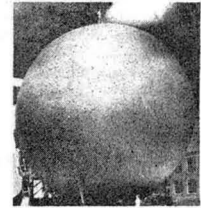
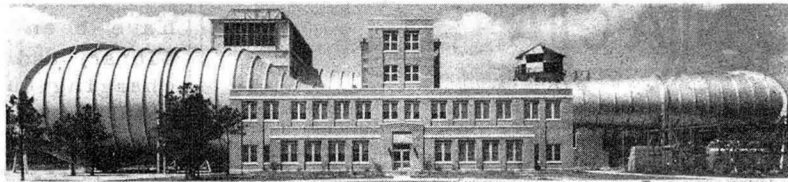
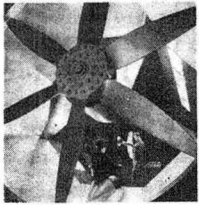


# LMAL BULLETIN



## LANGLEY MEMORIAL AERONAUTICAL LABORATORY

Issue 29, Vol. 2

Langley Field, Virginia, November 6-12, 1943

Page 1

# FRANK KNOX PRAISES NACA

## CONCERT GROUP SEEKS MEMBERS

The Cooperative Concert Association, which annually brings to the Newport News High School auditorium a diversified group of artists, will conduct its annual membership campaign this week, beginning on Tuesday, Nov. 9, and continuing through Saturday, Nov. 13.

NACA employees wishing to purchase a membership may communicate with Virginia Cullen, PRT, telephone 234. Her home phone number is Newport News 2-7541. Memberships are \$4.40 for adults and \$2.20 for students. All enlisted men are admitted to the concerts free.

The membership is guaranteed three concerts during the season; and the artists appearing are named at the conclusion of the campaign, since the amount of money on hand necessarily determines the artists to be chosen. The membership is obtained in the one-week drive, at the conclusion of which the membership list is closed and no one may join until the following season. No single admissions are sold for any one concert.

This will be the 13th season of the community concerts. Mrs. L. C. Branch is president and Mrs. E. K. Phillips, secretary.

This is considered an outstanding opportunity for NACA personnel to enjoy the talents of well known artists. As Miss Cullen says, "the more members, the more concerts".

## NAVY CHIEF CITES IMPORTANCE OF RESEARCH IN WAR EFFORT

Col. Frank Knox, Secretary of the Navy, complimented the personnel and the work of the NACA and told employees of the Langley Laboratory, in a speech here Thursday afternoon, that "you should feel pride in the part you are playing in this war" and expressed confidence "that if you stay on your jobs, American aircraft should never be excelled by those of other nations".

### *Must Preserve Our Way Of Life*

Declaring that this nation is engaged in the most crucial contest since its birth--fighting to preserve the liberties and freedoms for which the pioneers gave their lives--he emphasized that we of this generation have the responsibility of seeing that our way of living is not lost. He pictured the men and women of LMAL as occupying a critical position--"not less critical than a battalion atop a mountain peak in Italy, driving the Germans to defeat".

Secretary Knox, who was addressing approximately 1,500 Laboratory employees in the Structures Research building, commented that he had recently returned from a quick inspection tour of two war fronts--the European and African. "There I saw with my own eyes some of the fruits of your labors", he said, declaring that the transformation of America's production and research facilities from a peacetime to a wartime tempo was "nothing less than a miracle."

### *Describes NACA's Results*

Pointing out that he came here "to see at first hand a part of the strange equipment and to know something about the men and women who constitute the great research staff,

(See page 2)

## THANKS FOR YOUR COOPERATION, SAYS REID

H. J. E. Reid, Engineer-in-Charge, issued the following statement in connection with the visit by Secretary Knox:

"I am sorry that while you were gathered together to hear Secretary Knox, I did not take that opportunity to express my appreciation to everyone of the Laboratory staff for the splendid spirit of cooperation in carrying out the many details of planning, preparing, and executing the program for the visit of Secretary Knox and his party. It is difficult to express in words my appreciation for the splendid spirit of cooperation which has always existed at the Laboratory and as especially exemplified on this occasion."



The LMAL Bulletin is prepared and published at the Langley Memorial Aeronautical Laboratory of the National Advisory Committee for Aeronautics, Langley Field, Virginia, in the interest of LMAL employees. Contributions of news and art should be sent to the Editor, in the Administration Building. Telephone: 376

Editor. . . . . H. Iee Dickinson  
 Associate Editor. . . . Ruth Angel  
 Art Editor. . . . . Ben Vogel  
 Reporters . . . . . LMAL Employees

#### FRANK KNOX PRAISES NACA (From page 1)

Knox described the NACA's results as "new ideas and the technical data required to apply these new ideas to make our airplanes fly faster, higher and farther."

"New ideas are weapons of immense significance. You men and women working here far from the sound of drums and guns, working in your civilian capacity in accordance with your highly specialized skills, are winning your part of this war; the battle of research. This war is being fought in the laboratories as well as on the battlefields," he said.

#### *Cannot Relax Our Efforts*

Pointing out that what the Japs and Nazis had devised to destroy us, we have met and countered, Secretary Knox mentioned that we are on the offensive and cannot relax our efforts. The fact that the enemy will redouble his desperate efforts to devise special planes and weapons to defend his vitals, the Navy official said, is "a challenge to American science and industry. Our fighting airmen must never be handicapped in their dangerous task of controlling the air over enemy areas of land and sea."

#### *Cites Dive Bombing Development*

As an example of Naval aviation pioneering in which the Navy and the NACA worked together to produce a new idea and a new weapon, the dive bomber, Secretary Knox explained that this nation was the first to develop aircraft capable of vertical dive bombing. That was made possible by the prosecution of a program of scientific research by the NACA. It was your organization here at Langley Field that for the first time in the history of aeronautics, by means of novel flight research instruments and technique, determined the pressures over the lifting and control surfaces of airplanes, and how those forces changed in going through the pull-out at the end of a vertical dive.

#### *Commends Employees' Contributions*

"There is no question but that each and every one of you is making at least as great a contribution towards winning the war as if you were personally shooting Japs, because the basic things that give the Navy's combat aircraft their unquestioned excellence come directly from your own continuing hard work".

Knox assured the employees that the Army as well as the Navy is depending on the NACA to provide solutions for the technical problems incident to the requirements of a rapidly advancing technology. He praised not only LMAL, but the Ames Laboratory and the Aircraft Engine Research Laboratory, and described NACA's leadership as "of the highest competence".

## LIBRARY NEWS

The following new books have been received in the Library and are available for charging out for a four-day loan period. These books must be called for and returned personally by staff members.

Oxygen Sense. Issued by Training Division, Bureau of Aeronautics U. S. N. 1943

Air Masses and Fronts. Aerology Series No. 4. Prepared by Training Division, Bureau of Aeronautics, U.S.N.

Handbook of Chemistry and Physics. 27th ed. 1943-1944.

Proceedings of the Second Hydraulics Conference, June 1-4, 1942.

Bernhard, R. K. Mechanical Vibrations.

Humphreys, W. J. Ways of the Weather.

Hogben, Lancelot. Mathematics for the Millions.

Manly, G. B. Aircraft Powerplant Manual.

National Council of Teachers of Mathematics. Source Book of Mathematical Applications.

American Technical Society. Aerial Navigation.

Neubecker, William. Short Patterns, Kinks and Quick Methods for Sheet Metal Workers.

Rosenholtz and Oesterle. Elements of Ferrous Metallurgy. Bly, Merwin. Guide to Cathode Ray Patterns.

Clark, C. H. D. The Fine Structure of Matter.

Dickson, L. E. New First Course in the Theory of Equations.

Dow, W. G. Fundamentals of Engineering Electronics.

Dushman, Saul. Elements of Quantum Mechanics.

Franklin, Philip. Treatise on Advanced Calculus.

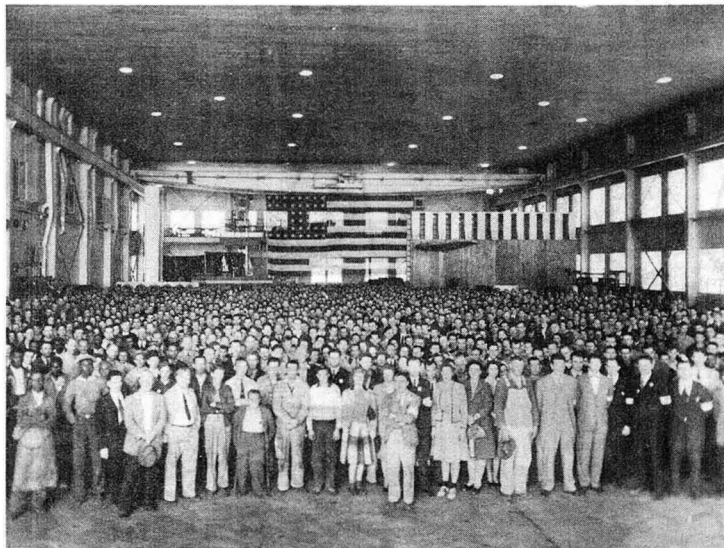
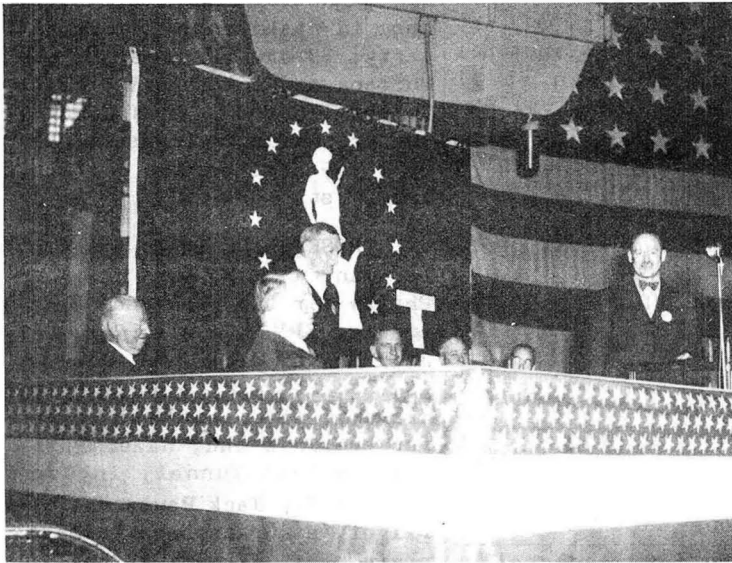
Hemney, Keith. Principles of Radio.

Keenan, J. H. Thermodynamics.

Kron, Gabriel. Short Course in Tensor Analysis.

Lindsay, R. B. Introduction to Physical Statistics.

SEE PAGE 3 for scenes taken by LMAL photographers of visit by Secretary Knox and party.





# TANK TOPS STRUCTURES TEAM, 37-20

In a game filled with long runs and scoring passes, an inspired Tank team upset Structures Research, 37 to 20, in an NACA touch football league game last Sunday.

Hacskeylo quickly put Tank in the lead when he ran Bartone's kickoff for a touchdown. Hacskeylo followed with another touchdown on a right end sweep, and a pass to Freihofner accounted for the third. After a scoreless second quarter, Bruce Amole started the scoring again by snagging a toss in the end zone. Tank scored twice again, once on a short pass to Walter and the last on a toss to Friehofner. Tank made one conversion.

Structures' first score came in the fourth period on a pass to Boughan. After Bartone carried Neff's pass to the one-yard-line, Boughan tallied again on a pass. Boughan also made the final score of the game on a long pass from Dowbrowski. Structures made two extra point tries good.

AFR defeated PRT, 2 to 0, on a safety which occurred when Nichols, attempting to kick from behind his goal line, received a bad pass from center.

Engineering Section dropped 8-foot Tunnel, 19 to 13. Sadler scored first by recovering an 8-foot Tunnel fumble behind their goal line. On a brisk toss from Marschal to Blank, Engineering converted. Engineering's second score came when Link tucked in a long pass from Nutter. Fedziuk countered for 8-foot by snagging a short pass from Axel Mattson to score; 8-foot converted. Sadler scored for Engineering on a floater from Nutter but missed the conversion. Looma's catch of Belot's sleeper pass in the fourth period gave 8-foot its final score.

In a hotly-disputed game, FRM came out on the long end of a 3 to 2 score. West Area Shops scored in the second quarter when Reeder fumbled a pass behind his goal line. The dispute arose as a result of an attempted field goal by FRM in the final quarter. A formal protest has been filed with the mediation board and a team captain meeting will be held to decide the issue.

Full Scale forfeited to 16-foot Tunnel.

The schedule: Nov. 7--AFR vs. 8-foot and PRT vs. Tank at Hampton at 11 a.m.; West Area Shops vs. Full Scale at Wilson at 11 a.m.; Engineering vs.

16-foot at Wilson at 1 p.m.; Structures vs. FRM at Hampton at 1 p.m. Nov. 14--16-foot vs. FRM and Tank vs. AFR at Hampton at 11 a.m.; Structures vs. 8-foot at Wilson at 11 a.m.; West Area Shops vs. PRT at Wilson at 1 p.m.; Engineering vs. Full Scale at Hampton at 1 p.m.

The Standings:

Team	Won	Lost	Pct
FRM	3	0	1.000
Engr. Section	3	1	.750
AFR	3	1	.750
Structures	2	2	.500
PRT	2	2	.500
16' Tunnel	2	2	.500
Tank	2	2	.500
8' Tunnel	1	2	.333
Full Scale	1	3	.250
W. Area Shops	0	4	.000

WANTED: Shot gun and shells, or shells only; call or see Donald Foster, Photo Lab, 259.

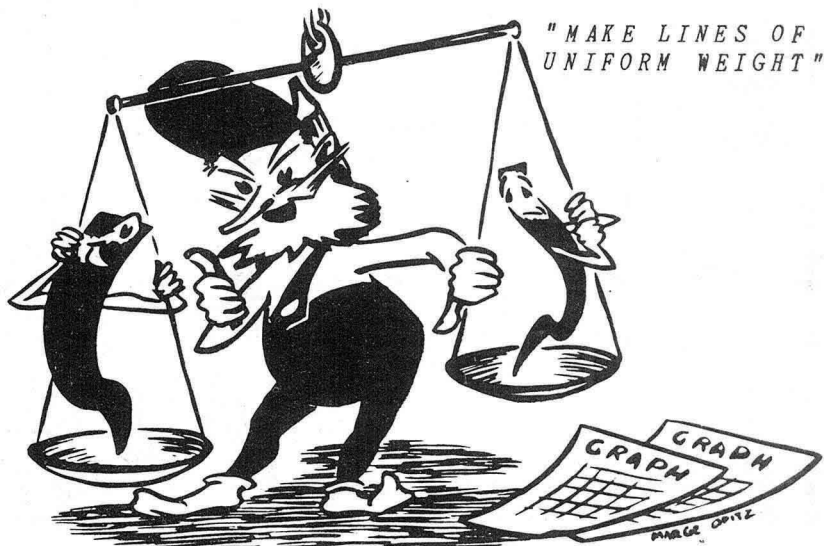
# VACATION

## RHAPSODY

RETURN OF THE NATIVES: Gladys Fulton, ALD, from home in Washington; Jewell Whatley, ALD, from Alabama; Bob Souther, ALD, from Washington; Hal Sweberg, Full Scale, from New York; Mrs. Pat Anderson, from a week-end with her daughter at Madison College, Harrisonburg; Dave Malorey, 16-foot Tunnel, from home in Farmville, Wilhelmina Kroll, George Heimerl, Harriet Tindal, Structures, and Levy Tindal, Construction, from Washington; Jim La Hatté, Full Scale, from home in Washington; Larry Fogarty, 19-foot Tunnel, from Martana and points east; Blake Corson, 16-foot, from a hunting trip near Buckingham; Jimmy Mayo, Engineering Section, from West Point.

THOSE STILL AWAY: Sig Sjoberg and Clo Wood, FRM, in Philly for the week-end; Betty Ludwig, FRM, in Tennessee; Jack Erwin, AFR, Owen Deters, 19-foot Tunnel, and Bernard Klawans, FRM, in Washington for the week-end; Hazel Phillyaw, 19-foot Tunnel, in Comfort, N.C.; Jack Paulson, Free Flight, at Greensboro College, where he is attending the fall prom as guest of Hilda Thompson, formerly of FRM.

# REPRODUCTION AL SAYS:



## HOUSING PROJECT

Another group of unfurnished apartments will become available to war workers in this area on December 1. They are located at Thirty-sixth street and Marshall avenue in Newport News and have been built under an FHA grant by the Seven Oaks corporation.

The entire project has over two hundred units, 44 of which will be completed by December 1. The other units are expected to follow in groups of the same number every fifteen days.

The construction is of brick and cinder block covered with cement topped by slate roofs. The individual buildings will contain from four to fourteen units. Each unit of four buildings will face inward on a grass court and play area.

Each apartment will cover two floors. There are five rooms and bath in each apartment. A living room, dining room, and kitchen are located on the first floor, with two bed rooms and a bath upstairs.

Electric refrigerators and gas stoves are furnished and the apartments are heated by a coal heating unit, with a blower, both of which are housed in a small furnace room.

The monthly rental is \$45.

The apartments are available to immigrant workers and workers whose present housing conditions are not suitable. Before an application can be accepted, applicants must present a statement of eligibility, which can be obtained by Laboratory employees from E. McKinley Hutton at the Personnel office.

Mr. Hutton states that although the apartments will not be ready for occupancy until December 1, they are already being assigned in advance.

**TELEPHONES:** Additions and changes in the directory include: Hydrodynamics--Chief, Starr Truscott, 392; Tank No. 1, Head, Jack Parkinson, 393; Tank No. 2, Head, John R. Dawson, 394; and Office, 213.

## Life At The Laboratory

**MISCELLANY:** Herbert R. Pass, formerly of Full Scale and Flight Research, writes from the west coast that he has recovered from his recent mountain climbing injuries and is now going in for yogi...Paul (Woman Hater) Johnson, 16-foot Tunnel, is reported to be receiving perfumed letters these days...ICL folks are wondering if the "feud" between Gloria Nestor and Sign Painter Johnson is because she is so often without shoes while at work...Reproduction's three illustrators, Marge Patterson, Mary Thorne Tyson, and Dot Severance, welcome Winifred Diller of Decatur, Ill., as their fourth artist...Ray Schaeffer, Blueprint Room, is back after three weeks in New York for an operation...

**LOVE AT FIRST SIGHT:** Henry Suydam, Tank, will marry Tony Williams of New York on Sadie Hawkins Day, Nov. 6...Fern Renner, East Area Computing, married Sergt. Robert Lester Jackson on Oct. 22 at the Hampton Presbyterian Church... Jack Golden, formerly of Free Flight and now on the west coast, was married in Boston on Oct. 31...Frances Bohannon, Reproduction, and Bob Liddell, AWT, were married Monday night, Nov. 1, at St. John's Episcopal Church in Hampton. Betty (Library) Bohannon was maid-of-honor.

**BUNDLES FROM HEAVEN:** Connie Parker, formerly of Apprentice Administration, has a new daughter, Rosalind Cooke Parker...Pete Korycinski, 16-foot Tunnel, is the father of a 5 pound, 6 ounce "jeep size" daughter, Jane Victoria... Cadwell Johnson, Engineering, was passing out cigars (a whole box of Phillies) Tuesday morning in honor of his brand new daughter.

**VISITORS:** A number of visitors were at the Laboratory during the past few days. Among them were John F. Victory, NACA Secretary; E. H. Chamberlin, Assistant Secretary; Ralph E. Ulmer, M. B. Ames, Jr., and Ieland D. Smull, of the Washington Office; K. Benson, B. G. Gulick, and A. H. Heidenreich, and B. A. Hunsaker of AERL; B. T. (Red Hulse), Curtiss-Wright test pilot; Grover Loening, of the WPB, chairman of the NACA's helicopter sub-committee; and Eastman N. Jacobs II of Purdue University to see Mr. Jacobs.

## MODEL CLUB MEETS TO SHOW PICTURES

The Brain Busters Model Club will meet at the Industrial USO in Hampton Sunday, Nov. 7. Movies of the Hydro contest conducted recently on a lake near Langley Field will be shown.

A gas model contest will be sponsored by the club on Nov. 21, weather permitting, at the LaSalle Avenue field. There will be two classes, A and B combined and C. Prizes will include a trophy for the highest average of three flights, cash, and merchandise. The entry fee will be 50 cents paid in advance or 75 cents at the scene of the contest. Entry fees should be paid to Dick Sladek or Frank Parmenter.

The club sponsored a hand launch glider contest last Sunday, with Dick Everett coming out on top. He had a total time of 8 minutes and 39 seconds for three flights.

George Sadler was second, his total time being 6 minutes and 50 seconds; Ben Cleveland was third, with a total of 6 minutes and 12 seconds, and Cadwell Johnson fourth with 4 minutes and 51.2 seconds.

**PIONAIRS:** First wind tunnel 12 inches square and a simple balance for measuring air forces on a model.

### CAFETERIA LOSES 800 SPOONS IN SIX MONTHS

This is the story of the NACA Cafeteria's missing silverware. The story began several months ago--or we might even say the day Walter Reiser's food emporium first opened shop. But what Mr. Reiser would like to know is: will it ever end?

Just about every day, according to Mr. Reiser, a few pieces of silverware disappear from the Cafeteria. In less than six months, 800 tea spoons vanished. What's worry-

ing Mr. Reiser is the realization that it is virtually impossible nowadays to replace the silverware.

So Mr. Reiser would like for the Laboratory employees to hunt around in their offices, in the far recesses of desk drawers, anywhere that might be harboring a piece of Cafeteria silverware that was probably borrowed temporarily, tucked away, and forgotten in the rush, and return it; and for that he offers thanks.

#### FORM NACA BRIDGE CLUB AT USO MEETING NOV. 8

Laboratory employees interested in the organization of an NACA Contract Bridge Club have been asked to report to the Industrial USO Center on North King Street in Hampton on Monday, Nov. 1, at 7:30 p.m.

The effort to form the club is being initiated by Manny Stein of the Structures Research Laboratory.

#### THIRTY-FIVERS SPONSOR HARVEST MOON DANCE

The Thirty-fivers of St. John's Episcopal Church in Hampton will sponsor a Harvest Moon dance on Friday, Nov. 19, at their Parish House on Hope Street, in back of the church, from 9 to 12 midnight. Music will be furnished by Edward Travis and his orchestra.

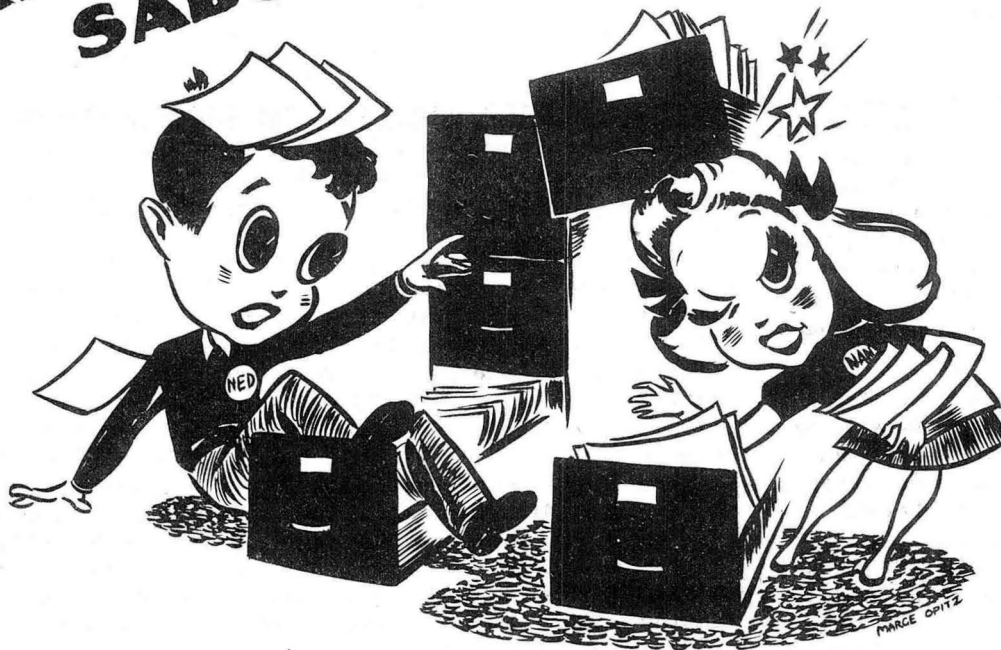
Tickets will be sold at NACA by Virginia Tucker, Kitty Joyner, and Mary Jones.

**MISSING:** The following electric drills, listed according to inventory numbers and serial numbers, are missing from the East Area Machine Shop. It is requested that all sections check this list and if any of these drills are in their possession, please communicate with E. J. Shave, East Area Machine Shop, telephone 383. Inv. No. 4498, Ser. No. 957292 M; Inv. 10266, Ser. 12601; Inv. 10267, Ser. 12602; Inv. 9139, Ser. 139916; Inv. 16165, Ser. 339645; Inv. 13726, Ser. 5920; Inv. 10268, Ser. 12603; Inv. 13970, Ser. 386759; Inv. 15941, Ser. 1608; Inv. 16351, Ser. 611282.

**LOST IN CIRCULATION:** Figures for report, "Effects of 6-blade Single and Dual-rotating Propellers on the Yaw Characteristics of a Fighter-type Airplane Model." If you have any information on the whereabouts of this material, please communicate with R. H. Neely, 19-foot Pressure Tunnel.

# SAFETY SABOTEURS

# LEAVE FILE DOORS OPEN



# KEEP CABINETS CLOSED WHEN NOT IN USE