

# AIR SCOOP

LANGLEY MEMORIAL AERONAUTICAL LABORATORY

Issue 12, Vol. 6

Langley Field, Va., March 28, 1947

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## JAMBOREE SET FOR TONIGHT

Tonight the NACA Morale Activities Association will sponsor another Juke Box Jamboree at the Activities Building. Music will be furnished by such famed musicians as Benny Goodman, Tommy Dorsey, Charlie Spivak, Diann Shore, Bing Crosby, Spike Jones and many other famous radio stars.

The music will get underway at 9 p.m. and dancing will continue 'til midnight. Admission will be 25 cents per person.

Social Chairman Axel Mattson stated that the last affair was a huge success and he urged that everybody come out and join in the fun.

## ANNOUNCE EXAM FOR DRAFTSMEN

The NACA Board of U. S. Civil Service Examiners announces an examination for Draftsmen and Engineering Draftsmen, SP-2 through SP-8. Employees in these positions should take the examination, if they wish to receive probational appointments.

Applicants will be rated on experience and training listed in their applications; no written test will be given. Applications must be on file with the NACA Board of Examiners not later than April 7. For further information call the Board of Examiners, telephone 2272.

## ANNOUNCE LITTLE THEATRE STAFFS

The director's and producer's staffs for the Hampton Little Theatre's production of "Joan of Lorraine" have been announced by David M. Goldenbaum, director, and T. Melvin Butler, producer.

Stage Manager for the presentation will be John Sewell. Mrs. Mary Jane Haaker will handle the costuming, and properties will be in charge of Mrs. Charles Dart. Lighting effects will be managed by Douglas A. King. Margaret Bame and Virginia Hall will head the makeup department.

John Houbolt has been chosen House Manager and will be assisted by Paul Taylor and Lee Dickinson.

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## DRIVE SUCCESS BRINGS THANKS

In connection with the successful conclusion of the Red Cross campaign here, Dr. H. J. E. Reid, Engineer-in-Charge, made the following comment:

"I want to congratulate the Laboratory staff on the splendid showing made again in the annual Red Cross drive. The total collected in 1946 was \$3,146.50, whereas this year the total collected was \$3,272.78. The Laboratory has always done its part in contributing to worthy causes and it is very gratifying, not only to the Red Cross but to the management of this laboratory, to see such a good showing."

Elton W. Miller, drive chairman, expressed his appreciation for the splendid work done by all of the campaign workers and for the cooperation received from the employees whose contributions made the effort a successful one.

## ANNOUNCE NEW RESEARCH DEVICE

Latest and one of the most potent weapons in the nation's attack on the problems of supersonic flight is a new electric calculator now in operation at the Langley Laboratory. This lightning calculator produces solutions to complex supersonic aerodynamic problems in one-sixteenth the time required by trained mathematicians.

The machine was built by the Bell Telephone Laboratories to include numerous special features peculiar to aerodynamic research work and not found in earlier computers, such as the Harvard and University of Pennsylvania machines. An essential feature of the new machine is absolute accuracy, a research necessity. To solve difficult transonic aerodynamic equations containing as many as 35 unknown terms or

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Shown above are two computers at the new Electric Calculator in the Langley Computing Section. The machine, built by the Bell Telephone Laboratories, fills an acute need for a fast, accurate solution to aerodynamic problems in high speed transonic research.

--Photo by Bill Taub

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By Bill Poythress

Last Sunday saw a few of the hardier type of model builders flying in the Balloon Hangar. Due to the high winds, the Hangar was very gusty which accounted for the low durations. The usual crowd of Brainbusters were out trying to break previous records. Joe Boyle, Class B Indoor Glider National Record Holder, Ben Cleveland, and Bob Dagand flew indoor gliders.

Bill Poythress, Jim and Bruce Alwood, and Freddie Harlow, one of the younger boys, flew outdoor free flight gas jobs. Poythress was flying the same battered Arden .099 ship that has survived four years of banging around. Jim Alwood test flew his new Vivell powered ship which performed far beyond his expectations. Freddie Harlow had a bullet powered Zipper and lots of bad luck.

On Sunday, April 20, there will be an indoor contest open to all interested model makers. Stick, cabin, and all classes of gliders will be flown. Prizes will be awarded to the winners by Bill Carroll of the Wythe Sport and Hobby Shop. The models, which will be flown, are very unusual in that they are built of very light balsa wood about 1/64 to 1/32 square and are covered with microfilm in varied hues of brilliant rainbow colors. The national record for this type of model is just under half an hour duration. Everyone is invited to attend the event.

Brainbusters are reminded that a club meeting will be held on Tuesday, April 2, at 8 p.m. at the Syms-Eaton Community Center.

### COMING EVENTS

Printed below is a calendar of coming events scheduled to take place in the Activities Building throughout the next week.

- April 1 - 7:30 - Bridge Club
- April 3 - Open House
- April 4 - IRD Section Party
- April 5 - FRD's Easter Egg Hunt

WANTED: Ride from King and Queen to East Area on 8:15 shift. D. Kaplan, Spin Tunnel.

WANTED: Riders from Sussex-Hilton or North End of Newport News to East or West Area on 8:15 shift. Joe Hallissy, 16-Foot.

FOR SALE: 1941 Chrysler Royal with radio and heater. \$1195. Joe Weil, 7 X 10.

### Time Is A Timely Topic

Time appears to have taken the place of the weather as an interesting topic of conversation; daylight saving time, that is. Although the governing bodies of Newport News and the Counties of Elizabeth City and Warwick already have voiced their opposition to daylight saving time, a lot of individuals favor the fast time as indicated in a poll conducted by the Peninsula Association of Commerce.

Since the subject is a popular one for discussion at this time, the "Air Scoop" sought this week to determine the views of Laboratory employees by getting a cross-section of opinion. Eleven persons selected at random were interviewed. Eight wholeheartedly favored either daylight saving time or beginning the normal work day an hour earlier. One was opposed and two were favorable if the remainder of the community followed suit.

One organization favoring the adoption of daylight saving time in this community was the Hampton Roads Power Squadron, a unit of the United States Power Squadrons. In its argument favoring daylight time, the Power Squadron pointed out that, in this latitude, the sun rises and sets at the following Eastern Standard Times: April 27, 5:11 a.m. - 6:45 p.m.; June 21, 4:48 a.m. - 7:11 p.m.; and September 27, 5:51 a.m. - 5:51 p.m.

Listed below are the persons interviewed and the gist of their comment on the subject of daylight saving time. Do you agree with them?

Dick Braig, Classification: Heartily in favor of any plan that would afford an extra hour of daylight for outdoor sports--either by means of daylight saving time or by coming to work an hour earlier than at present.

Steve Cavallo, Pilot: In favor; gives us more free time by daylight.

Louise Neal, Personnel: Very much in favor; leaves more afternoon time for recreation.

Charlie Clark, 8-Foot: Not in favor; enjoy sleeping in mornings and do too much work in the garden now after work.

Virginia Tucker, Computers: In favor if the rest of the community adopts daylight saving time.

Mark Nichols, Full Scale Analysis No. 2: Sure; I wake up at 6 o'clock anyway, so I might as well get up.

Johnny Campbell, Free Flight: In favor; gives more time for golf and tennis.

Warren Gilman, Purchase: We're all in favor of it.

Harry Hamilton, Mechanical Reproduction: Extremely favorable, especially in view of that extra hour of daylight for working around the house and garden.

Sarah B. Rickman, Cafeteria: Not in favor unless the whole community adopts daylight saving time, since it poses difficulties in ordering merchandise and in contacting salesmen. Otherwise, it's immaterial.

P. M. Lovell, A.L.D.: I believe I'll say I'm in favor of it, but I can see why someone who wasn't married wouldn't be in favor. (Ed. Note: He means it robs the romancers of an hour's moonlight.)

WANTED: 4 passengers to Danville during Easter weekend. J. M. LaPrade, W. Maintenance.

WANTED: Passengers from Hampton to East Area on 8:15 shift. Jules Miller, 3212.

FOR SALE: Second hand Electrolux vacuum cleaner. Good condition. Call Hampton-8993.

WANTED: Passengers to Washington. Leaving Friday and returning Sunday. F. W. Schmidt, 4503.

WANTED: Ride from Copeland Park on 8:15 shift to East Area. Iris Lathrop, Payroll.

FOR SALE: Latest edition of "Machinery's Handbook". Training Office.

# ROWLING NEWS

## MONDAY'S LEAGUE

The Monday night bowling league ended its season of play with Sound Lab on top with 40 wins and 20 losses. 16-Foot and Structures tied for the two spot with 36 wins and 24 losses. The number four position also ended up with a tie between Tank and Structures #2 but a preliminary play-off knocked Structures out of the run. Beginning Wednesday, the four top teams in the Monday league will bowl the four top teams in the Wednesday league.

Ending the season with high averages were Harry Davis with 100.6; I. B. Bloxom, 100.3; Lillian Brown, 92.4; and Marge Wilson, 91. High games and sets for the season were rolled by R. Salmi, 146; Alice Whitley, 137; Ed Hoffman, 372; and Lillian Brown, 329. High team game and set was rolled by 19-Foot with 564 and 1526

### STANDINGS

Team	W	L	Avg.
Sound Lab	40	20	.667
Structures #1	36	24	.600
16-Foot	36	24	.600
Tank	33	27	.550
Structures #2	33	27	.550
Foot	32	28	.533
#1	30	30	.500
FST #2	27	33	.450
Electrical	24	36	.400
Administration	22	38	.367
Computers	17	43	.283

## WEDNESDAY'S LEAGUE

Ending up on the top end of the Tuesday league was 8-Foot with 43 wins and 17 losses. IRD RC & T came in second with 37 wins and 23 losses and PRD and Inst. App. tied for third with 35 wins and 25 losses.

Ending up with high averages for the season were Luke Liccini with 108.2; Ed Wallace, 102.4; Marge Zender, 91.5; and Dot Comstock, 89.5. First place winners were awarded gold medals and second place winners received silver medals. 8-Foot received a trophy for league winner and a large trophy will be awarded to the team winning in the playoffs.

High games and sets were rolled by Luke Liccini with a 365 set, Hal Youngblood, 144 game; and Marge Zender with 122 and 352.

### STANDINGS

Team	W	L	Avg.
8-Foot	43	17	.717
IRD RC&T	37	23	.617
PRD	35	25	.583
Inst. App.	35	25	.583
ducks	34	26	.567
L&S	31	29	.517
Ragouts	28	32	.467
Deadpins	24	36	.400
Report Typists	22	38	.367
Atomic Bombers	20	40	.333
Rocketeers	20	40	.333

# REMIND SOFTBALL FANS OF MEETING

Softball enthusiasts are reminded of the organizational meeting of the NACA Men's Softball League for 1947 which will be held on Thursday, April 3, at 7:30 p.m. at the Activities Building. Any interested group may enter a team by meeting the following requirements.

(a) Entry of team roster, team name, team representative's name, Lab address and phone number.

(b) The payment of a \$10 entry fee.

(c) The presence of at least one team representative at the meeting on Thursday night with authority to participate in election of league officials.

Chet Weislo, Chairman of the Activities Committee, stressed the importance of meeting the obligations outlined above in order to form a smooth working league.

It is also requested that representatives determine the equipment needs of the team as plans for obtaining equipment will be discussed.

\* \* \*

## TENPIN LEAGUE

Still leading the second round of the Tenpin League with a record of 20 wins and 7 losses, are the Alleycats of Sound Lab. Gutterknives are second with 16 wins and 8 losses, and Pztech hold down third with 15 wins and 9 losses.

Some good bowling by Oborny, Baker, and Staffino, who had games of 212, 201, and 192 respectively, enabled the Alleycats to hit a new high team game for the season of 943. Their 2467 team set was high for the night. Al Braslow, Pinbusters, turned in a new high game of 245, and took high set honors for the night with 566. Doris Bloxom, Fiscal Wrecks, has a 440 set and 170 game to lead the girls.

Luke Liccini, Pinbusters, and Peg McNulty, Rockets, hold high averages of 174 and 142. Joe De Sorbo and Ann Robinson, both of Fiscal Wrecks, are runners-up with 168 and 125.

### STANDINGS

Team	W	L	Avg.
Alleycats	20	7	.741
Gutterknives	16	8	.666
Pztech	15	9	.625
Fiscal Wrecks	15	12	.555
Pinbusters	13	11	.541
Maplemaulers	13	11	.541
Rockets	14	13	.518
Headpins	11	13	.458
RC & T	11	13	.458
Lets-Strike	11	13	.458
Miscellaneous	9	15	.375
Missilot	7	17	.292
Woodpeckers	7	20	.259

# SKYHAWKS WIN IN CLOSE GAME

In a game which changed leads constantly, the NACA Skyhawks finally ended up on the winning end of a 41-38 score with the Norfolk Navy Yard in Portsmouth last Wednesday night. At the end of the first quarter the Skyhawks led 10-7 but were on the short end of a 19-18 score at halftime. The Skyhawks marked up a 29-28 lead in the third only to give way to the opposition in the fourth. Chuck Bennett came through with two baskets in the final seconds of play to save the day for the Skyhawks and win 41-38. Eddie Polhamus and Chuck Bennett were high scorers for the winners with 12 and 10 points respectively. Bowden and Michaels were top men for the losers with 9 points each.

# ACTIVITIES BUILDING CLOSES THREE NIGHTS

Due to the fact that we are now between seasons and sport enthusiasts are recuperating from the past basketball season in order to get in shape for softball, the Activities Building will be closed on Monday, Tuesday, and Wednesday nights until further notice except when reserved for section parties. Thursdays will be reserved for open house for those who would like to spend an evening of relaxation at the Building.

# SOFTBALL NOTICE

Now that spring is here and softball will soon be getting into full swing, any section interested in entering a team in the Girls' Softball League is asked to contact Ferne Driver, 16-Foot Tunnel, telephone 4590.

# LITTLE THEATRE

(Continued from page 1)

Nancy McCarthy and Mary Lou Lex will serve as ushers. The program committee, appointed last fall, is comprised of Mrs. John B. Parkinson, chairman, H. Granville Derby, and Crickett Burr. Box office will be in charge of Miles E. Farster, assisted by Frances Butler, Louise Neal, Margaret Young and Dorothy Taylor. Crickett Burr is publicity chairman.

FOR SALE: Federal enlarger - double condenser system, plano roll film tank, 4 x 5 hard rubber tank. Kurt Strass, PARO.

FOR SALE: Brevette 32 caliber automatic with ammunition. Call Newport News 2-8476.

## CALCULATOR

(Continued from page 1)

variable coefficients without error, the machine is equipped with built-in check circuits which prevent the process from continuing on a problem if each step is not correct or fully completed. Even while computing unattended the machine will drop calculations in which an error is found and proceed to another portion of the problem which is unaffected by the error or to an entirely new problem automatically.

The calculator fills an acute need for a fast, accurate solution to aerodynamic problems in high speed transonic research where today there are no short-cuts to answers. For example, an experienced aerodynamicist requires more than one month to calculate the flow over a given airfoil at one condition of transonic speed. The new calculator can do this in a few hours. Even more important is the fact that any error made in initial steps by an engineer working with pencil and paper is carried throughout the problem because each point in an airflow pattern is dependent on all others. The new machine, however, signals an error and indicates its nature and location in the problem, providing quick assessment of the mistake.

An unique feature of the new device is its fast loading time, considerably faster than either of the two other calculators now in use. Loading procedure consists of punching "problem tapes", which are fed into the machine. Augmenting these problem tapes are "routine tapes", which contain the formulas to be processed. Tables of data and functions are punched on "table tapes", which are used by the machine during the course of calculations exactly as a mathematician uses reference handbooks.

The three tapes are loaded into "transmitters" on a "position table" and the calculator is set in motion. Automatically, this complex machine feeds the problem through, processing the various formulas and making reference to tables of data. As the problem progresses, partial results are stored either in a "relay register" or entered on "storage tapes" for later use. When these results are required, they are automatically taken from storage, integrated into the problem and the final results printed by a teletypewriter on the "recorder table."

The system is fully automatic and begins a new problem immediately upon completion of an earlier computation. In this

## LIVE at the LABORATORY

Passing out cigars. . . . .

last Tuesday in a manner typical of new fathers was A. C. Ellis of Instrument Research. He became the proud father of a 6 pound, 8 ounce son on Monday, March 24.

Word has just reached. . . . .

the Laboratory that one of our former employees, Winnie Askew, of AWT and Impact Basin, recently became the mother of a daughter.

Wedding bells rang. . . . .

last Saturday when Marjorie Cullifer, formerly of Payroll, took her final vows with John Phillips of Norfolk. The ceremony took place at First Baptist Church in Hampton. Louise Neal, Personnel, served the bride as bridesmaid.

Sporting a sparkler. . . . .

on the third finger left hand is Mary Lanning of Report Typists. She is engaged to Pete Edwards of Hampton. No definite date has been set for the big event.

Another proud papa. . . . .

is Donald Call of West Sheetmetal. He became the father of a seven pound, four ounce son, Donald Kenneth, Jr., on Tuesday, March 18.

Word was a little bit. . . . .

late getting to us but Millie DeVine, formerly of Selective Service and 8-Foot High Speed Tunnel, was married January 25 to Lt. Robert Ingram Bristow of the U. S. Navy. The wedding took place in New York City.

An exclusive. . . . .

Bill Connor, 19-Foot, is engaged to Renie Rhodes, formerly of I.B.M. now of Richmond. Wedding bells will ring in May.

The NACA Skychicks. . . . .

will close their season of play next Tuesday night when they battle with the Eagles from Newport News at 8 p.m. at the Activities Building. Employees are invited to come out and support their team in this season closer.

manner it can be operated continuously over-night with the answers to dozens of problems on file at the start of business the following morning. The computer is equipped with a "discriminator" which, by comparing the magnitude of two quantities or examining the sign of a computed value, can automatically choose one of several possible courses of action, as a mathematician does.

The use of such a machine in aerodynamic research is so new that its possibilities are virtually unexplored. In some cases it can take the place of repeated wind tunnel tests and in most cases considerably reduce the time required for tests. Its greatest promise, however, lies in its anticipated help in deriving a thorough and accurate Scientific theory for the difficult transonic speed region, in which both subsonic and supersonic airflows exist simultaneously. Once this hurdle is cleared, progress in high speed aeronautics will be hastened well into the new era of supersonic flight.

WANTED: Ride from Elizabeth Road to W. Area on 8:51 shift. Rex Brown, IRD.

WANTED: Male pup. Do not want to buy, but willing to relieve anyone having abundant supply. W. H. McNamara, Addressograph.

FOR SALE: 1941 Deluxe Ford coupe, radio, heater. A. A. Adler, 24-Inch Tunnel.

