

Addendix C

Committee Memberships

I. Ad Hoc Committee for Evaluation of the present Functions and Operations of The National Bureau of Standards (Kelly Committee of 1953)

Dr. Mervin J. Kelly, Chairman
Bell Telephone Laboratories
Appointed by the President of the
National Academy of Sciences

Mr. John C. Green, Executive Secretary
Department of Commerce
Appointed by the Secretary of Commerce
at the request of the Committee

Members & Affiliations

Nominated by

Dr. Lee A. DuBridge California Inst. of Tech.	American Inst. of Physics
Dr. William L. Everitt University of Illinois	Inst. of Radio Engineers
Dr. James W. Parker Detroit Edison Co.	Am. Soc. of Mech. Engineers
Dr. Kenneth S. Pitzer University of Calif.	American Chemical Society
Dr. J. Barkley Rosser Cornell University	Policy Committee for Math
Dr. Guy Suits General Electric Co.	Am. Inst. of Electrical Eng
Dr. Clyde Williams Battelle Memorial Inst.	Am. Inst. of Mining and Metallurgical Engineers
Dr. Abel Wolman Johns Hopkins Univ.	Am. Soc. of Civil Eng.

II. Committee on Battery Additives of the National Academy of Sciences (Jeffries Committee)

Zay Jeffries, Chairman, Vice President (retired), General Electric Co., Chemical Division.

Elmer K. Bolton, Director of Chemical Dept. (retired), E.I. du Pont de Nemours and Co.

William G. Cochran, Professor of Biostatistics, Johns Hopkins University

J.P. Fugassi, Professor of Physical Chemistry, Carnegie Inst. of Technology

John G. Kirkwood, Professor of Chemistry, Yale University

Victor K. LaMer, Professor of Chemistry, Columbia University

Lewis G. Longworth, Member, Rockefeller Inst. for Medical Research

Joseph E. Mayer, Professor of Physical Chemistry, University of Chicago

Fred E. Terman, Dean, School of Engineering, Stanford Univ.

Samuel S. Wilks, Professor of Mathematical Statistic, Princeton University.

III. Senate Select Committee on Small Business

Republican Members

Democratic Members

Edward J. Thye (Minn.), Chairman

John J. Sparkman (Ala.)

Charles W. Tobey (N.H.)

Russell B. Long (La.)

Homer Ferguson (Mich.)

Guy M. Gillette (Ia.)

Leverett Saltonstall (Mass.)
(Minn.)

Hubert H. Humphrey

Robert C. Hendrickson (N.J.)

Lester C. Hunt (Wyo.)

Andrew F. Schoepel (Kan.)

George A. Smathers (Fla.)

James H. Duff (Ind.-Pa.)

Appendix D



Dear Automobile Owner:

I think you'd like to know about a product that could keep your car battery from ever going dead again.

I'm sure that like me you've listened to many stories about such miracle products:

Electric bulbs that burn forever, nylon stockings that won't rip or run, soles for shoes that can't wear out. Yes, wonder-working inventions we'd give our eye teeth to own...but know we'll never be able to buy.

It just wouldn't be "good business."

Is it any wonder that you don't know about miracle chemical compound AD-X2? It will save American drivers \$360,000,000 a year. Double and triple the life of your car's battery. Added to your battery - just like sugar to coffee - it virtually ends battery failure.

No - like the lifetime electric bulb, AD-X2 just wouldn't be "good business." But I ask you - for whom? You - or the men who sell you the \$360,000,000* worth of batteries each year?

That's why I'm writing to you now. You don't have to sit still for the battery manufacturers anymore. Pay for an expensive new battery because they want you to.

You can have a battery that's better than new for only \$3.00. Now, your old battery will last for years. Give you that peak performance you proved you wanted.

This is the amazing story of the triumph of AD-X2. The car battery miracle the wealth of vested interests couldn't bury.

Sincerely,

CD Kasher

President, Sterling-Warner Corp.

THIS IS WHY THE BATTERY MANUFACTURERS TRIED TO SMASH JESS RITCHIE

BECAUSE NOW YOUR OLD CAR BATTERY CAN BE BETTER THAN NEW!

Back in 1947, certain that the world would welcome such a discovery, Jess Ritchie together with Dr. Merle Randall, a noted chemistry professor, produced over 1,000 chemical formulas searching for an answer to battery failure.



For years men had grappled with this problem of prolonging the useful life of lead-acid storage batteries. All such batteries have a normal life span. After which they break down. And there's nothing you can do about it.

One after another their experiments failed, until, inexplicably an accidentally processed formula brought results entirely different from anything they had used up till then. *Sensational results!*

At last science had the answer to battery failure. Battery AD-X2, a secret chemical formula, doubled and tripled the life of any battery, actually rejuvenated ageing batteries, gave greater capacity to new batteries. For the first time you'd have a battery that could be completely charged, operating at 100% efficiency, all the time.

FROM THAT MOMENT OF DISCOVERY JESS RITCHIE WAS A MARKED MAN!

The Keystone Battery Company of California sent this letter to the American Association of Battery Manufacturers:

"When the AD-X2 thing first came out, we thought they'd kill themselves off in short order. But they seem to be getting stronger..."

"This is a serious situation. We have lost a considerable amount of business, and the loss to large manufacturers must have run into the thousands."

"We feel sure that with the cooperation of the Association we can lick this thing."

Jess Ritchie's Dream Became a Nightmare

Instead of lavish praise he ran into an incredible storm of violent condemnation, and brutal scientific indifference.

This small business man, who had never invented or discovered anything before, suddenly found himself the TARGET of a gigantic foe. He was zeroed in with charges of fraud, pinned down with court orders and law suits.

And like all successful attackers, the battery manufacturers kept themselves well camouflaged.

Their money and power influenced men in high public places — government officials — to front their offensive.

1. The National Bureau of Standards branded AD-X2 worthless. They issued an influential official condemnation.

THEY NEVER EVEN TESTED AD-X2

2. The United States Post Office, acting on this misinformation, sued Ritchie's firm, Pioneer's Inc. for attempting to defraud through the mails.

3. The powerful Federal Trade Commission sued Ritchie and AD-X2 for fraudulent advertising.

HE STOOD ACCUSED — LIAR AND THIEF

Remember, behind this frenzy of government activity was the sordid, underhanded scheme of the battery manufacturers to blanket AD-X2 in a bed of lies.

If there had been any doubt that AD-X2 worked, then there would have been no need to keep you from using it. No, it would have more nearly suited their selfish purposes, if AD-X2 did ruin your battery.

There never was a real controversy over AD-X2 as many newspapers and magazines wanted you to believe—only a highly successful campaign to tear Jess Ritchie's small business to shreds.

Twice Jess Ritchie was forced into bankruptcy trying to market AD-X2.

But he still wasn't licked. They hadn't counted on his bronco bustin' determination.

The Senate Select Committee on Small Business tried to prove the true merit of AD-X2.

They asked America's leading scientific university, the Massachusetts Institute of Technology to test it.

As you know: Your battery supplies electric current for the ignition — all the electric equipment — PLUS POWER TO CRANK YOUR ENGINE.

When you use any of this equipment, or leave your car stand idle, the battery discharges electric current. Run your motor and the battery recharges itself.

But — while a battery discharges two things happen:

1. Some of the active materials from the lead plates shed or fall off... Forms useless "battery mud." THIS IS THE FIRST REASON YOU LOSE POWER.

2. And, the soft sponge lead in the negative plate changes chemically into lead sulfate. With age this sulfate gets tough and hard. It clogs the pores of the plate. Then, the electrolyte-acid plus water — can't enter the pores and deliver electricity. This continuous process is called SULFATION. It is responsible for the steady loss of power in your battery, and when the plates are completely sulfated or clogged your battery fails and has to be replaced.

According to the Massachusetts Institute of Technology: **AD-X2 RESTORES ACTIVE MATERIALS . . . STOPS HARMFUL SULFATION . . . INCREASES THE CAPACITY OF YOUR BATTERY.**

But these unbiased scientific findings

HAD NO EFFECT ON THE BATTERY MANUFACTURERS PRINCIPLE OF "GOOD BUSINESS."

They actually persuaded the government bureaus to ignore the M.I.T. report!

In an unbelievable disregard for truth, they forced Ritchie to defend himself at 103 hearings in 11 different states, 13 separate cities.

He had to take 16 transcontinental flights. Spend over a half a million dollars.

SENSATIONAL REVELATIONS ROCK WASHINGTON!



All that remained was the final blow. These legal maneuvers had Ritchie blocked at every point. But he stood and faced them with his only weapon — fact.

The Federal Trade Commission heard 10,000 pages of testimony. 3,000 pages of exhibits. They found government employees on the payrolls of the battery manufacturers. Discovered possible major scandals involving millions of dollars of the public funds.

AND OVERWHELMING PROOF THAT AD-X2 WORKED!

In May, 1956—8 years after the discovery of AD-X2—the F. T. C. reached a unanimous decision. By a vote of 4 to 0 they dropped all the charges against Ritchie and AD-X2. None of the claims made for AD-X2 were fraudulent.

This historic decision was a complete and overwhelming victory. A spectacular triumph over the wealth of the entire battery industry. That's why today, *without fear of contradiction*, I am free to tell you:

AD-X2 is the first and only major chemical improvement in the lead-acid storage battery since its invention. It will double the life of your car's battery. End forever battery failure from harmful sulfation.

I wish I could go on and tell you that you could double the life of your car's battery simply by going to your local automobile dealer or service shop. But that simply isn't so.

The battle for AD-X2 isn't over. Remember, the man who sells and services your car depends upon these interlocking giants of the car business for his livelihood.

Do I have to tell you what *that* means?

But all their money and influence can't bury AD-X2! It is free of the battery industry's shackles.

**NOW — BY SIMPLY RETURNING THE COUPON
YOU'LL HAVE A BATTERY
WORKING AT PEAK CAPACITY.
For only \$3.00 — less than you pay
for an ordinary tune-up, less even than
a good car wash, you will have:
A BATTERY THAT IS
BETTER THAN NEW!**

Last year the American Automobile Association reported the number one road-call headache was battery trouble. Yes, even more than tires! Over 10,837,000 motorists with dead batteries called for help.

Now, whether your battery is *old or new*, 6 volts or 12 WITHOUT ANY SKILL OR MECHANICAL KNOWLEDGE you can positively end battery failure once and for all from harmful sulfation.

If you have a new battery

AD-X2 will keep it *new*. Hold back the harmful sulfation. Mile after mile, day after day your battery will deliver the *same* high power.

You know, even a new car often has to have its battery charged before it can be driven from the show room floor.

But no matter how long you leave your car stand idle—months or years — at the touch of the starter your engine will turn over.

If your battery is 12 months old or more

AD-X2 will remove that destructive sulfation.

Used car dealers and garagemen constantly boost old batteries into the *appearance* of life. But the first cold day that sulfated battery can't deliver the necessary 250 or more amps it takes to start your car. With a sickening groan your battery dies.

But no matter how tough and hard your plates may be, adding AD-X2 will make them *soft and porous again*.

Even if your battery has already needed expensive servicing it will stand by you like new. With AD-X2 it will recharge itself as you drive. Give you trouble free service for years to come.

When you step out into a day that bites your nose, freezes the lock on your car door—with AD-X2 added, you can be sure your battery will turn your engine over.

For the first time in your life you'll be driving a car with a battery that's completely and fully charged. No lost materials, no sulfation. You'll be getting the same 1,250 to 1,300 s.g. reading that battery delivered the day it was made.

Play the radio, use the heater, defroster, electric windshield wipers. Your battery will recharge itself completely. And fast!

Even if you now have a dead battery:

If it's mechanically sound, so great is the miraculous power of AD-X2, that you can extend its life for years to come.

**YOU SAVE 5 WAYS WITH
AD-X2 ADDED TO YOUR BATTERY**

- Saving #1.** You save the \$18.00 to \$40.00 you'd normally expect to pay for a new battery after a few years.
- Saving #2.** You save the expense and trouble of having to have your car with its dead battery, towed.
- Saving #3.** You save the cost of battery service calls. You won't need a "quick-charge" or booster of any kind. As you drive, your battery will completely recharge itself.
- Saving #4.** You will never have to pay to repair costly damage to your transmission caused by having to be pushed to get started.
- Saving #5.** Worry and Aggravation. No one can say how much it's worth to never worry again that your car won't start. You will start, even if every car on the block has to call a serviceman.

On the back of this folder you will find more information and details concerning this wonder-working discovery. FIND OUT FOR YOURSELF. Try AD-X2 on a *no-risk* special DOUBLE GUARANTEE.

You will receive a 3 package treatment of AD-X2. When the postman delivers this amazing product, DEPOSIT \$3.00 with him.

Then, if you have a 6 volt battery put one package in each cell. Just unscrew the 3 knobs at the top of the battery and pour in AD-X2 — just like sugar.

If you have a 12 volt battery put half of each envelope in each opening. (*Exact measurement not needed.*)

Your battery is now better than new! It will start your car for years to come.

One package treatment of AD-X2, good for either a 6 or 12 volt battery is only \$3.00. If you own two cars, have a boat with an electric starter, a dead battery stored in the garage, or want to save money for a friend, you may order treatments for 2 batteries for only \$5.00. You save one dollar.

Will you please fill in your name and address, and the number of AD-X2 treatments you need, on the convenient coupon and return it to us today in the accompanying self-addressed envelope that requires no postage.

**PLEASE TEAR OFF AND KEEP
THIS UNCONDITIONAL GUARANTEE**

GUARANTEE #1.

You have absolute protection! Complete satisfaction or your money back. Your mechanically sound battery must be completely charged, without harmful power-destroying sulfation, within 30 days or we'll refund your complete purchase price.

GUARANTEE #2.

You can make this test immediately. Prove to yourself that AD-X2 makes your battery *better* than new.

After adding AD-X2, run the car for 5 minutes. Then when you have driven 50 miles, do this. Pull the coil wire. Turn on the radio, lights, all the electric equipment. Run the battery until it is *completely* dead.

Turn off all the electric equipment and leave the battery rest for 3 minutes.

Then, with the starter only — *start* your car! Now — run the battery down a second time. Do not let up on the starter until it is completely dead!

Be sure all the electric equipment is turned off. Replace the coil. Let the dead battery sit for 30 minutes.

I GUARANTEE YOU CAN NOW START YOUR MOTOR IMMEDIATELY!

Further, I guarantee that for the first time in your life you will be driving a car with a battery that is completely and fully charged.

I will gladly refund your \$3.00 purchase price if AD-X2 doesn't do everything I say it will, and more.

C. P. Kashner
President,
Sterling-Warner Corp.

P.S. We know you'll probably want AD-X2 in your battery before the cold weather sets in. You can help us rush this wonder-working discovery to you. Please enclose your cash, check, or money order with your coupon in the enclosed envelope. Because this will save us time and bookkeeping expenses we will pay all the postage and cost of handling charges. You will save at least an extra 35¢.

ACT NOW! MAIL THIS SPECIAL NO-RISK DOUBLE GUARANTEE COUPON TODAY! →

WHY THE BATTERY MANUFACTURERS TRIED TO SMASH JESS RITCHIE

NO BATTERY IS AS GOOD WITHOUT AD-X2 AS IT IS WITH AD-X2:

"Plant superintendents, shop foremen, master mechanics, chief electricians... No other case has so large a volume of substantiated and reliable user testimony."

Chief Examiner
The Federal Trade Commission

A SPECTACULAR TRIUMPH FOR SMALL BUSINESS:

"This vindication of AD-X2 by the Federal Trade Commission, coupled with its clearance of fraud charges by the Post Office Department, should lead to prompt modifications in the practice of condemning products marketed by small business men..."

Senator John Sparkman, (Ala.)
Chairman, Senate
Small Business Committee

"IT WORKS!" SECRETARY OF COMMERCE

"The company with which I was formerly associated (United-Carr Fastener Corp.) had a \$1350 bat-

tery, which was about licked. We tried AD-X2 on a when-as-and-if basis. It worked. After at least 13 months it's still working..."

Sinclair Weeks
Secretary of Commerce

NEW BATTERIES FOR OLD IN 104 POLICE RADIO CARS:

"Even though the batteries were not new when treated, we have observed the life expectancy was extended from 12 to 18 months beyond normal. In police radio cars batteries are given hard usage; long periods of idling, constant use of radio, heater, defroster.

(signed) R. B. Lory
Engineer in Charge
Radio Division

TRUCK OPERATOR SAVES \$500 ON TRUCKS LEFT OUTDOORS ALL WINTER:

"Our trucks are kept outdoors all winter. We have been troubled in the past by frequent failures to start. It is now over a year since we first used AD-X2. We have not

had a single delay due to battery failure. We saved over \$500.00.

(signed) Louis L. Katchen
Vice President
B. Katchen Iron Works, Inc.

TRACTOR COMPANY REAPS HARVEST WITH WAR SURPLUS BATTERIES:

"We obtained some war surplus Euclids. They had been stored in the tropics, and we found the batteries could not be charged even though they had never been used. Treating these batteries with AD-X2, they came to a full charge. This has meant a savings of 50% over the past 5 years."

(signed) Frank I. Guilford
Manager, Calif.
Tractor & Equipment

GOOD AS NEW AFTER 116,000 MILES IN DAY & NIGHT BUS SERVICE:

"The life of original equipment in this day and night bus service was about one year or 40,000 miles. We treated a battery that had seen 6 months service with AD-X2. It

is now in its 23rd month, and the bus has travelled 116,000 miles. We've adopted treating all new and aged batteries.

(signed) Gordon Henry
Maintenance Manager
Wichita Transportation Corp.

SCIENTISTS AGREE

REPORTS UNITED STATES TESTING COMPANY:

"The use of AD-X2 as an additive is effective because it increases the speed of charging, and discharging efficiency, reduces internal operating temperatures, does not harm lead-acid batteries, reduces shedding of active materials."

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY:

1. Higher capacity;
2. decrease in battery mud;
3. gas passed in finer bubbles;
4. softer negative plates;
5. less water used;
6. lower temperatures;
7. higher hydrometer readings;
8. higher conductivity of electrolyte.

STERLING-WARNER CORP.

147 E. 69th Street, New York 21, N. Y.

Yes! I want to double the life of my car's battery now.

- Rush me one (1) package of AD-X2 for \$3.00.
(good for 6 or 12 volt battery)
- Send me treatments for 2 batteries for only \$5.00.
- Money Order* Check* Cash enclosed*
- Send C. O. D. I will pay postage.

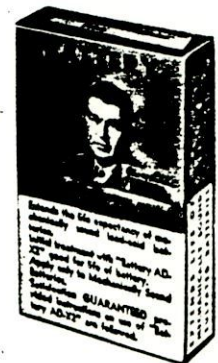
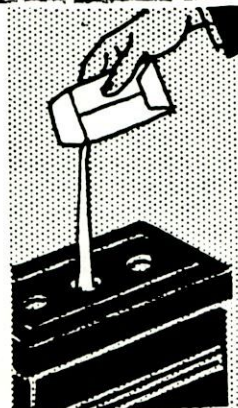
*Save at least 35¢. Mail your remittance now.
We will pay postage and handling charges.

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Use the enclosed EXTRA COUPON for yourself
PASS THIS CIRCULAR ALONG TO A FRIEND



POURS LIKE SUGAR: So simple a child can do it. You can't make a mistake. Unscrew the caps and simply pour in AD-X2. Now your battery is better than new. Guaranteed to give you new years of carefree service.

Printed in U. S. A.

Double Your Battery Life

Most 'Dopes' don't work, but this one seems to be better than its maker says

AD-X2, A BATTERY additive available at most auto parts stores, will double the life of your battery according to authorities ranging from the Senate Small Business Committee to the Massachusetts Institute of Technology.

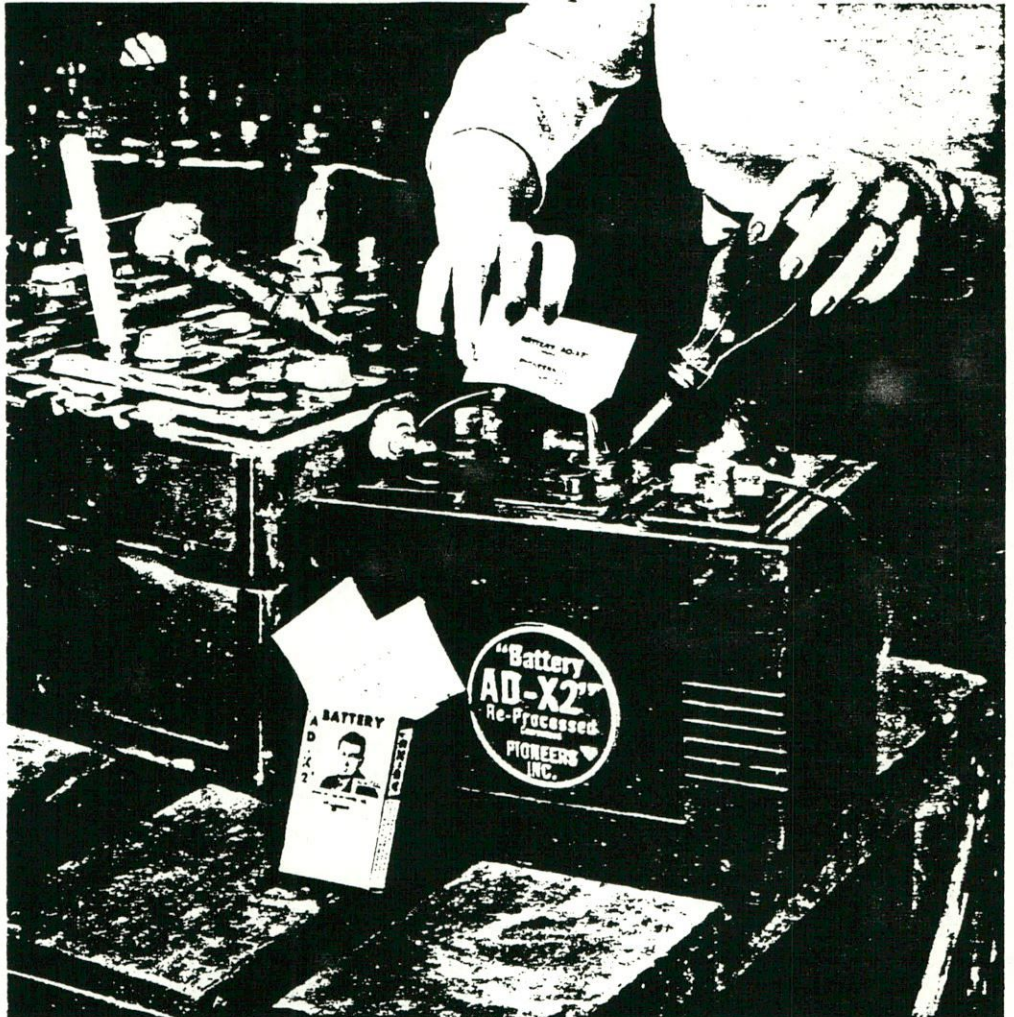
The wide range of sponsors for the battery-saver springs from a rhubarb between the manufacturers of AD-X2 and the National Bureau of Standards, who originally branded the product as worthless although probably harmless.

Pioneers Incorporated, who make AD-X2, took their case to the Senate Small Business Committee, which authorized the MIT tests. These tests, coupled with use reports from some of the biggest battery users in the nation, including the Air Force, indicate the white powder you add to your car battery does more than the manufacturer claims.

By mixing a \$3 packet of AD-X2 into the water of your battery cells you can:

1. Reduce harmful effects of sulfation and extend the life expectancy of your battery.
2. Decrease loss of water.
3. Increase speed of charging and normally increase the capacity of the battery.
4. Protect the battery from destruction by sulfation during long periods of inactivity.

As a result of the MIT tests and the endorsement of other competent authorities, the National Bureau of Standards has taken back their nasty words about AD-X2. Their original unfavorable report was evidently based on their previous experience with a multitude of phoney battery additives which



You have to add the white powder to the water covering battery plates. Then mix by squirting water with syringe.

claimed and failed to deliver the advantages attributed to AD-X2. Because it claimed what so many failed to deliver, Bureau experts broke their legs leaping to a conclusion and released the unfavorable report on Pioneer's product before conducting thorough laboratory tests.

The manufacturers of AD-X2 caution that the powder should only be added to new batteries or used batteries that have been examined by an expert and found mechanically sound. In the absence of an expert inspection you can add AD-X2 to your battery and expect

results if it is in operating condition and not more than six months old.

When adding AD-X2 to your present battery, thoroughly clean the battery posts, cable terminals and top of the battery before adding the life-lengthener. Completely dissolve the AD-X2 in the water covering the battery plates by dusting the powder over the top of the plates and then circulating the water with a battery syringe. After the powder is dissolved, run your car motor for 30 or 40 minutes.

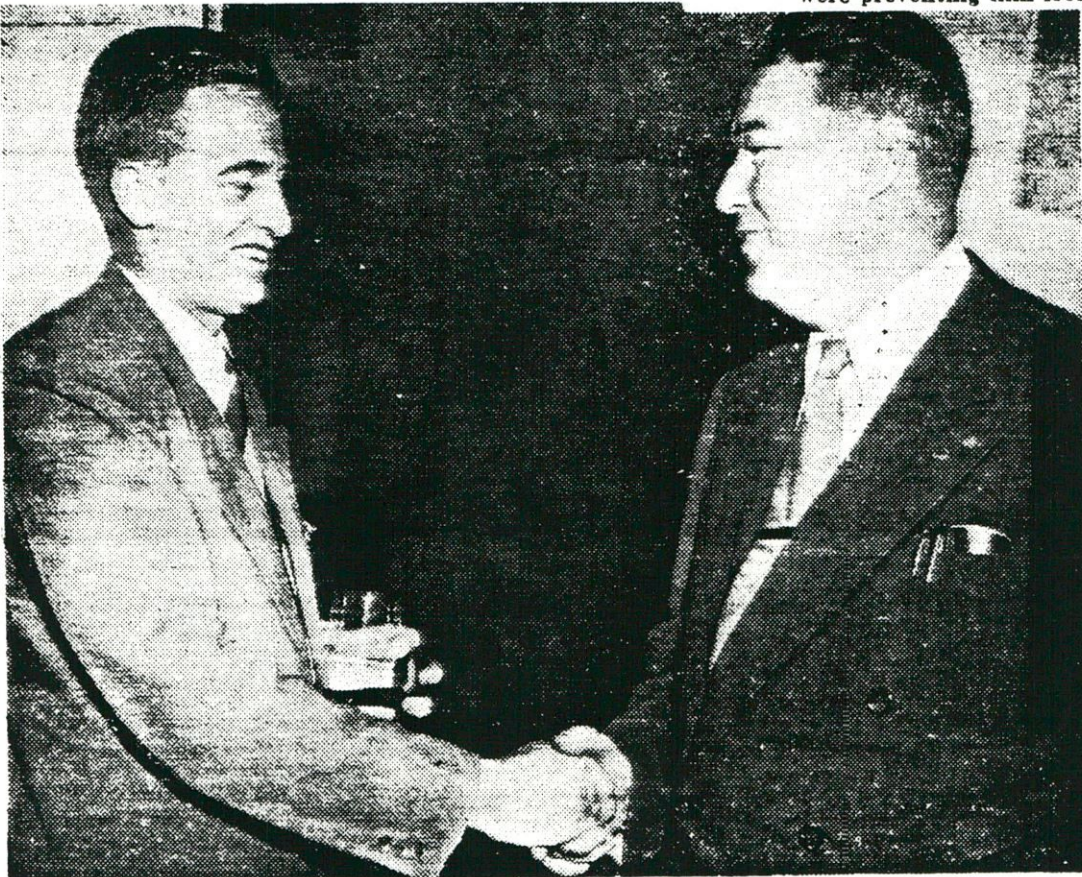
One application of AD-X2 will last the life of the battery. ●●●

from AutoSport Review, August 1953

The [Washington, D.C.] Evening
Star, June 22, 1953



RITCHIE DEMONSTRATES ADDITIVE—Jesse M. Ritchie of Oakland, Calif., demonstrates the theory of his battery additive, AD-X2, before a Senate Small Business Committee today as a hearing opened into charges that Government agencies were preventing him from marketing the product.—AP Photo.

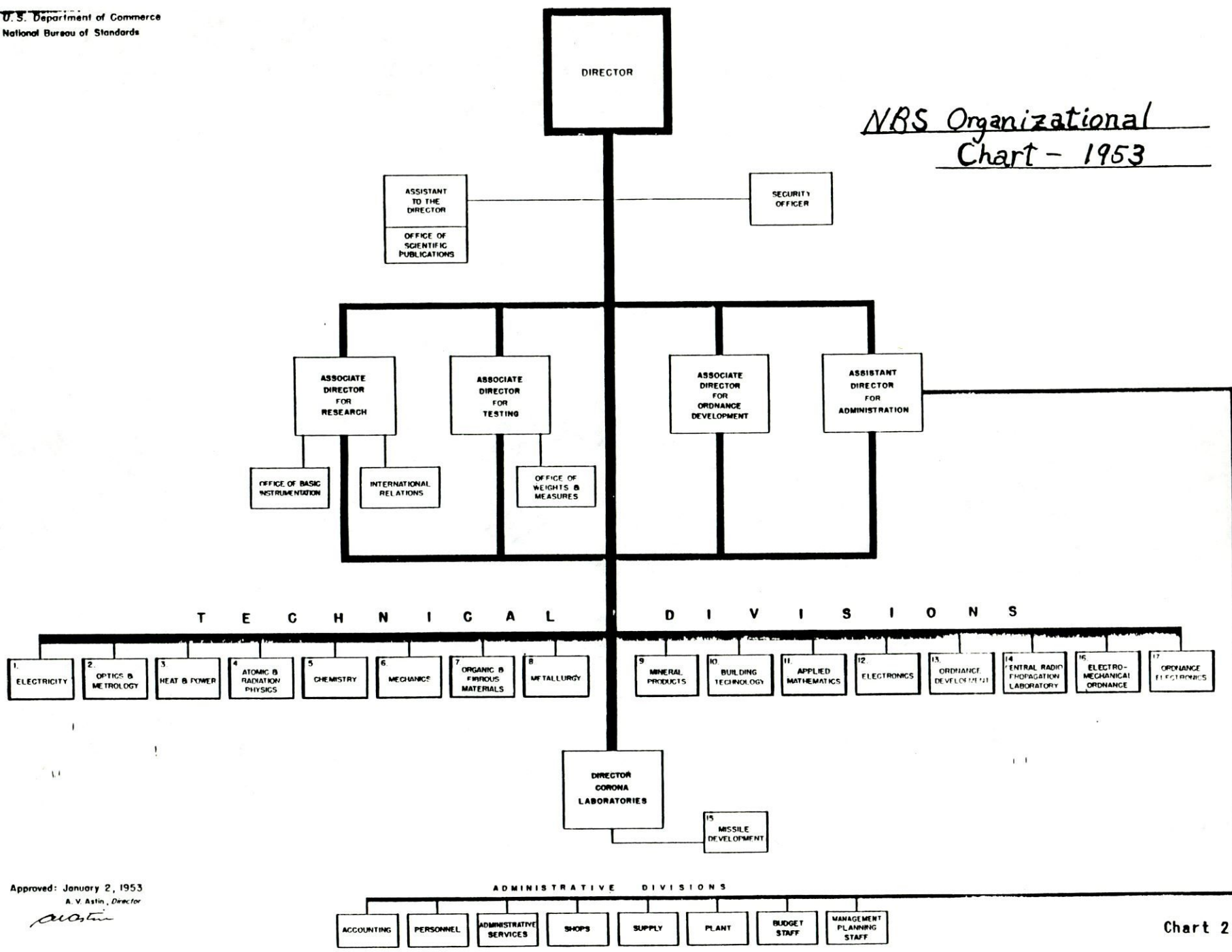


The Evening Star
June 25, 1953

NO HARD FEELINGS—Dr. Allen V. Astin (left), director of the Bureau of Standards, shakes hands with Jess M. Ritchie, inventor of the battery additive AD-X2, at the close of Dr. Astin's testimony before a Senate committee yester day. —AP Photo.

Appendix E

NBS Organizational
Chart - 1953



Approved: January 2, 1953
A. V. Astin, Director

A. V. Astin

Chart 2

Department of Commerce
National Bureau of Standards

Source of Financing Total Program by Fiscal Years

	<u>Fiscal Year 1952</u>	<u>Fiscal Year 1953</u>	<u>Fiscal Year 1954 (Estimated) ^{2/}</u>
<u>Supported by NBS Direct Appropriations:</u>			
Research and Testing	\$ 3,992,598	\$ 3,954,847	\$ 3,000,000
Radio Propagation and Standards	2,726,976	2,677,267	2,000,000
Operation and Administration	1,059,135	1,174,825	1,000,000
Construction of Laboratories	<u>1/ 369,282</u>	<u>1/ 136,581</u>	<u>1/ 771,993</u>
Emergency Facilities, Radiation Physics Laboratory	-	130,798	-
Total Support by NBS Direct Appropriations	8,147,991	8,074,318	6,771,993
<u>Supported by Orders from Other Agencies:</u>			
Department of Defense and AEC	43,452,427	38,813,579	11,533,000
Other Federal Agencies	<u>1,898,000</u>	<u>1,240,700</u>	<u>1,240,000</u>
Total Support by Orders from Other Agencies	45,350,427	40,084,279	12,773,000
Total Program	53,498,418	48,158,597	19,544,993

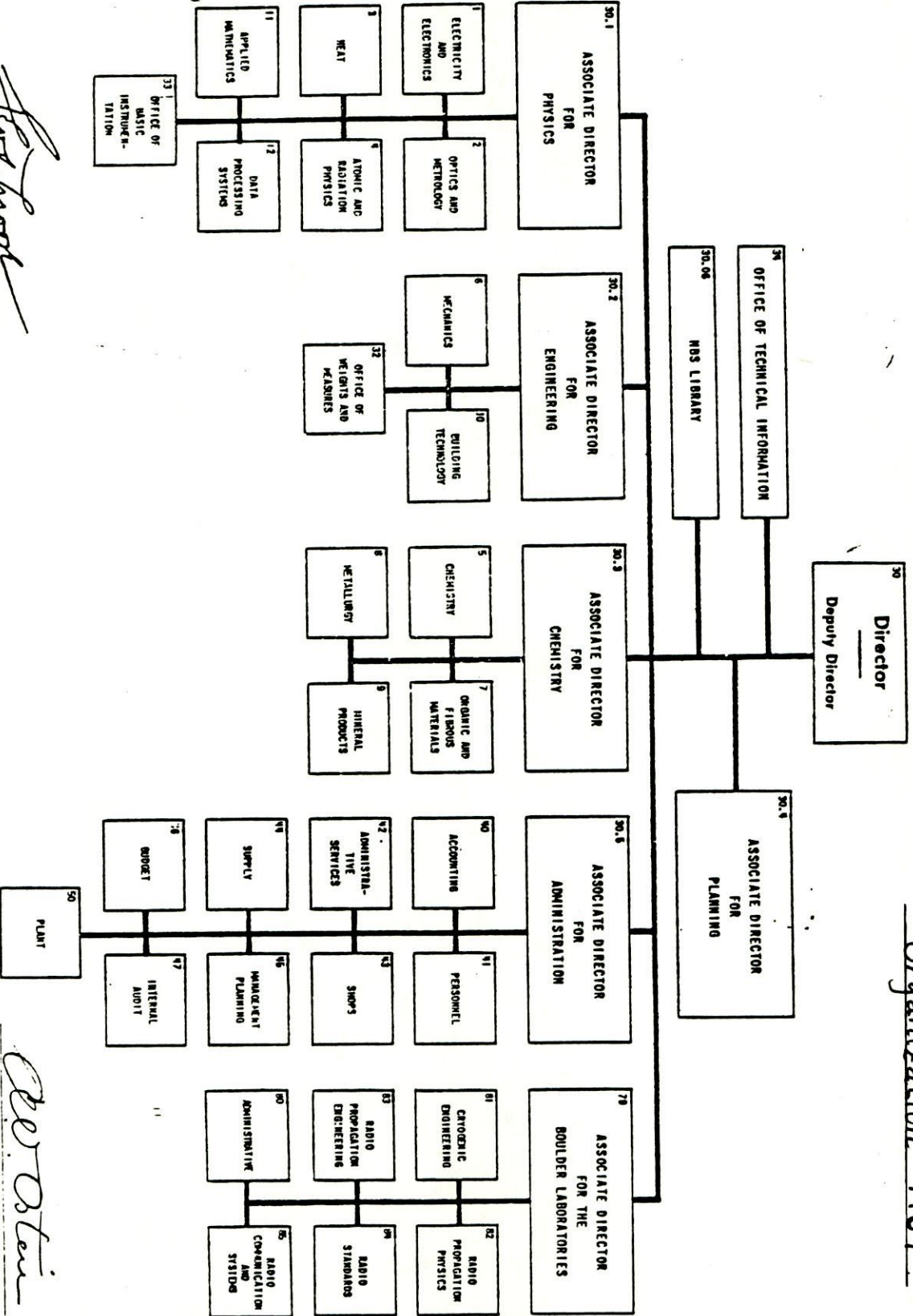
1/ Does not include obligations by PBS as follows:

<u>Fiscal Year</u>	
1952	\$3,368,364
1953	77,822
1954 (Estimated)	<u>193,814</u>
	3,640,000

2/ Excludes obligations incurred in activities which are being transferred to the Department of Defense.

**U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS**

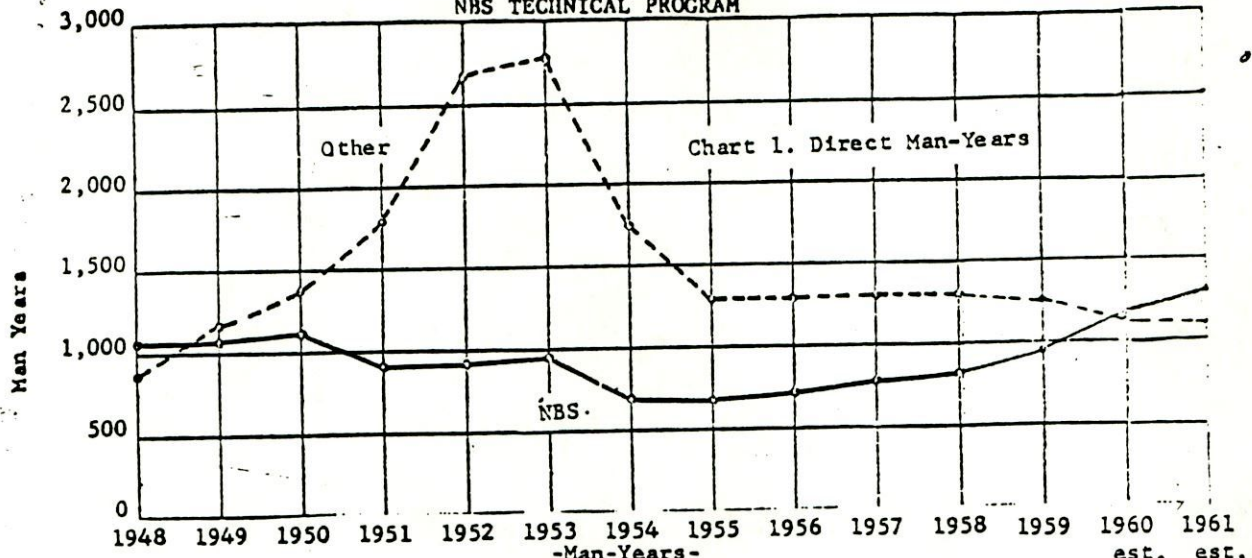
Organization - 1959



Approved *[Signature]*
Assistant Secretary for Administration

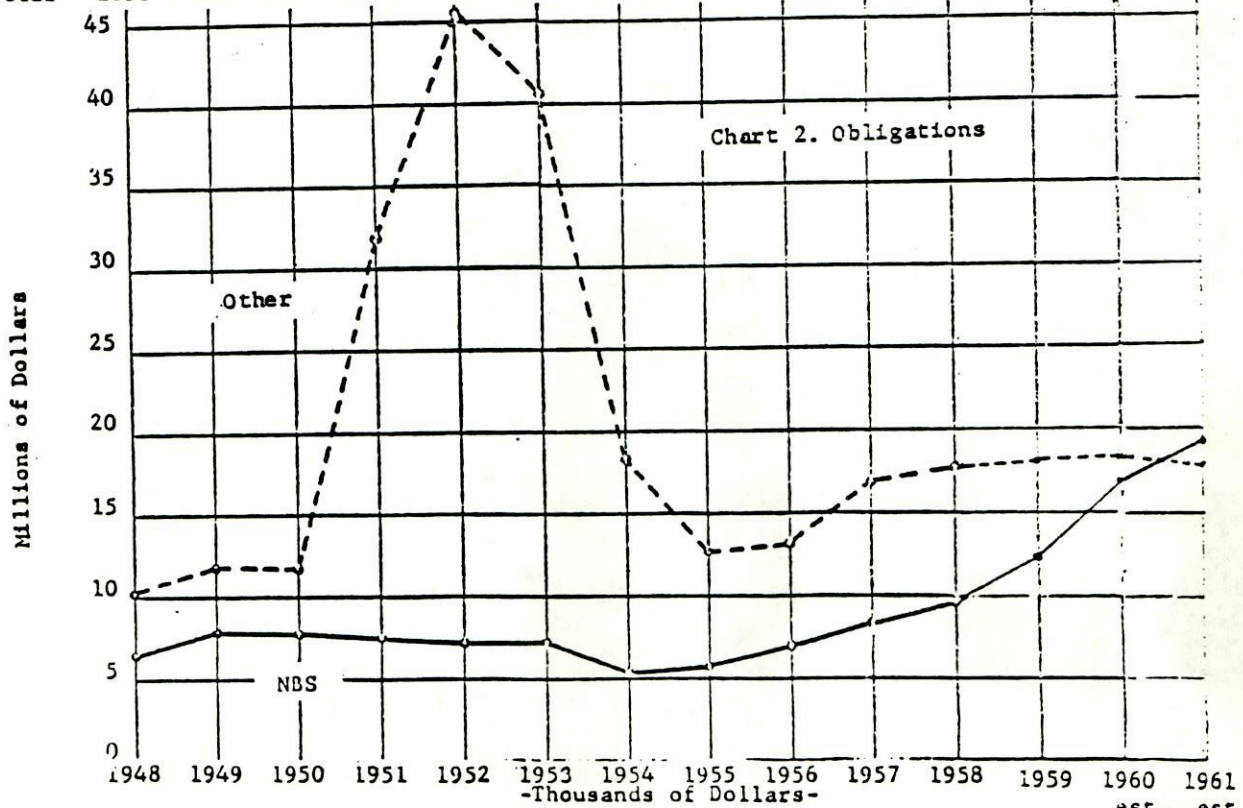
[Signature]
Director
February 24, 1959

NBS TECHNICAL PROGRAM



-Man-Years-

NBS	1004	1075	1071	896	914	947	672	669	710	776	822	928	1188	1318
Other	849	1148	1371	1776	2664	2787	1730	1270	1284	1262	1300	1257	1179	1173
Total	1853	2223	2442	2672	3578	3734	2402	1939	1994	2038	2122	2185	2367	2491



-Thousands of Dollars-

NBS	6461	7880	7850	7451	7114	7059	5319	5643	6918	8235	9724	12379	17250	19500
Other	10069	11750	11606	31707	45610	40583	18051	12579	13053	16844	17738	18116	18349	17704
Total	16530	19630	19456	39158	52724	47642	23370	18222	19971	25079	27462	30495	35599	37204

Note: "NBS" denotes funds and work from direct appropriation. "Other," from transferred funding