentry Paint & Chemical Co., Inc.
Mill & Lawrence Streets
Darby, Pa.
Plant: Same address
William Armstrong Smith Company
156 Forrest Avenue
P.O. Box 430
East Point, Georgia 30044
Plants: East Point, Georgia
Plants: East Point, Georgia
Reliance Chemical Co. of Kentucky
Richmond, California
Reliance Chemical Co. of Kensas

Watson-Standard Company 225 Galveston Avenue Pittsburgh 30, Pa. Plant: Same address

> 3 of 3 OPL TT-E-515-3

QPL TT-E-516-4 20 March 1967 SUPERSEDING QPL TT-E-516-3 28 June 1966

FEDERAL QUALIFIED PRODUCTS LIST PRODUCTS QUALIFIED UNDER FEDERAL SPECIFICATION

ENAMEL, LUSTERLESS, QUICK DRYING, STYRENATED ALKYD TYPE

FSC 8010

This list has been prepared for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsament of the product by the bapartment of Defense. All products listed herein have been gifted under the requirements. This list is subject to change latest effective issue of the applicable specification. This list is subject to change without notice; revisit or amendment of this list will be used as necessary. The listing of a product does not release the supplier from compliance with the specification requirements. We of the information shown hereon for advertising or publicity purposes is ments. We of the information shown hereon for advertising or publicity purposes is expressly forbidden.

The activity responsible for this Qualified Freducts List is Army

expressly forbidden.

The activity responsible for this Qualified Products List is Army
COATING AND CHEMICAL LABORATORY, ABERDEEN PROVING GROUND, MARYLAND 21005

Acveragent	AL LABORATORY, ABERDEEN PROVING Manufacturer's Designation	Test or Qualification Reference		Manufacturer's Name and Address
ed No. 31136	PH-5386-A 860-R-195 C-3684-A EB-1010 36-31136 103-R-94 RGL-29009-C	16,589 16,636 16,625 16,554 20,840 19,627 16,561 21,252	Cook Pai DeSoto Egyptia Enmar, W. P. I The GI	Fuller Paint Company idden Company hemical Corp.
Lt. Red 31158	Q30R005 F93 R C14 43-10897 36-31158 103-R-26	19,067 24,048 22,593 22,870	Allie Enmar W. P.	in-Williams Company d Paint Hfg. Co., Inc. , Inc. , Fuller Paint Company Gildden Company
Oranga No. 32246	RGL-35025A 43-10527 C-1325A 36-32246 51024	22,950 22,921 16,663 21,258 23,980 22,519	Alli DeSc Enma 1.V	ed Paint Hfg. Co., Inc. oto Chemical Coatings, Inc. ar, Incc. Industrial Coatings, Inc. lied Paint Hfg. Co., Inc.
Tow No. 33538	43-10381 71-613E12-1 315 860-Y-149	16,583 24,238 16,634	Co	lanese Coatings Company n-Lux Paint Products, Inc. ok Paint & Varnish Company of 12 PL TT-E-516-4

Governmer Designati	ion Manufacturer's Designation	Qual	Test or Qualification Manufact Reference and Ac	
Yellow No. 33538	(Cont'd) 593-007			7001658
in-	36-33538	19,687	DeSoto C	hemical Coatings, inc.
	103-Y-89	21,001	Enmar,],	oatings, inc.
0	RGL-29132-D	19,960		
. 0	030Y016	16,563	The Clina	ler Paint Company en Company
n ·		164 ر24	Inter-t	en company
0	51023	24,368	TWA	ical Corp.
n .	2028-6c	24,385	1.v.c. Inc	dustrial Coatings, inc.
n .	F93 Y C12	16,648	Benjamin M	loore & Company
	E-2748G		She rwin -Wi	Illams Company
Olive Drab No. X3408	B7 - Qualification extended to Bro	-13442	The Voltax	Company, Inc.
	In soon	Wn No. 30117		
n .	LR-3087	18, 199	At	
14.0	X-43-9335	19,615	Akron Paint	& Varnish Company
n e	R-7575-B	20,451	Allied Pain	t Mfg. Co., Inc.
100	9347	18,071	Armstrong Pa	int & Varnish Works, Inc
	A-931	24,064	n. A. Becker	Company
n e	7023		Andrew Brown	Company
	22-776	23,998	Bisonite Co.,	!nc.
n.	300	24,411	The Chemical	Coatings Co.
	860-G-220	23,719	Con-Lux raint	Products, inc.
	16761-9	18,095	Cook Paint &	Varnish Company
i u	35 G 87	18,860	DeSoto Chemica	of Coatings, Inc.
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	1071-158	24,670	C. H. Dragert	Com-
	L4622	19,591	E. I. duPont	company, inc.
	0552-1	18,078	Durates of	e Nemours & Co., Inc.
30 S		22,401	Duralec Chemic	al Corporation
н	36A-X34087	20, 839	rangern States	Paint & Varnish Co.
0	305160	23,636	Enmar, Inc.	
n .	103-G-184	22,931	Finnaren & Hale	Y, inc.
m in the state of	RGL-29049-B	18,658	W. P. Fuller Pai	nt Company
	60-5483	24,579	The Glidden Comp	
n .	XD-2864		Guardsman Chemic	al Coatings, inc.
	M5571	21,297	Hanna Paint Manu	facturing Company
	50957	17,931	industrial Paint	Company
12		23,977	1.V.C. Industrial	Coast
-E-516-4			, //4/	coutings, inc.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
	ification extended to Brown No	. 30117 (Cont'd)	
live Drab No. X34087 - Qual	ification extended to	18,647	Interchemical Corp.
	0306059	20,174	J. Landau & Company, inc.
	4086B	23,517	Longhorn Paint Company, Inc.
	43-127	23,712	Midwest Paint Mfg. Co.
	1-4001		Minnesota Paints, Inc.
	12402	18, 139	Mobil Chemical Company
	SA-181	18,044	Napko Corporation
	s2050	24,516	Niles Chemical Paint Company
41 . 13. 13. 15.	B-1222	18,846	F. O. Pierce Company
	J610A	18,040	H. K. Porter Co., Inc.
	GL-2686	22,468	H. K. Porter cory
a (4)		23,898	Riverside Laboratories
	AT-266	23,256	Seibert-Oxidermo, Inc.
	X535 ⁴	21,140	Sentry Paint & Chemical Co., inc.
10 (10 m)	X-1528	18, 578	Sherwin-Williams Company
	F93 G C81	24,027	Speed-O-Laq Products Co., Inc.
	19-4058	19,343	Stabler & Company, Inc.
	2050	23,493	Standard Coating Corp.
	4580-1549	24,496	Tenax Finishing Products Co., Inc.
	57-T-10 ⁴²		Western Specialty Coatings Co.
	TX -3522	24,622	요즘 사람들은 사람들이 되었다. 유로를 가입하는 것으로 <u>모르</u>
		16,633	Cook Paint & Varnish Company
Green No. 34108	860-G-198	21,257	Enmar, Inc.
	36-34108	19,681	W. P. Fuller Paint Company
	103-G-610	16,560	The Glidden Company
	RGL-30113	18,875	Interchemical Corp.
	0306061	18,575	Sherwin-Williams Company
	F93-G-C79	10,572	
	- I d to Medi	um Blue No. 35109	Cartising Cost Inc
Light Blue No. 35193 -	Qualification extended to Medi	21,878	Allied Paint Manufacturing Co., Inc.
n e		16,558	DeSoto Chemical Coatings, inc.
	11561-1	17,538	E. 1. duPont de Nemours & Co., Inc.
Andrew Community of the	1071-147	23,487	Duralac Chemical Corp.
	L3913B	16,555	Egyptian Lacquer Mfg. Company
	• EB-1011	(0,50)	2 26 12
			QPL TT-E-516-4
Mark State County			

QPL TT-E-516-1

Government Designation	Manufacturer's Designation	Test or Qualification Reference		Manufacturer's Name and Address
Light Blue No. 35193	- Qualification extended to Med			
	extended to Med	ium Blue No. 35109		
	36-35193	21,337		
	103-K-511	19,925	Enmar,	
	RGL-29970-B		W. P. FL	iller Paint Company
	50956	20,055	The Glid	den Company
***	Q308006	23,982	1.0.0. 1	ndustrial Coatings, Inc.
0	H~2]4]	18,874	Intercher	nical Corp.
		16,587		ir Paint Company, inc.
	X-1838	21,977	Senteu D.	
Blue Gray No. 74923	F93 L C15	18,577		int & Chemical Co., inc.
7 1101 30231 (Qualification extended to Light	Green No. 34558 C1-	sue LM1 U=A	Illiams Company
	Qualification extended to Light 43-10171	20,000 318	te No. 26132, and	Ocean Gray No. 36176
H .	A-507	-2,000	Allied Pai	nt Manufacturing Co., inc.
li li	860-A-164	16,919	Andrew Bro	wn Company
	11261-7	16,718		& Varnish Company
ir .	1071-148	16,559	DeSoto Cher	nical Coatings, inc.
u u	[1] 하나 없었다고 하는 그리고 하고 있습니다.	17,587	E.I. du Por	it de Nemours & Co., Inc.
	EB-1012	16,556	Egyptian	cquer Mfg. Co.
	368-36231	22,341		cquer Mfg. Co.
	103-H-606	19,300	Enmar, inc.	
	RGL-29332-D	18,736	W. P. Fulle	r Paint Company
	XD-1862		The Glidden	
	50960	21,296	Hanna Paint	Mfg. Company
n	Q30A036	23,976	I.V.C. Indus	trial Coatings, Inc.
	B-1050	18,873	interchemica	l Corp.
	x2458	16,568		I Paint Company
ii .		24,602	Sentry Paint	& Chemical Co., inc.
	F93 A C19	16,600	Sheruta utu.	o unemical Co., inc.
lack No. 37038	19920	16,604	Sherwin-Willi	ams Company
"" 37038	4-291	8,571	George D. Wea	therill & Company
	X-43-3871		Adelphi Paint	& Color Works, Inc.
	X-124	13,845	Allied Paint P	lanufacturing Co., inc.
u i	A-59	9,660	John L. Armita	ge & Company
	4-6294	6,929	Andrew Brown Co	ompany
	616-31	20, 753	Celanese Coatin	
n (1944)		7,714	Celanese Coatin	-3º company
f 12	9911	6,980		igs company
TT-E-516-4			Conchemco, Inc.	

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Nanufacturer's Name and Address
D0013(1-1-1-1)		6,616 Co	ok Paint & Varnish Company
Black No. 37038 (contid)	860-B-4	8,922 Co	ook Paint & Varnish Company
Black No. 37030 (com	860-B-6		eSoto Chemical Coatings, Inc.
	7-11-598-011-1	그녀는 돈 없는 사람은 강에 들어 있다.	.1. duPont de Nemours & Co., Inc.
	1071-123	9,102	astern Lacquer Corporation
"	н-657-1	<i>"</i> "	Egyptian Lacquer Mfg. Company
	EB-282	1,213	Enmar, Inc.
	36-37038	20,500	W. P. Fuller Paint Company
	103-8-9	8,127	W.P. Fuller Paint Company
0	103-B-78	19,667	P.D. George Company
		11,283	The Glidden Company
n n	39-8074	7, 163	The Glidden Company
	41218	7,353	Guardsman Chemical Coatings, Inc.
	RGL-22818	7,628	Guardsman Chemicos
	60-0040	12,684	Hilo Varnish Corporation
	н-4476	9, 106	Interchemical Corporation
	6SP43 -7702	6,805	Interchemical Corporation
	Q30K021	23,975	1.V.C. Industrial Coatings, Inc.
	51025	6,753	Jones-Blair Paint Company, inc.
	K-X-89-9		v-lley Paint Company
Û	E-322	15,093	Merrimack Industrial Finishes, Inc.
	sE-5750	7,684	Mobil Chemical Company
, v	240-900-LB354	6,555	Mobil Chemical Company
	s-3750	9,922	Monroe Sander Corporation
n		9,015	Benjamin Moore & Company
in	u 4337	9, 262	National Lead Company
	B-1	7,033	Pittsburgh Plate Glass Company
	TR-18653	7,117	Pratt & Lambert, Inc.
	UC-35025	10,997	Pratt & Lamber C. 1
u u	коз28	8 ₂ 59 ¹ 4	Reliance Universal, Inc. Sentry Paint & Chemical Company, Inc.
	25-B-2353A	14,095	Sentry Paint & Unemico.
n.	X-443	6,598	Sherwin-Williams Company
a a	F93 B C8	13,625	William Armstrong Smith Company
	K-67	8,961	Sun Chemical Corporation
	11880		Vita-Var Corporation
	F2 1563	12,698	
and the second second			5 of 12 QPL TT-E-516-4

Government Designation	Manufacturer's Designation	Test Qualifi	Cation	Manufacturer's Name
magenta No. 27142 - Qua	lification extended to Purple No 36-27142	Refer	ence	and Address
	36-27142 No			4.4
	103-P-2	22,592	Enmar,	Inc.
	50962	22,871		Fuller Paint Company
		23,978	1,40	raint Company
Aluminum 17178	F93 P YI	24,476		Industrial Coatings, inc.
	43-10361	22,507	onerwi i	n-Williams Company
i i	36-17178	22,764	Allied	Paint Manufacturing Co.,
	103-A-1		Enmar,	inc.
	50961	22,869	W. P. F	uller Paint Company
	E-3932	23,974	I.V.C. 1	ndustrial Coatings, inc.
White No. 37875	43-10189	24,215	William	Armstrong Smith Company
dir.	PM-1192-A	22,033	Allied P	aint H
4	A-58	14,633	Aut	aint Manufacturing Co.
		6,930	Yaromot IV	e Finishes, inc.
	9125	6,978		own Company
	295		Conchemco	
n e	860-W-81	23,622	Con Lux Pa	lint Products, Inc.
	11061-6	16,632	Cook Paint	& Varnish Company
	1071-146	7,111	DeSoto Che	mical Coatings, inc.
**************************************	36A-37875	16,941	E. I. duPa	toatings, inc.
	103-W-29	20,483	Enmar, inc.	nt de Nemours & Co., Inc.
		22,932		
n n	US-10919	6,699	To Fulle	r Paint Company
n ·	RGL-29246	9,496	Gilmore & N	olan, inc.
n.	60-1062	7,629	The Glidden	Company
	50963		Guardsman Ch	emical Coatings, inc.
,	Q30W009	23,979	I.V.C. indus	trial Coatings, Inc.
	K-x-74-9	13,921	Interchemica	Corporation
	E-319	6,752	Jones-Blair s	POTATION
	240-100	15,091	Kellev Dar	aint Company, Inc.
		6, 795	Kelley Paint	Company
6	E-5868	8,936	Mobil Chemica	I Company
n e	WH-4	9,265	Monroe Sander	Corporation
	46881		Benjamin Moore	& Company
	UC-35026	10,993	National Lead	Company
12	X2431	7,121	Pittsburgh Plat	e Glass Company
12 TT-E-516-4		24,344	Sentry Paint &	Chemical Co., inc.
			in which the	

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
White No. 37875 (cont ¹ d)	F93 W C9 18358 6687 LAFK 12113	6,861 20,834 7,298 24,090	Sherwin Williams Company Titanine, Inc. Valspar Corporation Wyandotte Paint Products Co.

7 of 12 QPL TT-E-516-4

MULTIPLE ADDRESS LISTING (Military and Federal Qualified Products Lists)

Reference . Number	Hanufacturer's Hame Address and Plant	Reference Number	Hanufacturer's Ham Address and Plant						
Adelphi Paint & Color Works, Inc									
86-00 Dumont Avenue Ozone Park, New York 11417		Ce lanese Const							
. Tunt: Same address		Celanese Coatings Company 224 E. Broadway PO Box 1863							
The Akron Paint & Varnish Co. 1390-Firestone Parkway		Louisville, Kentucky 40201 Plants:							
Akron, Ohio 44301 Plant: Same address		Jones - Dabney Detroit	Division Michigan						
A111 - 4 - 5 - 4		Louisyi	le. Kv.						
Allied Paint Manufacturing Co., Inc.		Mewark, N. I							
834 West Third Street		Riverside C-11c							
Lansdale, Pa. 19446 Plants: Lansdale, Pa.		Devoe Paint Division							
Cosden Chemical Coatians		Houston, Texas Los Angeles, Calif Louisville, Kentucky							
Beverly, New Jersey									
John L. Armitage & Co.	그리고 🔨 그리고 하는데 살이다.								
		Devoe Marine Division							
Newark. New Jareau 0711		Newark, N. J. Riverside, Calif.							
Plant: Same address									
		Chemical Coatings C	Officiany						
Armstrong Paint & Varnish Works, Inc									
Chicago, Illinating Avenue		Rocky Hill, Connecticut 06067 Plant: Same address							
lants: Chicago, Illimata		. Junt. Same address							
Stewart Mowry Co. Chicago, Illinois Automotive Finishes, Inc. PO Box 457, NN Station Detroit, Michigan 48204 Plants: Detroity Michigan Dearborn, Michigan		Con Chemco, Inc.							
		HUI Severn Street Baltimore, Md. 21230 Plants: Baltimore, Hd. Boydell Bros. Detroit, Nichigan Seldlitz Paint & Varnish Co. Kansas Circ.							
					A. Becker Company		n. B. Davis Co.		
					441/ Lanadon Farra n		Baltimore, Md.		
					Cincinnati, Ohio 45237 Plant: Same address		John W. Masury & Son, Inc. Baltimore, Md. W. H. Sweney & Co.		
					sonite Company, Inc. 50 Military Road		Seidlitz Painte	of Tau.	
Onawanda, New York 14150 lant: Same address		Masury Paints of Texas, Inc.							
					맞으로 가는 이번 가게 가장하는 하다.		Uld Colony Paint	C CL	
ndrew Brown Company 31 S. District Blvd.		Old Colony Paint & Chemical Co. Los Angeles, Calif.							
ants: Los Angeles, Calif.		Con-Lux Paint Products, Inc. Ethel and Talmadge Roads							
Laurel, Md.		Edison, New Jersey 08817 Plant: Same address							
					Kent, Washington				
Marietta, Georgia		Cook Paint & Varnish Co							
[요. 10] 작용회가, 지난하고 있습니다		1412 Knox Street							
		Kansas City, Missouri 64141							
		MO+ Kansas City Mi-							
요즘 사람이 그러 나는 얼마를 하게 되고 있었다.		Detroit, Michi Houston, Texas							

8 of 12 QPL TT-E-516-4

MULTIPLE ADDRESS L'STING (Hillitary and Federal Qualified Products Liste)

QPL TT-E-516-4 20 March 1967

Rofarence Number	Manufacturer's Name Address and Plant	Reference Number	Manufacturer's Name Address and Plant
		W. P. Fuller Pa	
Soto Chemical Coatings, Inc.	얼마를 하다고 있는 것이 없는 것이다.	450 East Grand	Avenue
		So. San Francis	an Francisco, Calif.
		Plants: 50. 50	ngeles, Calif
licago, Illinois lants: Chicago, Illinois			le, Washington
		Seatt	그림 그렇게 하는 사람들이 많다.
Pennsauken, New Jersey		P. D. George Co	ompany
a line Division			
Couthwestern Division		Plant: Same a	nddress
Carland, Jexas			
Division		Gi Imore & Nola	
Chicago, Illinois			
		I an Angeles.	Calif 90025
Berkeley, Calif.		Plant: Same	audress
C. H. Dragert Company, Inc.			
C. H. Dragert company, the		The Glidden Co	
2518 Chalk Hill Noas			
		Cleveland, Un	veland, Ohio
Dallas, Texas 75222 Plant: Same address		Chic	Cado, IIIIIIO.
ridni. Jame 535.		Don't	ding. Pa.
E. I. duPont de Nemours & Co.	, tuc.	Minr	neapolis, minii
E. I. duPont de Memos 19898 Wilmington, Delaware 19898	그리 살인 호텔 의 기존하는 중요점	S+-	Louis, Mo.
		New	Orleans, La.
		4.1	Lanta Ga.
Fort Madison, lowe		Can	Francisco, Calif.
Toledo, Ohio		Due	na Park, Calif
	Calif.	Car	rrollton, lexas
So. San Francisco)	医自己性氏征 电电阻 基础设计设计	Por	rtland, Oregon
Flint, Michigan			hemical Coatings, Inc.
newtonl Core		Guardsman C.	Avenue, S.W.
Duralac Chemical Corp.		1350 Steele	Avenue, arm 49502
84 Lister Avenue Newark, New Jersey 07105			
Newark, New Jersey Plant: Same address		l amber	et corp.
Plant: Same addiess			
Eastern Lacquer Corporation		The Sc	chaefer Varnish CO.
1080 Eastern Avenue		, ic	ouisville, Kentucky
	바람이는 이 아이들의 아들은 것		
Plant: Same address		Hanna Paint	t Mfg. Co.
	ish Co.		
Eastern States Paint & Varr		Columbus	Ohio 43211
		Plants: C	Columbus, Ohio s B. Sipe & Company
		James 0	s B. Sipe o comp.
Plant: Same address			- Daint Co. Inc.
Les com	any	Hann	Birmingham, Alabama
Egyptian Lacquer Mfg. Comp	5년, 이번 시간으로 가게 하시를 된		
PO Box 444			ish Corporation
Newark, New Jersey		nty of C	arpenter-norton company
Plants: Newark, N.	g 🌬 nga nagan ngilik asah si s	Div. of C	Street
Lafayette, Indiana			
La. 0, 0, 0, 0, 0		Plant: S	Same address
Enmar, Inc.	이 살아 이 바다 보이다 하시다.		
25th & New York		Industria	al Paint Company
Wichita, Kansas 0/201			
Wichita, Kansas Plants: Wichita, Kansas Little Rock, Arkansas		Plant:	Same address
	e proper a major deligrados de		
Little wond			
Little Room			
Finnaren & Haley Inc. 1			
Finnaren & Haley Inc. 1 5630 Summer Street			
Little Room			9 of 1 QPL W

10 of 12 QPL TT-E-516-4

MULTIPLE ADDRESS LISTING (Military and Federal Qualified Products Lists)

Reference Manufacturer's Name Address and Plant Reference Hanufacturer's Hane Address and Plant Interchemical Corporation
Finishes Division
1255 Broad Street
Clifton, New Jersey 07015
Plants: New Jersey 07015
Plants: Newark, N. J. 07101
Charlotte, N. C. 28203
Morganton, N. C. 28655
Detroit, Michigan 48210
Grand Rapids, Michigan 49509
Chicago, 111. 60658
Chicago, 111. 60658
Chicago, 111. 792803
Los Angeles 111. 792803
Anaheiston, Ind. 46750
Anaheiston, 117. 92803
Los Angeles 111. 792803
Interchem Canada Ltd.
Toronto, Ontario, Canada
Rinshed-Mason Co. of Canada
Scaffe & Co., Ltd.
Brantford, Ontario, Canada
Carterio, Canada Mobil Chemical Company 1024 South Avenue Plainfield, N. J. 07062 1024 South Avenue
Plainfield N. J. 07062
Plaints:
Automotive Finish Division
Ferbert Schorndorfer
Cleveland, Dhio
Maintenance Finish Division
Socony Paint
Beaumont, Texas
Los Angeles, Callif
Metuchen, N. J.
Metal Finishs Division
American Marietta
Kankakee, Ili
Louisville, Ky.
Arco, Cleveland, Ohio
Marietta Paint and Color
Migh Point, N. C.
Marietta, Ohio
Sewell Avenue
American Division
Schon-Merietta Paint and Color
Migh Point, N. C.
Parietta, Ohio
Sevellarit, Kansas City, Mo.
Packaging Goating Division
Stonn-Messee
Fittsburgh, Pa.
Rochester, Pa. 1.V.C, Industrial Coatings, Inc. 2245-50 Valley Avenue Indianapolis, Indiana 46218 Plant: Same address Jones-Blair Paint Company, Inc. 6969 Denton Drive Dallas, Texas 75235 Plant: Same address The Monroe Sander Corporation 10-18 46th Avenue Long Island City, New York 11101 Plant: Same address Kelley Paint Company 1445 So. 15th Street Louisville, Kentucky 40210 Plant: Same address Long is the Long i J. Landau & Co., Inc. PO Box 135 Washington Avenue Caristadt, New Jersey 07072 Plant: Same address Longhorn Paint Company, Inc. PO Box 5099 San Antonio, Texas 78201 Plant: Same address Merrimack Industrial Finishes, Inc. 33 Railroad Avenue Haverhill, Massachusetts 01830 Plant: Same address Midwest Paint Manufacturing Co. 17-23 Main Street Minneapolis, Minn. 55413 Plant: Same address Napko Corporation PO Box 14509 Houston, Texas, 77021 Plant: Same address Minnesota Paints, Inc.
1101-3rd Street South
Minneapolis, Minn 55415
Plants: Atlanta, Ga.
Minneapolis, Minn
Ft. Wayne, Indiana
Dallas, Texas National Lead Company 2240 Twenty-Fourth Street San Francisco, Calif. 94107 Plants: San Francisco, Calif. Los Angeles, Calif. Seattle, Weshington Perth Amboy, N. J. Chicago, Illinois

MULTIPLE ADDRESS LISTING (Military and Federal Qualified Products Lists) QPL TT-E-516-4 20 March 1967

Reference Number

Manufacturer's Hame Address and Plant

Reference Number

Manufacturer's Name Address and Plant

Niles Chemical Paint Company 3rd & Fort Streets Niles, Michigan 49120 Plant: Same address

F. O. Pierce Company 2-33 50th Avenue Long Island City, New York 11101 Plant: Same address

H. K. Porter Co., Inc. Box 494 New Brunswick, New Jersey 08903 Plant: Same address

Pratt & Lambert, Inc.
75 Tonawanda Street
Buffalo, New York | 1207
Plants: Buffalo, N. Y.
Dibble Color Company
Detroit, Michigan
Waggener Paint Company
Kanasa City, Missouri

Reliance Universal Inc.
1901 Sheridan Road
North Chicago, Illinois 60064
Plants: N. Chicago, Illinois
Louisville, Vy.
Los Angeles Callf.
Bouston, Texas
Irvington, N. J.
High Point, N. C.
Roanoke, Virginia
Salem, Oregon

Riverside Laboratories 411 Union Street Geneva, Illinois 60134 Plant: Same address

Sentry Paint & Chemical Co., Inc. Mill & Lawrence Street Darby, Pa 19023 Plant: Same address

Seibert-Oxidermo, Inc. 6455 Strong Avenue Detroit, Michigan 48211 Plant: Same address

Sherwin-Williams Company 101 Prospect Ave., NW Cleveland, Ohio 44101 Plants:

Cleveland, Unio 44101
Claveland, Ohio 44113
Chicago, 111. 60628
Garland, Texas 75041
Los Angeles, Callf 90023
Newark, New Jersey 07101
Oakland, Callf, 94623
Morrow, Georgia 30266
Greensboro, N. C. 27410
Acme Quality Paints
Detroit, Michigan 48217
The Lowe Brothers Co., Inc.
John Lucas Company
John Lucas Company
John Lucas Company
Martin-Senour Co.
Martin-Senour Co.

Gibbsboro, N. J. 08026
Martin-Senour Co.
Chicago, III 60608
Rogers Paint Products
Detroit, Michigan 48211

Willen Armstrong Smith Company 1561 Forrest Avenue PO Box 430 East Point, Georgia 30044 Plants: East Point, Ge. Rellance Chemical Co. of Kentucky Richmond, Callf. Rellance Chemical Co. of Kensas Pauline, Kansas

Speed-O-Laq Products Co., Inc. 970 Raymond Avenue St. Paul, Minnesota Plant: Same address

Stabler & Company, Inc. 3827 First Avenue North Birmingham, Alabama 35222 Plant: Same address

Standard Coating Corp. 461 Broad Ave. Ridgefield, New Jersey 07657 Plant: Same address

Sun Chemical Corporation
750 Third Avenue
New York,
N.Y. 10017
Industrial Coatings Division
Industrial Coatings Division
Horthlake, Illinois 60164
Nutley, New Jersey, 07110
Claveland, 0hio ¼hilo
East Molline, Illinois 61244

Tenax Finishing Products Company, Inc. 390 Adams Street Newark, New Jersey 07114 Plant: Same address

11 of 12 QPL TT-E-516-4

MULTIPLE ADDRESS LISTING (Military and Federal Qualified Products Lists)

Reference Hanufacturer's Hame Number Address and Plant

Reference Number Hanufacturer's Hame Address and Plant

Titanine, Inc. Morris & Elmwood Avenues Union, New Jersey 07083 Plant: Same address

Valspar Corporation
Valspar Corporation
Rockford, Illinois Flants: Rockford, Illinois Flants: Rockford, Illinois Plants: Rockford, Illinois Patch Faint Company
Detroit Graphite Company
Detroit Graphite Company
Detroit Graphite Company
Rockford, Illinois Rockford, Illinois Rockford, Illinois Orlando, Florida

Vita-Var Corporation 46 Albert Avenue Newark, New Jersey 07105 Plant: Same address

The Voltax Company, Inc. 277 Mountain Grove Street PO Box 3365 Bridgeport, Conn. 06605 Plant: Same address

Western Specialty Coatings Company
Div. of Western States Lacquer Corp.
4400 Singleton Blvd.
Dallas, Toxas 75212
Plants: Dallas, Texas 75212
Los Angeles, Callf 90023

George D. Wetherill & Company 113 Arch Street Philadelphia, Pa. 19106 Plant: Same address

Wyandotte Paint Products Co. 1430 Sycamore Street Wyandotte, Michigan 48192 Plants: Wyandotte, Michigan Detroit, Michigan

12 of 12 QPL TT-E-516-4

*U.S. GOVERNMENT PRINTING OFFICE: 1607-181-1504