

# AIR SCOOP

LANGLEY MEMORIAL AERONAUTICAL LABORATORY

Issue 20, Vol. 6

Langley Field, Va., May 23, 1947

Page 1

## GOLF TROPHIES NOW ON DISPLAY

The trophies for the Annual NACA Golf Championship Tournament have arrived and will be on display this week-end at Albert's Sport Shop in Newport News. The six trophies, in addition to a perpetual trophy for the low gross winner, will be awarded for permanent possession to the top three winners in the low gross and net brackets.

The 36-hole, medal play, handicap tournament will be held at the Hampton Country Club on Saturday and Sunday, June 7 and 8 with 18 holes scheduled for each day. Golfers are reminded that only one more week remains in which to turn in the 3 qualifying rounds. All qualifying rounds and the four dollar entry fee, which includes green fees, must be in the "Air Scoop" Office, Service Building, by Thursday, May 29 so that the handicaps may be determined and the groupings announced.

## ORVILLE WRIGHT SEES LAB RESEARCH EXHIBITS

Dr. Orville Wright, venerable member of the National Advisory Committee for Aeronautics and first man to fly in a heavier-than-air plane, expressed amazement at the strides aviation development has taken since his memorable flight more than 43 years ago at Kitty Hawk, N. C.

Dr. Wright was among several top-ranking men in the world of aeronautics to visit the Langley Laboratory this week and view several exhibits and demonstrations exemplifying the progress made in aeronautical research during the past year, especially in the field of supersonics.

The Sixteenth General Inspection got under way Tuesday with a visit from approximately 200 aircraft manufacturers, and was followed on Thursday by a large delegation of army and navy representatives who came here from many points in the United States. Today's group is comprised of Langley Field and Fort Monroe military personnel and several college students. The four-day inspection program will end with a visit next Wednesday of

(Continued on page 2)

## X-RAY SURVEY JUNE 9 THRU 13

The 1947 X-ray survey of employees of the Langley Laboratory will be conducted during the week of June 9 through 13 with the cooperation of the Industrial Hygiene Bureau of the State Department of Health. There will be no charge for this service.

X-rays are not compulsory but it is strongly recommended that each employee avail himself of this opportunity of obtaining the service at no cost to himself. No disrobing will be necessary in connection with the X-ray program, it was pointed out by State health authorities.

In the West Area the survey will be conducted in the Electrical Building. The East Area location will be announced soon.

Notice will be given by telephone to each section head at the time the employees in his section are to report. It is requested

(Continued on page 2)

## QUIET AIRPLANE DEMONSTRATED

At the 16th General Inspection of the Laboratory's research facilities, the possibilities of reducing airplane noise was effectively demonstrated in flight. A 5-blade propeller operated at low rotational speed and combined with an effective engine-exhaust muffler made possible a reduction in noise pressure of over 90 percent and reduced the airplane noise to a level acceptable for operation over populated areas. The 5-blade propeller with the geared engine allows the full power of the engine to be absorbed at greatly reduced propeller tip speed. This reduction in tip speed is the factor mostly responsible for the noise reduction.

In the demonstration an Army Stinson L-5 airplane, equipped with its standard 2-blade propeller 85

(Continued on page 3)



Army Stinson L-5 airplane modified by the NACA to demonstrate the effectiveness of methods proposed by the NACA for reducing airplane noise. A 5-blade propeller driven at 1000 rpm by an engine geared-down by a ratio of 2.8 to 1 replaces the standard 2-blade propeller driven directly by an engine operating at 2500 rpm. The 5-blade propeller with the geared engine allows the full power of the engine to be absorbed at greatly reduced propeller tip speed. This reduction in tip speed is the factor mostly responsible for the noise reduction. The engine exhaust has been effectively muffled. With these modifications the overall noise level was reduced from 90 decibels to 66 decibels when compared with the standard airplane operating at the same airspeed and power. This represents a reduction in noise pressure of over 90 percent and is probably a greater reduction than necessary. Additional research is necessary to establish acceptable noise levels.

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  
 Staff Photographer . . . . . Bill Taub  
 Reporters . . . . . Langley Employees

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#### SUBMIT NEWS EARLY

In view of the fact that Friday, May 30 is a holiday for all Federal employees, publication date for the "Air Scoop" next week will be Thursday, May 29. Therefore, in order to help us meet our deadline and get the paper to you on time, it will be necessary for all news matter to be submitted by Monday noon instead of Tuesday as has been the custom. Employees having articles that they wish to submit for publication that week are urged to cooperate and send it to the Editor, "Air Scoop", Service Building, by noon Monday.

### LIFE at the LABORATORY

Gas Dynamics has settled. . . . .

down to work now that Jack Erwin has become the father of a son, Richard. The new addition arrived Wednesday, May 14 and the proud mother, Mary Hester, used to work in Stability Analysis.

While journeying to New York. . . . .

last week, Glenna Dunkum, Travel Clerk who has assisted numerous employees in arranging their travel, relaxed a little too much while vacationing and put herself on the wrong train. Glenna and her three companions, Kathleen Harris, Personnel Records, and Betty Mills and Mary Catlett, Stenographic Section, intended to catch the B & O from Washington to New York but by mistake they ended up on the Pennsylvania. Luckily both trains were headed in the same direction.

Another proud papa. . . . .

is Nelson Catlett of Construction Engineering. He became the father of a son on Saturday, May 17.

Passing out cigars. . . . .

in a big way last Monday was Nelson Harris, Prop Shop. He became the father of a son on Sunday, May 18.

Another Laboratory twosome. . . . .

reached the engagement stage last week when Betty Brown, Structures Research, became engaged to Kenneth Spreeman, 7 X 10 Foot Wind Tunnels. Wedding bells will ring sometime in mid-summer.

Sporting a new sparkler. . . . .

on the third finger left hand is Grace Mears, Payroll. She is engaged to Jack Atkins of Hilton. No definite wedding plans have been announced.

Another new father. . . . .

is Ray Hooker of Pilotless Aircraft. He became the proud father of a son on Monday, May 19.

## COMING EVENTS

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

May 27 - 7:30 Bridge Club  
 May 28 - Noon - Conference  
 5:30 - Free Flight  
 Picnic

WANTED: Ride to Winston-Salem leaving today or tomorrow. H. 8397.

WANTED: Ride from corner of Shell Road and Hampton Roads Ave. to E. Area on 7:30 shift. Barbara Burriss, 2253.

WANTED: Ride or passengers on 7:30 shift to East Area from Seaford. Omar White, 2336.

WANTED: Ride from down town Hampton to E. Area on 7:30 shift. Betty Ann Pease, Steno Section.



By John Worth

Successfully competing in the first contest of the season, club members captured four places at the Washington meet last Sunday. Bea Cleveland took first place in Class "C", Charlie Folk placed second in "A" and third in "B", and Frank Parmenter followed with fourth in "A". Also entered were Paul Marchal, Reavis, Reid Hull, Bill Poythress, and John Worth. Hard luck honors went to Marchal for his beautiful "C" job which washed out and to Worth for losing his "A" ship during test flights.

During the meet, assurance was voiced by Val Luce, AMA Secretary, and Walt Good, AMA Contest Board Chairman, that the club's request for a Four A rating would be granted for the Annual Meet here. It was also revealed that the club's proposed rules changes would be presented officially at the Contest Board's National Meeting in Minneapolis during August.

## INSPECTION

(Continued from page 1)

another group of aircraft manufacturers.

The program is virtually the same for all four days, including opening exercises in the Base Theater, followed by visits to the Full Scale Tunnel, Tank #2, 19-Foot, 8-Foot, Flight, Free Flight and Spin Tunnels, 7 X 10, 16-Foot, Gust Tunnel, PARD, 9" Supersonic, PRD, ALCL, and Structures. At the Morale Activities Building, where lunch is being served each inspection day, the visitors also are viewing the IRD's exhibit on NACA research instrumentation.

## X-RAY SURVEY

(Continued from page 1)

that when the telephone notification is received, all employees in the section desiring the examination report as promptly as possible to the designated locations.

Further information concerning the program will be given within a few days.

WANTED: Room or apartment for two or three men in vicinity of Lee Street. Don Hewes, Free Flight Tunnel.

WANTED: Passengers to Harrisburg, Pa., on May 27. Howard Miller, 4485.

WANTED: Riders on 7:30 shift to W. Area from Stuart Gardens. Hugh Watson, Purchase.

## BUGG PITCHES SECOND NO-HITTER

Raoul Bugg, Instrument Research, who opened the softball season last week with a no-hitter against Physical Research, came back with a repeat performance this week in a game with the Electrical Section. This was Bugg's fourth game of the season and his second no-hitter. Bugg struck out 17 men, walked none, and allowed no one to reach first base to give IRD a 12-0 victory over the Electrical Section. Doing their share at bat were Bugg and Hoffman with three hits out of five trips to bat and Ray Hansen with three out of four. Earnhardt, serving on the mound for the losers, gave up 19 hits.

Despite the fact that they got 16 hits to the opponent's seven, Structures Research succumbed to a 14-12 defeat from 19-Foot Pressure Tunnel. Pitcher John Houbolt ran into some trouble and walked 8 men which along with the team's 6 errors cost them the game. Winning pitcher Pat Cancro gave up 16 hits, walked 2, and struck out 5. Houbolt and Anderson had a perfect day at with Houbolt getting 5 singles and Anderson getting a home run, double, and two singles.

Last Wednesday Loads came through with their first win of the season to defeat PARD 6-4. Serving on the mound for the winners, Ted Skopinski gave up 5 hits, walked 4, and struck out 5 while Harry Clason, losing pitcher, gave up 4 hits, walked 5, and struck out one. Clason was outstanding batter for the losers getting a triple, double, and single. Bill Aiken, Loads, came through with two singles. PARD's seven errors cost them the game.

In a one-sided game played last Thursday, Engineering Services took a 14-6 victory over 8-3/4 Tunnel to chalk up their first victory of the season. Erwin Schumecher hurled for the winners giving up 10 hits, walking 7, and striking out 4. Cletus Vincke and Bob Pendley did honors for the losers and together gave up 9 hits, walked 8, and struck out 2.

In another one-sided game, Instrument Research took a 9-1 victory over Low Turbulence. Bugg, pitcher for IRD, gave up seven hits, walked 4, and struck out 10 while winning pitcher Dale Burrows gave up seven hits, walked 6 and struck out six. The only outstanding performance of the day was Dave Newby's home-run.

8-3/4 Tunnel found the going a bit tough this week with another

## GIRLS' TENNIS

Two challenge matches in Girls Tennis were played this week but the ladder remains unchanged. Eleanor Andrews, 7 X 10 Foot Wind Tunnels, defeated Becky Boykin, Compressibility Research Division Office, 6-4, 6-3, to hold onto her number one position. Alice Aronson, Loads, defeated Dorothy Comstock, Flight Research, 6-3, 6-2, to remain in seventh place.

All challenge matches should be reported to the "Air Scoop" Office, telephone 2376 as soon as possible so that an up to date ladder can be published from week to week. A player may challenge any five players above her position and if she wins, she takes the loser's place and the loser drops down one position. Challenge matches will consist of the best two out of three sets.

TENNIS LADDER		
No.	Players	Phone
1	Eleanor Andrews	4403
2	Shirley Huxter	4590
3	Becky Boykin	2255
4	Mae Meadows	4527
5	Gerry Couch	4527
6	Julia Woodbridge	4527
7	Alice Aronson	4454
8	Lucy Taylor	4593
9	Gerry Hilton	2245
10	Nancy Wall	4590
11	Dorothy Comstock	2229
12	Mary Maline	2255
13	Frances Butler	2236
14	Dorothy Huston	4527

loss marked up to their credit. Behind the pitching of Al Martina, 19-Foot Pressure came through to take a 13-1 win. Martina gave up 5 hits, struck out 8 and walked 1 while losing pitchers "Burly" Beals and Bob Pendley game up 11 hits, struck out 3, and walked 5. Stan Spooner led the batting with 2 for 3.

Low Turbulence won their first game of the season by defeating Dynamic Tunnels 7-6. Dale Burrows, Low Turb, gave up 10 hits and walked 3 while losing pitcher "Red" Neihouse gave up 11 hits and walked 3. The outstanding hit of the day was Jack Kinzler's homerun.

Model Shop came through with their first win of the season last Tuesday in a 13-9 game with Loads. Winning pitcher Nutter gave up only three hits, struck out 4, and walked seven while losing pitchers Harper and Skopinski gave up 6 hits, struck out 3, and walked 6. Moore, of Model Shop, and Mickleboro, Loads, got a single and a double each.

FOR SALE: Two bicycles, 26" balloon tires, one girl's and one boy's. \$60. Al Stokke, Loads, or Hampton 3-2257.

## LOCKS AVAILABLE FOR LOCKERS IN ACTIVITIES BUILDING

Chet Wcislo, Chairman of the Activities Committee of the Morale Activities Association, announced this week that locks for the lockers in the Activities Building have been purchased and a system for their use has been worked out.

The locks have been placed on the lockers and the keys will be kept in a locked case in the building's dining room. Employees wishing to use the lockers must first contact the man in charge of the building in order to secure a key. Each person using the locks will be required to sign a slip with his name, section, and telephone number. This slip will be placed on the key hook and will remain there until the key is returned.

## QUIET AIRPLANE

(Continued from page 1)

inches in diameter directly driven at 2500 rpm by a 185-horsepower engine, was compared in flight with the modified airplane. The modified airplane was also a Stinson L-5 but had its 2-blade propeller replaced by a 5-blade propeller 96 inches in diameter and driven at 1000 rpm by a 185-horsepower engine geared down by a ratio of 2.8 to 1. The muffler on the modified airplane was located inside the fuselage and exhausted upwards near the vertical tail. NACA research investigations had shown that an appreciable reduction in the noise level of an airplane was possible only by reducing both the engine exhaust noise and the propeller noise.

The research investigation culminating in the demonstration of a quiet airplane was urgently requested by the Aircraft Industries Association, the Civil Aeronautics Authority and the Aircraft Owners and Pilots Association. Aircraft noise was considered the most important factor affecting the utility of personal aircraft by making it impossible to obtain permission to locate airports conveniently close to residential areas. The NACA research was not aimed at developing the best or the most practical arrangement but rather was aimed at demonstrating that the methods proposed by the NACA were sound and could be adopted by aircraft manufacturers to meet their particular needs.

WANTED: Passengers to Newark, N. J. leaving May 28. F. Schmidt, 4503.

# 16TH GENERAL INSPECTION



Photos By Bill Taux