

# AIR SCOOP

LANGLEY MEMORIAL AERONAUTICAL LABORATORY

Issue 18, Vol. 6

Langley Field, Va., May 9, 1947

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## NACA REVEALS SONIC RESEARCH INSTRUMENTS

The NACA has revealed that the Bell XS-1 and the Douglas D-558, sonic research airplanes, are literally "flying research laboratories". Each of the planes carry provisions for 500 pounds of special research instrumentation comprising the design tactical load of these non-military aircraft. The size and weight of the planes was determined by designing around this essential load a configuration which would carry these instruments into the speed region through which research information is needed.

This region is the "transonic" speed zone in which both subsonic incompressible airflow and supersonic compressible airflow occur simultaneously on the airplane surface. At standard sea level conditions this region extends from about 600 miles per hour to about 900 miles per hour. Below this region the airflow is the well-known subsonic incompressible type of which the past 43 years of aviation has given us a comprehensive understanding. Above this region the airflow is substantially the compressible supersonic type, our knowledge of which has been based in the past on studies of artillery missiles and exterior ballistics.

These transonic research airplanes will carry science further into this region than existing airplanes and their special design is expected to minimize the normally adverse affects of this region through utilization of available knowledge of stability and control. The decision to utilize piloted aircraft, rather than missiles, was

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## SEVERAL OFFICES IN NEW LOCATIONS

Several offices in the Personnel Division were moved Tuesday to new locations in the Technical Service Building. The following changes are made: Lee Dickinson, Employees Services, to Room 112; Dr. W. A. Aery, Selective Service, to Room 104; C. A. Spurling, Job Applicant Interviews, to Room 115. The Board of Civil Service Examiners, in Room 124, has been assigned a new telephone number, 2226.

## SEVEN TROPHIES WILL BE AWARDED IN GOLF TOURNEY

Golf enthusiasts are reminded of the Annual Golf Championship Tournament at the Hampton Country Club on Saturday and Sunday, June 7 and 8. A 36-hole, medal play, handicap tournament will be played with 18 holes scheduled on each day.

Six trophies will be awarded for permanent possession of the winners for the top three places in gross and net brackets. The trophies range in size from 18-inches high to 9-inches and each trophy bears the golf figure head. In addition to the six permanent trophies, a perpetual trophy for the low gross winner will also be awarded. All seven trophies will be on hand for the presentation which will take place at the Hampton Country Club following the final round on Sunday.

The tournament is open to any male employee of the Laboratory. The

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## BANCA WILL SPEAK TO ENGINEER'S CLUB

M. C. Banca, Sales Manager, Electronic Microscope Section, RCA, will be the guest speaker at the meeting of the Engineer's Club on May 15, at 8 p.m. at the Park View High School.

Born in 1908, Banca graduated with a degree in Electrical Engineering from the University of Illinois in 1930. After graduation, he was employed as a research engineer at RCA under Z. V. Zworykim. His work dealt with research in fluorescent materials, high frequency magnetrons, television circuits, cathode ray tubes, television camera tubes, electronic optics, and electronic microscope. In 1942 he joined the Sales Division as Manager of Scientific Instrument Sales Department.

His lecture, which will be illustrated with slides dealing with biology, chemistry, metallurgy, and diffraction, will consist of a brief history of electronic microscopes, why such equipment was designed, and how it operates.

Light refreshments will be served after the meeting.

## RESERVE MAY 16 FOR SPRING PROM

Laboratory employees are reminded to reserve Friday, May 16, for the Spring Prom, sponsored by the NACA Morale Activities Association at the Activities Building. The main feature of the semi-formal affair will be a Grand March of the District Representatives to the Morale Activities Association. Leading the march will be Pete Korycinski, President of the Association, and his wife, followed by members of the Executive Board, the General Assembly, and their dates.

All District Representatives and their dates for the dance are asked to be at the Activities Building on Wednesday, May 14 at 7 p.m. for a rehearsal of the Grand March.

The semi-formal affair will get underway at 9 p.m. and music will be furnished by Joel Vause and his fourteen piece orchestra.

Tickets are \$1.50, stag or drag, and may be purchased from the District Representatives to the General Assembly of the Morale Activities Association.

## LABORATORY GOES ON EARLY SHIFT

Effective as of 12:01 a.m. Sunday, May 11, the regular hours of duty of the Laboratory will be 7:30 a.m. to 4 p.m. Until further notice, these new hours of duty will supersede the regular 8:15 a.m. to 4:45 p.m. working hours.

The present 7:30 a.m. to 4 p.m. shift, affecting shop personnel mostly, will change to 7 a.m. to 3:30 p.m. The present 3:30 p.m. to 12 midnight shift will remain the same while the 12 midnight to 8:30 a.m. shift will change to 11:30 p.m. to 8 a.m.

## HAMPTON LITTLE THEATRE MEETING SET FOR MAY

A meeting of members of the Hampton Little Theatre will be held on Friday, May 16, at 7:30 p.m. at the Syms-Eaton Community Center. All members are urged to be present and they are reminded that the meeting will be over in time to take in the Spring Prom which gets underway at 9 p.m. at the Activities Building.

The Air Scoop, an official publication of the Langley Memorial Aeronautical Laboratory, National Advisory Committee for Aeronautics, Langley Field, Virginia, is published weekly in the interest of its employees. Address contributions to the Editor, Service Building, telephone 2376.

Editor. . . . . Ruth Angel  
 Art Editor. . . . . Frank McVay  
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## LIFE at the LABORATORY

Monday found a. . . . .

few new sparklers floating around the Laboratory. All excited over the new addition to her third finger left hand was Dorothy Kirchmier, Tank #2. She's engaged to "Beany" Cochran of Hilton Village.

Dan Cupid scored. . . . .

another victory last week-end when he shot another bull's eye. The two parties concerned this time are Mary "Tut" Whisnant of East Computers, and Cpl. John T. Hedgepeth, Jr., of Phoebus and Langley Field.

With spring in the air. . . . .

the Electrical Section is beginning to get more social minded. Last week they organized a new club called the Ivanhoe Club and are already making plans to hold a hill billy jamboree at the Activities Building on June 20. Newly elected officers are: President, John Blom; Secretary and Treasurer, Clyde Cottrell; Entertainment Committee, Ray Myers, Edward McFleean, and Bruce Earnhardt.

Well, we read in the. . . . .

"Daily Press" last Sunday where a couple of our employees are contemplating matrimony in June. The two love-birds who let the local paper scoop us are Edith Hamilton, Aircraft Loads, and Don Reisert, Cust Loads.

Sonya Rosenfeld, daughter. . . . .

of Boris Rosenfeld of Construction Engineering, has been selected salutatorian of the graduating class of Newport News High School. She is a member of the National Honor Society, the Quill and Scroll, Literary Club, and feature editor of the school annual.

Word has just reached the Laboratory that. . . . .

Pearl Young, formerly of Langley now of Cleveland, has left Government employment after twenty-five years of service. She has accepted an appointment to teach physics in the State College of Pennsylvania System.

Several weddings. . . . .

are scheduled to take place this Saturday. Bill Connor of 19-Foot Pressure Tunnel and Rene Rhodes, formerly of IBM, will take their final vows in Richmond. Assisting the groom will be Chet Furlong, 19', and Al Stokke of Aircraft Loads.

Wedding bells. . . . .

will ring in Chicago Saturday for another Laboratory twosome when Shirley Riley, Physical Research, and Bob Gorman, East Engineering, walk down the aisle. Les Cborney also of Physical Research, will serve as best-man.

Harold Robinson, 8-Foot High Speed Tunnel, went and got himself engaged last week to Paula Kantor of Newport News. Wedding bells will ring May 23.



By John Worth

With the outdoor contest season just a few weeks away, the lineup of meets already scheduled promises the greatest competitive turnout in years.

The club's initial trip will be to Beltsville Airfield on Sunday, May 18. Located between Washington, D. C. and Baltimore, on Route 1 past Hyattsville, Maryland, the meet will feature three classes each of Free-flight and control line events. A fifty-cent entry fee is required. Further details may be obtained from L. O. Steger, 1341 Queen St., N.C., Washington, D. C.

The recent Novice Indoor Glide-meet resulted in a complete success as excellent performances highlighted the day's activity. Ward Hodges topped the senior "A" field and also turned in the highest flight of the meet with 38.2 seconds. Gene Monroe led the "B" seniors with 35.2 seconds. Among the Juniors, Herbie Hobbs stood out by winning both "A" and "B" classes.

## COMING EVENTS

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

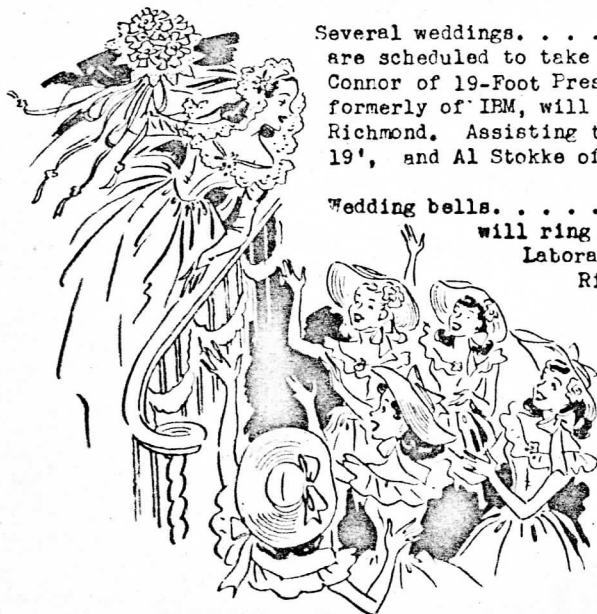
- May 13 - 5 p.m. Cooking School  
7:45 - Bridge Club
- May 14 - 7 p.m. - District Representatives will rehearse for the Grand March for the Spring Prom.
- May 15 - Cooking School  
Library Party
- May 16 - Morale Activities Association sponsors Spring Prom
- May 17 - Low Turbulence Party
- May 18 - Structures Picnic

If I were hanged on the highest hill,  
 Mother o' mine, O mother o' mine!  
 I know whose love would follow me  
 still,  
 Mother o' mine, O mother o' mine!  
 --Kipling

WANTED: Passengers to Washington. Leaving May 23 and returning on Sunday. F. W. Schmidt, 4503.

WANTED: To share ride from Warwick-on-the-James to East Area on 7:30 shift. Norman Land, Tank.

FOR SALE: 1935 Plymouth coach in good condition - \$300. 3 hp water-witch outboard motor - \$50. M. J. Menges, E. Elec. Shop.



## SOFTBALL LEAGUE OPENS SEASON

The NACA Men's Softball League opened its season Monday with Pilotless Aircraft getting a forfeit from 7 X 10 Foot Wind Tunnels and the 16-Foot versus Full Scale game being cancelled. However, Tuesday saw the league get into full swing with Dynamic Tunnels trouncing Aircraft Loads 12-5 and Structures defeating Engineering Services Division 7-4.

In the Loads-Dynamic Tunnels game, "Red" Neihouse pitched his teammates to an easy 12-5 victory. Serving on the mound for the losers were Paul Harper and Ted Skopinski, who together gave up five hits, struck out five and walked 12. Coming in for their share of the hits were Stan Scher, for the winners, with a double, and Bill Aiken and Maynard Buckley, Loads, with a double and two singles respectively.

Behind the pitching of Andy Anderson, Structures Research came through with a 7-4 win over Engineering Services. Andy struck out four, walked three, and gave up only three hits. Paul Marchal and Bobby Spangler were on the mound for the losers and together struck out five, walked five, and gave up 8 hits. Ed Kruszewski, Structures, started the season off with a bang, getting a home run. George Galaher also did his share for the winners, getting two singles.

Due to the fact that the Laboratory is going on early shift, game time will be at 4:45 instead of 5:30.

The schedule for next week is as follows: Monday - 7 X 10 versus Model Shop and Dynamic Tunnels vs. PRD. Tuesday - Full Scale versus Electrical Shop and 16-Foot versus IRD. Wednesday - Structures versus 19-Foot and FARD versus Aircraft Loads. Thursday - 8-3/4 Tunnel vs. Engineering Services Division and IRD versus Low Turbulence.

## BOWLING NOTICE

The Tenpin Bowling League's dinner dance which was scheduled for tonight at the Activities Building has been called off.

FOR SALE: 4 skin sable dyed squirrel neckpiece. Practically new. Apply at 30 Mitchell Road, Cavalier Court.

FOR SALE: Golf clubs for beginners. Bob Shack, 7 X 10.

FOR RENT: Double bedroom, suitable for one or two people. LaSalle Ave., call Hampton - 4247.

## TENNIS TEAM OPENS SEASON SUNDAY

By Ed Kilgore

The NACA Tennis Team held its first practice last Saturday with eleven candidates present. Inter-team matches were held and several prospects for the team showed flashes of mid-season form in spite of lack of practice. Jack Irwin, J. W. Cannon, and Billy Bates looked particularly good, serving warning to all future opponents.

The initial match has been scheduled for Sunday, May 11, with the Northside Tennis Club of Norfolk. The Norfolk club sported one of the best teams in the state last year and are reported even stronger for the coming season so the local team, while not expecting miracles this early in the season, is particularly anxious to make a good showing in this first match.

A full schedule of matches both at home and away with teams throughout the state is planned for the summer months. A team of six men for the first match is expected to be picked from the following: Ed Kilgore, East Engineering; Jack Irwin, FGDA; J. W. Cannon, Const. Engineering; Johnny Campbell, Free Flight Tunnel; Bill Jordon, East Engineering; Billy Bates, Free Flight; Coleman Donaldson, FGDA; Bill Sperry, Const. Eng.; Leo Rogin, Loads; and Henry Weber, W. Eng.

## GIRLS' TENNIS

Several girls have responded to the announcement in last week's "Air Scoop" that plans are underway to form a Girls' Tennis Team. Girls interested in playing tennis will be given one more week in which to enter their name on the ladder.

All girls interested in playing are asked to contact the "Air Scoop", telephone 2376. The ladder will be published in the next edition of the "Air Scoop" and challenge matches will get underway shortly thereafter.

## INSPECTION NOTICE

Laboratory officials announced this week that the Administrative Headquarters for the 16th Annual Inspection will be located on the second floor in the north-east corner of the Administrative Building. The telephone number is 2308.

FOR SALE: 22-foot star sailboat. Completely overhauled. H. R. Ivey, PRD.

FOR SALE: 15 watt, push-pull, audio amplifier - \$25. Tom Carpini, Impact Basin.

## BOWLING NEWS

Even though one week remains in the Duckpin playoffs, Instrument Application came through last week to take undisputed first place for the season with 14 wins, 4 losses, and a .778 average. Three teams, PRD, Sound Lab, and 8-Foot are tied for second with 10 wins, 8 losses, and a .556 average.

Last week high games and sets were rolled by Ed Kruszewski, Structures, with a 136 game and 350 set; Martha Warren, Tank, with a 104 game; and Lillie Belle Evans, Structures, with a 266 set. High team game and set was rolled by Instrument Application with a 516 game and 1575 set.

### STANDINGS

Team	W	L	Avg.
Inst. App.	14	4	.778
PRD	10	8	.556
Sound Lab	10	8	.556
8-Foot	10	8	.556
IRD	9	9	.500
Structures	9	9	.500
16-Foot	6	12	.333
Tank	4	14	.222

## GOLF TOURNEY

(Continued from page 1)

entry fee is four dollars, which includes green fees. Entrants will be required to turn in three qualifying rounds, on which the handicap will be determined. In turning in the qualifying rounds, each contestant must turn in his score card signed by himself and endorsed by one other player in the group. All score cards, with the entry fee, must be in the "Air Scoop" Office, Room 105, Service Building, by Thursday, May 29.

Golfers are also reminded of the preliminary tournament at the Gloucester Country Club on Sunday, May 18. An 18-hole, medal play tourney will be played with the first group scheduled to tee off at 1 p.m. The only charge will be a \$1.50 green fee which may be paid at the club. All persons interested in entering the tournament are asked to contact the "Air Scoop" telephone 2376. Persons needing transportation or having vacancies in their cars are also asked to contact the "Air Scoop."

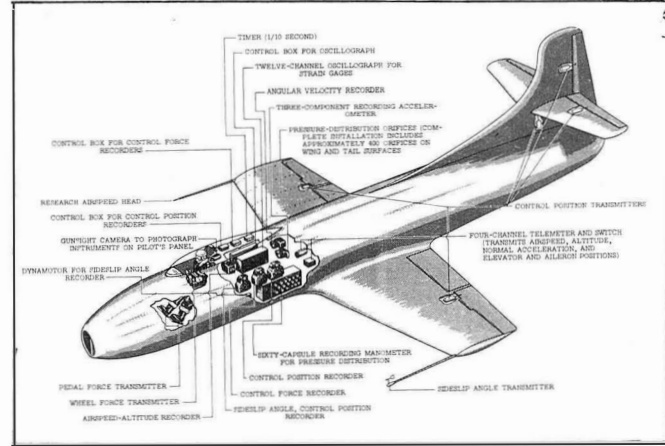
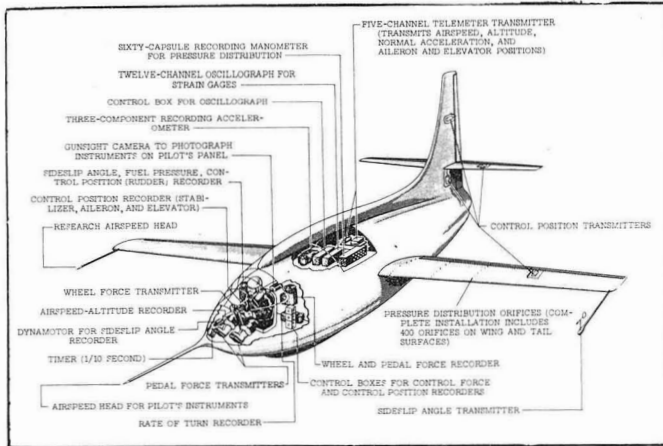
LOST: Brown leather bill fold containing valuable papers and \$6 in cash. William Brock, W. Elec.

WANTED: Ride to Greensboro or Charlotte on May 23. Becky Boykin, 2255.

FOR SALE: 3 piece maple living room suite. Eleanor Andrews, H - 8259.



## NACA RESEARCH INSTRUMENTATION



**XS-1 ROCKET AIRPLANE**

**D-558 JET AIRPLANE**

### NACA REVEALS

(Continued from page 1)

based on a number of factors including the advantage of a pilot's opinion, the ability of human control to adapt the airplane to unexpected conditions and the fact that the ultimate application of transonic research information is a piloted aircraft.

All of this complex instrumentation has been developed by NACA research scientists, its installation coordinated and the obtaining of data and its analysis will be accomplished by NACA engineers. It is this instrumentation and the ability of the XS-1 and D-558 to fly faster than any previous airplane that characterizes these aircraft as "flying research laboratories." These aircraft will be flown carefully and conservatively at small speed increments from their acceptance speed of Mach number 0.8 higher towards the speed of sound. A flight will not be made until the data from the previous flight has been carefully analyzed, and the flight plan carefully drawn up for the next flight. For this reason, NACA engineers and pilots will, in general, "feel their way" into the transonic zone rather than recklessly drive through this region according to a predetermined plan. No time schedule has been considered for this program and no limits set on its duration. However, the relentless pressure for a rapid flow of transonic aerodynamic knowledge from the NACA laboratory and flight test research program together with the irresistible force of aviation progress provide an element of urgency in this program. With the assurance that their careful instrumentation, conservative program and advanced design of the aircraft are the best possible approach to the transonic research problem, NACA engineers are confident of early and significant success.

### WASHINGTON OFFICE VACANCIES LISTED

There are several vacancies in the Washington Office which might be filled by qualified employees from this Laboratory, including two accurate and reliable CAF-4 stenographers with good knowledge of English to learn to take technical dictation at a deliberate rate and assume responsibility for some administrative details; one CAF-4 clerk-stenographer to set up a confidential photo file and be able to work on his own initiative generally; and a Purchase Clerk CAF-4 with typing experience, or clerk-typist CAF-3.

Laboratory employees interested in applying for any of these positions may communicate with the Employment Office, telephone 2325.

### FORMER NACA EMPLOYEE DIES

Dwight Miner, 83, former translator for NACA in Washington, died recently in Fall River, Massachusetts. He retired from Government service approximately fifteen years ago and had resided in Fall River for the past 4½ years.

**WANTED:** Young couple with 2 month old baby would like to share a house for several months. Call Air Scoop, 2376.

Research instrumentation on these two airplanes, as well as other aircraft scheduled for test, consists of ground equipment, airborne recording equipment and airborne radio transmitting equipment. All of this equipment is designed to provide data on the effects of transonic speed on the stability, control and load distribution of a piloted aircraft.

**FOR RENT:** 2 room furnished apartment for light housekeeping. Little Farms Ave., or call H - 5985.

### SEEK DONATIONS TO RELIEF FUND

Elton W. Miller, Executive Assistant, announced this week that he has received a letter from the Virginia State Firemen's Association asking that Laboratory employees contribute to the relief fund for the Texas City Firemen's widows and orphans. Mr. Miller pointed out that this is not an official solicitation but that he will be glad to receive any contributions that employees want to make. All donations may be sent to Elton W. Miller in the Administrative Building.

### BRIDGE TOURNEY WINNERS ANNOUNCED

At the regular meeting of the Bridge Club held last Tuesday night at the Activities Building, 10½ tables of the Mitchell movement were played. Winners for north-south were M. J. Olson and A. F. Goodman with 127 points and second place went to Dr. Salasky and Jack LaMay with 115. Taking top honors for east-west were Major and Mrs. Payne with 108 points. Second place was won by Bill Sperry and McNulty with 104½ points.

The Bridge Club meets every Tuesday night at 7:45 at the Activities Building and all Laboratory employees are invited to come out and enter the tournaments.

**WANTED:** Ride on 7:30 shift from 30 St. to E. Area. Elizabeth Fulley, 2313.

**WANTED:** Ride on 7:30 shift from Stuart Gardens to E. Area. Mrs. C. G. Brown, 2313.