



LMAL BULLETIN

ISSUED SEMIMONTHLY IN THE INTERESTS OF THE PERSONNEL OF LMAL, NACA

Issue 2, Vol. 2.

LANGLEY FIELD, VA., JANUARY 23, 1943

Page 1

NEW PAY RATES ESTABLISHED

In accordance with the Senate Joint Resolution approved December 27, 1942, extending until April 30, 1943, (the period for which overtime rates of compensation may be paid under the present acts), the following table of salaries together with pertinent deductions is published for the information of the Laboratory staff:

NOTES:

- * The semimonthly overtime rate is the annual overtime rate divided by 24.
- ** The regular semimonthly rate is based on a 360 day year, so the amount is calculated by dividing the annual rate by 360 and multiplying by 15.

BASE SALARY	ANNUAL OVERTIME	OVERTIME, REGULAR, and TOTAL SEMIMONTHLY	RETIREMENT DEDUCTION	10% BOND ALLOTMENT	VICTORY TAX	NET SEMI-MONTHLY PAY
720	156.00	6.50* 30.00 36.50**	1.50	3.75	.40	30.85
1200	260.00	10.83 50.00 60.83	2.50	6.25	1.90	50.18
1320	286.00	11.91 55.00 66.91	2.75	7.50	1.90	54.76
1440	312.00	13.00 60.00 73.00	3.00	7.50	2.40	60.10
1500	325.00	13.54 62.50 76.04	3.13	9.38	2.40	61.13
1620	351.00	14.62 67.50 82.12	3.38	9.38	3.20	66.16
1680	364.00	15.16 70.00 85.16	3.50	9.38	3.20	69.08
1800	390.00	16.25 75.00 91.25	3.75	9.38	3.20	74.92
1860	403.00	16.79 77.50 94.29	3.88	10.00	3.20	77.21

(Continued on page 6.)

RETIREMENT DEDUCTIONS ARE TAXABLE

According to the "Federal Register" of January 7, 1943, the amounts deducted from the pay of Civil Service employees in accordance with the Civil Service Retirement Act must be reported in gross income and no deductions can be taken on income tax returns for the amounts deducted inasmuch as these amounts are payments made toward the purchase of annuities provided for in the Act and are not allowable deductions for income tax purposes.

NACA LEADS GOVT. AGENCIES IN BOND SALES

The following letter was received from the Washington office:

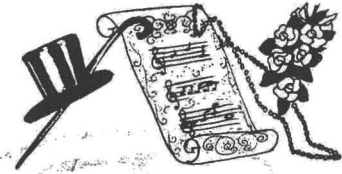
The report of the Interdepartmental War Savings Bond Committee on the participation of Governmental agencies in the payroll savings plan for the month of November, 1942 shows the National Advisory Committee for Aeronautics leading all Government agencies regardless of size, in the percentage of gross pay subscribed for war bonds. With respect to percentage of employees participating, the NACA also leads all Governmental organizations having over 500 employees, with a percentage of 96.4. Three small organizations have 100%.

For your information, the leading Federal agencies with the highest percentage of gross payroll subscribed for war bonds are:

(continued on page 6.)

EDITORIAL STAFF

EDITOR-IN-CHIEF.....	Joseph P. Doyle, Jr.
ASSOCIATE EDITORS.....	Jerry Kayten Mary Anne Campbell
NEWS EDITOR.....	Marvin Pitkin
MANAGING EDITOR.....	Ward Matthews
SOCIAL EDITORS.....	Peggy Gildner Elizabeth Garner
SPORTS EDITOR.....	Bob Crawford
ART EDITORS.....	C. B. Russel Ben Vogel
ADVISOR.....	Dr. W. A. Aery



DIMOUT RULES

Despite the fact that dim out regulations have theoretically been in effect for several months, the average Peninsula resident still appears to be somewhat in the dark about lights. In view of recent developments, about which the less said the better, no one can definitely say that the horseless carriage is here to stay. At present, however, (that is, as we go to press) most of us still do drive our cars occasionally, and should be familiar with the exact rulings regarding automobile lights. With this in mind, we have obtained from Major Bob Souter of the Wythe, Auxiliary Police a copy of Governor Darden's Civilian Defense Executive Order No. 90 (amended), dated December 21, 1942. We have digested the order and prepared a brief summary of points we believe to be of particular interest to NACA personnel.

1. We are located deep in the heart of the coastal dim-out area, and hence subject to all regulations pertaining thereto.
2. All light regulations are in effect during the hours of darkness, which run from one-half hour after sunset to one-half hour before sunrise. In the case of a cloudy day, the sunset or sunrise may be presumed to occur at the same hour as the corresponding phenomenon on the previous day.
3. For ordinary driving, headlights of course must have their upper halves blacked out by opaque paint or opaque material. BUT this still does not permit the use of high beams. Low (passing) beams must be used at all times.
4. Normal rear driving lights and license plate lights are permitted and need not be covered.
5. If the car is in such a position that its lights are visible from the sea, parking lights only may be used. Here again, however, normal rear lights may be used. The immediate area in which an automobile's lights are considered visible from the sea consists of that portion of the shore of the Chesapeake Bay from the mouth of the York River, southeast and south, to Fort Monroe.

WELCOME P-I'S

During the first eight months of 1943, 109 new engineers will join the laboratory staff. The new P-I's represent schools from Harvard to Southern California, from Georgia Tech to the University of Washington; in all 39 different colleges.

The majority of these men are aeronautical engineers; but the group includes mechanical engineers, electrical engineers, industrial engineers, civil engineers, physicists, mathematicians, and naval architects.

Already 13 of our new engineers have arrived and entered upon their duties at the laboratory.

To these and to their colleagues who will follow, the Bulletin extends a hearty welcome. We wish you the best of success and happiness in your new careers.

NOTICE - GASOLINE APPLICANTS

THE LOCAL RATION BOARDS HAVE STATED THAT THOSE EMPLOYEES OF THIS LABORATORY WHO HAVE RECEIVED SUPPLEMENTARY GASOLINE RATION BOOKS WITHOUT APPLYING THROUGH THE LMAL TRANSPORTATION COMMITTEE WILL BE REQUIRED TO SUBMIT A NEW APPLICATION THROUGH THE COMMITTEE BEFORE THEIR RATION BOOKS CAN BE RENEWED.

6. Violations of any portions of the order subject the violator to a possible \$5000 fine, one year's imprisonment, and immediate exclusion from the Eastern Military Zone (to some cleaner community, we trust). If the violator is an enemy alien he is subject to immediate internment and all sorts of embarrassment.

No mention is made of the use of shore parked automobile headlights for the transmission of code messages to off-shore vessels. This question is evidently left to the driver's discretion.

MARRIAGES:

Maude Sinclair of Apprentice Administration to Graham Agnew of Fort Bragg, North Carolina on December 20, 1942.

Temple Bass Brandau, Flight Research Maneuvers, married James Cook, Shipyard, in a lovely ceremony at St. John's, January 16th. Attendants were Rowena Daniels, Computing Section, and Charles Liddell, Flight Research Maneuvers.

Mr. and Mrs. John Hymans announce the marriage of their daughter, Dorothea La Vonne, to Mr. Lucas James De Koster, on Wednesday, December 30, at 12 noon, at the American Reformed Church, Hull, Iowa.

Mr. and Mrs. John Campbell were hosts on January 2 at a party for the members of the Free-Flight Tunnel and their guests.

Mary Ann Canaday, formerly of the Computing Section and 16-foot tunnel, was married on January 2 at Raleigh, N.C. to Stewart Simms of that city.

Romance seems to still be blossoming although the holiday season is over and spring hasn't arrived. One of the most eligible bachelors of the Laboratory, Bob Swanson, is no longer on the eligible list. Look at the sparkler on Margaret Dawson's third finger, left hand. Congratulations Bob, for the fine work.

Miss Pearl Young of the Editorial Section left January 15 for Cleveland. The entire Laboratory staff will miss her and we wish her the best of luck at AERL.

Although we are losing many members of the staff who are going to Cleveland, new personnel are arriving every day. Welcome to them all.

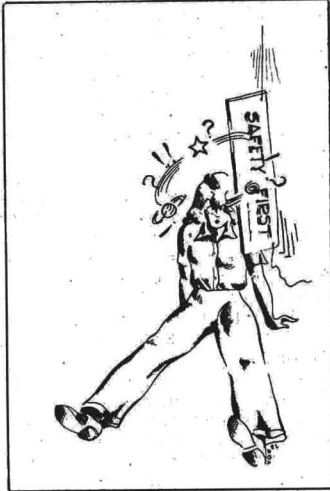
George Lindsey of the Stenographic Section is now recuperating from an appendectomy which was performed Jan. 2. Best wishes for a speedy recovery, George!

LOST,
1 1/2 ton Koffin chain hoist - property Engine Lab - loaned to 16-foot tunnel - rehailed by Maintenance - Phone any information to Maintenance office (223).

MY DAZE

By K. and P.

As part of a general move to improve efficiency by reducing losses due to accidents, a safety campaign has been inaugurated at the Laboratory. Signs urging employees to exercise extreme caution in their work have been mounted in all the shops on the field. So far, the results have been gratifying. As a matter of fact, the only serious accident reported since the campaign started occurred last week at the Prop Shop, where a young lady apprentice was hit on the head by one of the wooden safety signs. Maybe somebody should post safety signs urging care in mounting safety signs.



The majority of Lab employees driving cars have blacked out their headlights to comply with the recent edict. The de-glowification appears to have been accomplished in many simple and ingenious ways, using everything from plain cardboard masks to fancy venetian blind affairs. The prize coup, however, was attempted by an engineer who should have known better. He spent several hours dismantling his headlight assemblies and coating the upper half of each light bulb with black paint. Shows a complete lacquer brains, one might say.

NOTE: We didn't write the following "dirge"; blame it on the Editor!

K. and P.

Mother Adolf Hubbard,
Went to Europe's cupboard,
To satisfy her greed
But a Russian bear,
Found her snooping there,
And now Mother Adolf is treed.



BY K.- P.

Dr. Theodorsen.

Although a mechanical engineer and physicist by training, Theodorsen's work on flutter, vibrations and theoretical aerodynamics has been of such quality as to rank him among the top-flight aerodynamicists in the country. A tall gaunt man, capable of extended periods of driving concentration, Theodorsen heads the Division of Physical Research at the Laboratory and is rated Chief Physicist.

Theodorsen's earliest recollections are of the gray mists and whalebone-covered shores of Sandefjord, the fishing village in Norway where he was born. In Sandefjord, important in Norwegian economy as the home port of half the whaling fleet of that country, Theodorsen received the basic training given to all Norwegian youths and then left his birthplace to continue his education at the Technical Institute of Trondheim. There he studied mechanical engineering, and probably the ways of women as well, for his graduating year, 1922, found him possessed of a newly-won bride as well as a degree in Mechanical Engineering (equivalent to the American degree of Master of Science).

The seaman's instinct still ran high in Norway and Theodorsen and his classmates elected to pursue their careers in foreign countries - only one man out of the graduating class of 31 remaining in Norway. Theodorsen had heard much of America from the tales told in Sandefjord by returning sailors and after spending two years as Fellow and Assistant Professor of Mechanical Engineering at Trondheim he decided to try his luck there.

The Congress of the United States at this time chose to revoke the ruling that a wife could enter the country on her husband's passport; consequently, when the Theodorsens arrived at our shores they were forced to go back for another passport. This they didn't mind very much - they had been married only a year and were just as content to be aboard ship as any place else - so off they went and on the third crossing they were finally admitted to the United States. Two weeks after landing Theodorsen was teaching engineering at Johns Hopkins University. By some odd quirk of chance Mel Gough of piloting fame was a student in his first class.

Theodorsen taught at the university for five years, from 1924 to 1929. "Being possessed of more mathematical inclination than the average engineering job would permit," he took steps to obtain his Doctor's degree in Physics during the same period. In 1929 he inadvertently disclosed to Dr. Ames, Dean of Johns Hopkins that he was thinking of doing theoretical work at the Bureau of Standards. Dr. Ames, a fast talker, convinced Theodorsen that the NACA was the place for him and to the NACA he came in 1929.

Theodorsen's work on the Field, in addition to being top-notch has also been extremely varied. To mention only a few fields, he has done work on flutter, vibrations, instruments, turbines, propellers, cowling, cooling, tunnel wall interference, theory of thin airfoils and scores of others. His most outstanding work has been in the field of flutter, in which he is freely acknowledged to be the country's expert and in the field of theoretical pressure distribution on airfoils, where his work supplemented the previous investigations of Joukowski and Munk.

Theodorsen's keenest outside interest at present is an educational experiment being perpetrated on Brown University, to which he acts in an advisory capacity. The purpose of the experiment is to set up at Brown a system of engineering education similar to European methods. Theodorsen believes that the American system of education has caused too great a cleavage between the mathematician and the engineer. He thinks the most efficient combination of the two can only be gained consistently under the European system of engineering education in which much more stress is placed on a sound mathematical background for engineers. He therefore watches with a delighted eye, the guinea-pig laboratory now taking shape.

Theodorsen's staff is much amused over the fact that he has apparently never changed or cleaned his pipe in 10 years. To this outrageous charge, he points out that once each year he goes to the machine shop, there takes a 1/2" drill and drills out the bowl.

The Theodorsen's have three children, the oldest of whom her father ruefully admits, finds him seriously lacking in mathematical rigorism.

LANGLEY VIEWS

By J.P.C.

NOTE: Because of the many interesting features of the equipment and work of the NACA tanks, two or more articles will be necessary to describe them. This week the equipment is described.

THE NACA TANKS

Equipment

At least two sets of tires at LMAL are important enough to the war effort to be replaced regardless of how serious the rubber shortage becomes. These tires are used on the two NACA tank towing carriages and constitute but one of the many novel design features which make these tanks the best seaplane model towing basins in existence.

Tank number 1, built in 1931 and enlarged in 1937, was the first tank in this country designed especially for testing models of seaplanes. It is 2920 feet long, over 1000 feet longer than the next longest tank in the world which incidentally is NACA tank number 2. It is so long that due to the curvature of the earth's surface, the water at the middle of the tank is about 5/8 inch higher than a straight line joining the water level at each end. The width of the tank at the surface of the water is 24 feet and the average depth of the water is 12 feet.

Eight 75-horsepower motors, which can provide 220 horsepower apiece for short periods, drive the towing carriage of tank number 1 at speeds up to 80 miles per hour, making it the world's fastest. Here again tank number 2 is the runner-up --- its two motors give a top speed of 60 miles per hour.

Tank number 1 was the pioneer in the use of rubber tires on towing carriages. Previously only carefully machined steel wheels had been used and they had proved satisfactory for the low-speed tests of ship models carried out in the early towing basins. The NACA tank, however, introduced new problems because of its great length and the high speed required of its carriage. If steel wheels had been used, careful machining of each inch of rail would have been necessary and the cost of the tank would have been increased tremendously. Moreover, finely finished steel wheels would have low adhesion on the steel rails and this would have prevented attaining the rapid acceleration and deceleration necessary for high carriage speeds. The use of pneumatic rubber tires was the solution to the problem - they provided smooth running for the carriage in spite of the slight roughness of the rails and made it possible to accelerate and decelerate very rapidly.

(Continued on page 5.)

OUT OF THE DOPE CAN

By Dick Everett

Seems as though the first indoor contest will be well attended. The only thing that is sure is that someone will have to best Phillips. It has been a long time since we saw that now famous tailless ship last year.

Records of last year will probably be beaten after a few contests. They are as follows: Class B Fuselage, Dave Call, 7:37; Class B Stick, Caldwell Johnson, 7:00; Class C Stick, Dick Everett, 10:54; Class D Stick, Dick Everett, 9:53 and incidentally set a national record. Class A R.O.G., Caldwell Johnson.

A lot of you may wonder why there is so much about indoor ships this time. Just look at the weather and you will readily see the answer. There seems to be plenty of supplies available for all who are interested.

The Baby R.O.G. class A model will weigh approximately .030 oz. ready to fly and has 30 sq. in. of wing area. The Class B Model weighs about .035 to .043 without rubber and has 100 sq. in. The Class C is still bigger and the best of ships will weigh .054 oz. without rubber and has 150 sq. in.

All those who are interested in these, the very best and hardest to build of the model airplanes, come out to Armstrong School on Sunday January 3rd and see what these ships look like. Don't be surprised to see a framework of balsa and a prop cruising through the air for the ships have no apparent covering being covered with Microfilm, the lightest material available and actually most of the new kits are coming through with substitute materials. They are composed of pine, gumwood, balsa and cardboard. Everything seems to work all right with the

(Continued next column.)



A son was born to Mr. and Mrs. Charles E. Bennett, Jr. on November 3, 1942. Mr. Bennett is of the 19' Pressure Tunnel. The young son is Charles E. Bennett III.

Mr. and Mrs. Andrew Veryzer are the proud parents of a 7 pound 4 1/2 ounce son. Young Andy Jr. was born December 17.

exception of the cardboard. The ribs are usually diecut from this material and the tendency to warp is too much. And as you all probably know, once it starts to warp its usefulness is gone.

The Martens contest will be held January 10th, weather permitting.

ANNUAL MEETING NACA CREDIT UNION

The annual meeting of the NACA Laboratory Federal Credit Union will be held on January 27, 1943. The tentative plans call for dinner to be held in the NACA Cafeteria at 5:30 PM followed by a business meeting in the projection room on the second floor of the Administration Building.

A complete report on the operation of the Credit Union for the year 1942 will be presented and a declaration of dividends to the shareholders will be recommended. There will also be an election of the officers for the year 1943.

The officers of the Credit Union consist of seven directors, three credit committee members and three supervisory committee members. The directors establish the operating policies and procedures of the Credit Union, the credit committee passes upon all loan applications, and the supervisory committee acts as an auditing agency. At this annual meeting, there will be elected to office five directors, two credit committee members and three supervisory committee members.

A nominating committee consisting of Joseph N. Kotanchik, S. Walter Hixon, and Robert A. Goodness will present the name of one candidate for each vacancy. Additional nominations for the various positions may be made from the floor.

Both members and nonmembers of the Credit Union are invited to attend the annual dinner and meeting. The cost of the dinner for members will be shared by the Credit Union and the members. Nonmembers will be required to pay the full cost of the dinner which will not exceed 75 cents.

Arrangements are being made with the military authorities to permit Credit Union members to bring their wives, husbands, or friends who are not Laboratory employees, to the dinner and meeting. The names of such visitors as well as of members and nonmembers must be given to a collector of the Credit Union four or five days in advance in order that a complete list of visitors may be in the hands of the military police at the main gate before the time of the meeting.

Efforts are being made to procure interesting and educational films to be shown during the meeting.

LOST - One copy of Milliken's Aerodynamics of the Airplane. Finder please communicate with Cal Muse, 19' Pressure Tunnel.

Langley Views
(continued from Page 4)

Elaborate precautions have been taken in the design of the tank to be sure that the carriage stops at the end of its high speed dashes. Two types of electrical braking - regenerative and dynamic - can be applied through the carriage motors by the operators, and the dynamic braking is also applied automatically at a certain point near the end of the tank. Air brakes, similar to those used on large trucks, are also used by the operators and, like the dynamic braking, are applied automatically near the end of the tank. In case the air brakes fail, a hand brake on the carriage can be used to operate the brake shoes on the carriage wheels. If all these brakes fail, the carriage is stopped at the end of the tank by special grab brakes, consisting of spring clamps on the carriage which grip the tapered webs of two I beams beside the rails. Thanks to the satisfactory operation of the other brakes, the grab brakes have not as yet been required to stop the carriage.

Tank number 2, which is now receiving its finishing touches is probably the most modern towing basin in the world. Its towing carriage, unlike that of tank number 1, runs on an overhead track, is streamlined, and has a very small cross-section. These features permit a large unobstructed area over the surface of the water and thereby reduce the interference of the carriage on the model in dynamic take-off and landing tests. In tank number 1, the water level is dropped 6 feet to give this unobstructed area.

Individually, tanks number 1 and 2 are probably superior to any other seaplane towing basins in the world. Together, they form a combination which assures the NACA of unrivalled leadership in equipment for testing models of seaplanes.

The carriage rails in tank number 1 consist of structural H beams which are laid with the sides of the H horizontal. The rails are curved to conform to the earth's surface so that they will always be the same distance above the water in the tank.

BASKETBALL

On the afternoons of January 5 and 7 the first workouts for the basketball team were held. The team's coach, Frank Read, reports that the turn-outs were very promising and that practice will continue through this week at the Langley Field Gym from 4:30 until 6:00 o'clock.

Among those who reported last week at practice were:

- Louis Fieldman 8' H.S.T.
- Charles Clark 8' H.S.T.
- Jack Reeder Flight Research
- Harold Kleckner Flight Research
- Albert Evans 16' P.T.
- Robert DeMoss 16' P.T.
- Paul Johnson 19' P.T.

NACA BOWLING STANDINGS

At last, it is possible to release the official standings of all but one of the bowling leagues. The results of the men's "A" League are not included below since the league with the exception of a few teams has an abnormally high percentage of forfeit games. Write to Jack Burgess for information about "the decline and fall of the "A" League.

Bowlers are reminded that the season is divided into three sections - each independent of the other two. The team winner of each league per section shall be given a prize award of \$3.60. A complete prize list will be published shortly. All negligent teams are again urged to pay their entrance fees of \$3.60.

NACA DUCKPIN BOWLING LEAGUES

(MEN'S LEAGUE B)

Position	Name	Won	Lost	Tie	High Team Game	High Team Set	Number Games Bowled
1	KINGPINS*	(8) 18	6	-	608	1683	120
2	TANKERS	(6) 18	6	-	565	1582	117
3	ENG. SEC.	(9) 13	10	1	552	1602	120
4	FREE FLIGHT	(3) 13	11	-	552	1608	119
4	SPINNERS	(4) 13	11	-	554	1608	117
6	STUPORMEN	(5) 12	12	-	573	1561	119
7	STREAMLINERS	(2) 10	14	-	543	1569	75
8	STAB. TUNNEL	(1) 10	13	1	535	1509	92
9	SLOW ROLLERS	()	DROPPED OUT				36

(MIXED LEAGUE C)

1	NO NAMES*	(8) 17	7	-	516	1459	113
2	HOLY ROLLERS	(5) 15	9	-	480	1397	113
3	AWT WILDCATS	(3) 13	11	-	495	1427	108
3	WESTERNERS	(9) 13	11	-	494	1460	94
5	AWT WOLVES	(4) 12	12	-	491	1365	92
6	STINKERS	(7) 11	13	-	510	1438	113
7	SHARPSTERS	(1) 10	14	-	490	1420	94
8	BENEDICTS	(2) 9	15	-	492	1418	80
9	BIG TIMERS	(6) 8	16	-	501	1429	86

(MIXED LEAGUE D)

1	WHIZBANGS*	(7) 20	4	-	473	1340	102
2	RAGOUTS	(3) 18	6	-	482	1389	117
2	EXCELSIOR	(1) 18	6	-	532	1534	85
4	SPITFIRES	(8) 14	9	1	462	1350	117
5	DIMOUTS	(4) 12	12	-	475	1404	113
6	QUEENPINS	(9) 11	12	1	455	1285	103
7	COSMOPOLITANS	(5) 9	15	-	459	1317	82
8	S.T. DUBS	(2) 5	19	-	466	1352	87
9	JERKS	(6) 2	22	-	DROPPED OUT (Replaced)		24

(MIXED LEAGUE E)

1	ERS SCRUBS*	(1) 19	5	-	472	1358	111
2	WHIRLAWAYS	(4) 16	4	1	493	1408	105
3	PRES. TUN. NO. 1	(5) 15	6	-	508	1406	102
4	BULLDOGS	(9) 14	10	-	500	1405	107
5	PRES. TUN. NO. 2	(3) 13	7	1	479	1391	82
6	TANGLEFOOT TIGERS	(7) 6	9	-	488	1317	57
6	ERS LUGS	(2) 6	9	-	492	1310	35
8	DYN. MODEL SHOP	(8) 0	21	-	435	1249	36
9	HAS BEENS	(6) 0	DROPPED OUT - (Replaced)				

NACA TENPIN BOWLING LEAGUE F

1	*PHOTO LAB KEGLERS (1)	21	3		883	2400
2	I.S.C.'S (3)	16	8		832	2321
3	8' HST BUNGLERS (6)	16	8			
4	E.R.S. DUBS (4)	12	12			
5	AWT DRIPS (7)	11	13		817	2326
6	STRUCK-SHURES (8)	11	13		814	2229
7	E.R.S. THUGS (9)	9	12		887	2407
8	ENG. LAB ROLLERS (2)	8	16			

*Winner of 1st section.

BASE SALARY	ANNUAL OVERTIME	O.T., REG. and TOTAL	RETIREMENT DEDUCTION	10% BOND ALLOTMENT	VICTORY TAX	NET SEMI-MONTHLY PAY
2000	433.33	18.05 83.33 101.38	4.17	12.50	4.20	80.51
2040	442.00	18.81 85.00 103.81	4.25	12.50	4.20	82.46
2200	476.66	19.86 91.66 111.52	4.59	12.50	4.20	90.23
2300	498.33	20.76 95.83 116.59	4.80	12.50	4.20	95.09
2600	563.33	23.47 108.33 131.80	5.42	15.00	5.20	106.18
2900	628.33	26.18 120.83 147.01	6.05	15.00	6.20	119.76
3200	628.33	26.18 133.33 159.51	6.67	6.20	18.75	127.89
3500	628.33	26.18 145.83 172.01	7.30	7.20	18.75	138.76
3800	628.33	26.18 158.33 184.51	7.92	8.20	18.75	149.64
4600	400.00	16.67 191.66 208.33	9.59	9.20	22.50	167.04

STOCK NOTES

By Johnny Bergbom

This is the first of articles to appear in this paper devoted to keeping the Laboratory posted on materials no longer available or being delayed due to some reason beyond our control.

Calendar pad refills have been received. They were held up by Washington Office until the needs of LMAL, AERL, and AAL were determined.

Grippit glue is out for the duration of the war.

The question of mechanical pencils is something we cannot answer. They have been ordered for about 6 months. A reliable source says that the contractor is so rushed with government orders that they are about 3 to 4 months behind and supplies of metals are running low. We are forced to substitute an HB wood-case pencil until we receive definite word on the mechanical pencil situation. If you want mechanical pencils you will have to get some of those you have at home or in the back of your desk.

Be patient when you order a pencil and get a bolt. We have new apprentices also. After all they may only be substituting in an earnest effort to please.

The stockroom will continue to look for the best available substitutes for items impossible to procure. In "Saran" we have a very reliable substitute for brass, copper and aluminum tubing and fittings. The cheaper "Koroseal" and the higher priced "Neoprene" synthetics are on hand as rubber substitutes, and soft steel shim is available in place of Swedish blued steel and copper and brass shim. Swedish blued steel is out for the duration and our remaining supply must be conserved for the more important instrument work.

When designing equipment or ordering material please bear these necessary changes in mind. Call 252 for further information on the substitutions we carry.

The present storage facilities in the warehouse are overflowing with stored items. However we will have a large outside storage lot available before long, (we hope) in which to place items that cannot be affected by weather. Before we accept items for storage from the various sections, a storage form, "in duplicate" should be submitted through proper channels, see form, and when this form is properly acted upon and the necessary approvals gained the stockroom will have the items picked up and placed in storage. Please do not deliver items to warehouse until these approvals are received on the proper form.

Requests at stockrooms for any strategic materials such as brasses, copper and alloys, bronze, Swedish blued steel, rubber in all forms, aluminum and alloys, etc., must have some specific reasons why only these materials can be used. You will not be issued these materials without an OK, so call 252 and ask for J. Bergbom or if not available for D. Buchanan.

MISSING PROPERTY

The two stopwatches described below have been misplaced:

- (a) A.R. & J.E. Meylan
Works No. 80851
Case No. 256865
Marked "Eng. Res. Sec. 1044"
- (b) A.R. & J.E. Meylan
Works No. 85999
Case No. 219006
Inventory No. 1122
Marked "Eng. Res. Sec." and maybe "1122"

Anyone knowing the location of either of these watches please notify the Engine Research Section.

did you know?
THAT LMAL USES ENOUGH INDEX CARDS IN ONE YEAR TO REACH RICHMOND IF PLACED END TO END



NACA LEADS GOVERNMENT AGENCIES (continued from page 1.)

Organization	No. of Employees	Percentage
NACA	2883	11.5
National Mediation Board	27	11.4
Navy	53355	11.3
Food & Drug Administration	814	
National Capital Park & Planning Commission	19	11.0
Federal Power Commission	673	10.9
		10.8

The personnel in most of the Governmental agencies just began receiving overtime compensation December 1, 1942, so a general increase is expected in the subscriptions from such agencies. I am very proud of the spirit of NACA personnel and trust that we will continue our fine record.

/s./ J.F. Victory