

## FLIGHT IN STORM CONDUCTED BY AMES

To locstie the most severe icing storms in the country and then deliberately fly through them is the unenviable assignment of the crew members of a specially equipped C-46 cargo airplane now being operatad over the mountainous regions of the Faciffc Northwest by the Ames Laboratory in cooperation with the Army Air Forces, the U. S. Weather Bureau and United Air Lines. The airplane is being used in extensive flight research to obte in meteorological information on the structure of icing clouds and the amount of heat that must be aupplied to various parts of the irplane to prevent ice rormation. The airplane is equippad with a special NACA-designed thermal ice-prevention system which makes use of the waste heat in the engine exhaust gases to prevent ice from forming on wing and tail surfaces, windshields, and propellers. Previous NACA Plight reseerch has shown that installation of this system makes the airflane capable of continuous flight in icing conditions. The immediate result of this research has been the incorporation of thermal ice prevention systems in nearly all new trensport airplane designs.

The airplane used in this unusual research project is specially equifped to obtain the greatest possible amount of information. An electrically-heated wing section is monnted vertically on top

## (Continued on page 4)

## CREDIT UNION HAS NEW OFFICE HOURS

The LMAL Federal Credit no:v has a zew office in the Aircraft Loade Building. The Office will be open for businass in West Araa on Tuescay nd Friday of each week from 11:30 a.m. to 1 p.m. in the cafeteria and from 1 to $3: 30$ p.m. In the sircruft Loads Building.

The East Area office is located in the Service Building and is open from 11:30 a.m. to 4 p.m. on Monday and Thursday.

## JUKE BOX JAMBOREE TONIGHT FROM 8-12

Don't forget the Juke Box Jamboree tonight from 8 'til 12 in the Activities Building. This is the second such affair to be sponsored by the iNACA Morale Activities Association. Admission will be twenty-five cents per person and music will be furnished by Tommy Lorsey, Harry James, Bing Crosby and several other big name bands and vocalists.

The last jamboree was a huge success and everybody is invite. ${ }^{\circ}$ to come out and enjoy an informal evening with friends.

## CIVIL SERVICE EXAMS OPENED

The board of United States Civil Service oxaminers of the NACA at Langley Field, has anrounced the opening of civil service examinations for the following positions: carpenter, \$2,516-\$2,787 per annum; dynamic model maker, $\$ 3,057$; experinental molder, \$2,2.46-\$2,932; machinist, $\$ 1,705-$ 2, 216 ; metg]. model maker, \$3,057-\$3,203; model finisher, \$2,787, and model maker, \$1,715\$3,203.

No written test will be given, but applicants will be rated on experience anc training listed on their applications. Salary is bas$\epsilon d$ on the standard federal work waek of 40 hours.

Applications must he on file witt the office of the Executive Secretary, Board of U. S. CiviJ. Servica Examiners, NACA, Langley Field, not later than Jenuary 27.

## PLAN TO FORM NEW ACTIVITIES <br> By Chet Wcislo

Chairman, Activities Committee
At tile present timo, sports, such as basketball, may seem to dominate the use of the facilities at the Activities Building, but the scheduling committee would like to point out that these activities, though planned in advance for the season, will be made flexible to allow postponinp or temporary re-
(Continued on page 2)

## CREDIT UNION MEETS JAN. 30

The annual meeting of the LMAL Federal Credit Union will be held in the Projection Room of the Administration Building on Thursday, January 30 , at $4: 15$ p.m. This time has been chosen in an effort to obtain the attendance of the greatest possible number of members of the Credit Union and permission has been obtained for members to be excused from duty at 4:15. There will be no entertainment or refreshments as this is a purely business meeting to elect officers for the coming year, to determine the dividend on shares for the previous year, and to transact such other business as may be required. All members who are interested in the profitable operation of their organization are urged to attend.

## LAB EMPLOYEES WIN BRIDGE TOURNEY

In the bridge tournament held Tuesday night by the Peninsula Bridge Club, Bill Thompson, West Engineering, and Kemble Johnson, Assistant Chief of the Administrative and Technical Service Department, took first place with a total of 48 match points. Manny Stein and Ed Kruszewski, both of Structures Research, came in second with 47 match points, and John Crigler, Physical Research, and Gene Frank, Safety Office, took third with 45.5 match points.

On Tuesday nights, January 21 and 28, the club will meet at 7:30 at the NACA Activities Building in West Area. All persons interested in playing bridge are urged to attend the meetings.

## "MARCH OF DIMES"

The National Foundation for Infantile Paralysis, founded by the late President Franklin D. Roosevelt, is sponsoring a "March of Dimes" drive to help fight infantile paralysis. Boxes have been placed in the various offices throughout the Laboratory and employees are urged to drop in their extra change.

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The Air Scoop, an official publication of the Langley Memorial Aeroneutical Le boratory, Nationsl Advisory Committee for Aeronautics, Lengley Field. Virginia, is published weekly in the interest of its employees. Address contributions to the Editor, Service Ailding, telephone 2376.
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We predict this bit. . . . .
of news to be one of our biggest scoops for 1947. Another long standing Laboratory romance was climaxed on Christmas Day when Alice Nichols, East Computing, and Tony Proterra, Full Scale 'unnel, were married in Plattsburg, New York. The couple managed to keep the big secret until this* week.

One of the Laboratory's. . . . .
proudest fathers is Frank Read, East Engineering. He became the father of a son on New Year's Day.

Wedding bells will ring. . . . .
Monday for Virginie Powell, Employment, when she merries Gene Burkett, U. S. Navy.

At last the blessed event. . . . .
has happened and Jules Miller, Research Steff Office, is gradually getting beck to normal. He became the father of an eight pound, nine ounce son, John Maleomb, on Saturday, January 11. Mama Texie Bolle used to work in Fuil Scale.

The Research Staff Office. . . . .
is having a rather busy week. The next big event scheduled to take place is Ray Zavasky's marriage tomorrow to Edith Borden.

Another proud papa 1s. . . . .
Tom Bolleck of 19-Foot Fressurs Tunnel. He recently b scame the father of a daughter, Sonya LaVerne. The mother, the former Mas Harmon, was also an employee of 19-Foot.

Another couple that picked. . . . .
New Year's Eve for the big day in their life was Audrey Wood, Stock, and Bill Fox, Instrument Service. Audrey has left the Laboratory to dovote her time to housekecping.

Nedaing bells rang. . . . .
last Saturday for Louise Parkgr, Stenographic Section. She was married to Robert Sauer of Newport News.

Yord has just been received. . . . .
at the Lab of the marriage of Ann Ellis Luton, formerly of Flight Research, to Thomas Leon Bentzel, formerly of Electrical Section, in Nashville, Tennessee, on Januery 1. They will make their home in Radford, Virgiria, untiz Tomay completes his studies at V.P.I.

One marriage which somehotv missed. . . . .
the "Air Scoop" was that of Nancy Cooley, formerly of Stability Analysis, to Major Walter M. Taylor. The couple if now living in Tokyo, Japan.

Dan Cupid scored another victory. . . . .
this past week when rorothy Crook, Full Scale Tunnel, married Robert Gleichman, Manager of Friden Calculating Mechines in Hagerstown, Maryland.
Another big sparkler was. . . . .
being flashed around this week. It's Marjorie Cullifer; formerly of Payroll, and she's engeged to John Fhillips of Norfolk. The wedding will take flace in April.

# BRAINBUSTERS TO HOLD SERIES OF MODEL MEETJ 

By John Worth
Following a successful series of Indoor Glider meets that saw the standing world record broken by Joe Boyle of Eest Model Shop, the Breinbusters Model Club announces a series of rubber powered speed moaiel contests with the first date set tentatively for Sunday, February 2. Entries are not limited as to size or weight but must be flown over a course lou-figet long and 50-feet wide. Flights are expected to be timed electrically to insure accuracy. Further details will be released with the next notice of club activities.

Official confirmation of Boyle's 60 second class $B$ indoor elider flight as s new world record is expected shortly from AMA head juarters. It should be noted that Poyle topped the previous record four times in all with an unofficial high of 68 seconds.

## ACTIVITIES

(Continued from page 1)
scheduling when in conflict with non-searonal activities, such as saction functions and similar affairs. In addition, it may be necossary at times to schedule two or more activities at the same time when the octivities do not conflict in their requirements as to equipment and space. Except for extremely lerge affairs requiring the use of the entire building, such as amokers or dances sponsored by the Activities Association, the lounge will be open evory weekday evening to anyone desiring to use it.

In addition to providing for the maximum use of the present facilities, one of the duties of the Activities Committee is to foster new activities and to pro$\begin{aligned} \\ \text { ide facilities when possible. }\end{aligned}$ The Activities Committee would appreciate suggestions from the Laboratory personnel as to new activities that may be of intsrest throughout the Lab.
Memorandums suggesting an activity, giving data such as facilities and equipment required, season, etc., should be sent to Margaret Ivey, $7 \times 10$-Foot Tunnels. These memos will be answered promptly and the activity suggested diecussed with the sender. If the activity merits consideration, appropriate steps will be taken to determine the extant of interest.

## 7-FOOT, 5ERL5 LOSE GRME

With Yest Shop's 35-28் win over 8-Foot High Speed Tunnel last week and 8-Foot's 29-28 win over the Seals, no undefeated teams remain in the Men's Basketball League.

In the Hest Shops versus 8-Foot game, the losers seemed to have trouble clicking and West Shops came through with a.32-28 win to give the losers their first defeat of the season. Jim Dawson, Shop forward, was the star of the evening with 14 points. Cletus Vincke came through for the losers with nine points.

8-Foot came back in their game with the heretofore undefeated Seals to set them back by a bare margin of 29-28. Although 8-Foot had a 18-12 lead at halftime, the Iast three seconds of the game found the two teams fighting out a 28-28 tie. Iuke Liceini made good his free throw to win the game 29-28. Iiccini wคs high scorer for the winners with 9 points and Andy Anderson for the losers with 9 points.

Stability came through to break heir losing streak with two strasht wins. Their first victory came last week when they knocked IRD from the undefeated column by a 33-23 score. Eddie Polhamus starred for the winners with 18 points and McConnell for the losers with 7 points. The second win came last Tuesday night when they took a 34-21 win from l6-Foot. Leading by the wide margin of 2l-10 at nalftime, the winners came through to chalk up 34 points to the losers' 21. Chuck Bennett was high scorer for the winners with 11 points and Ted Himka for the losers with 9.

Keeping a bare lead throughout the game, Flight Research came out on the winning end of a 1614 tussle with PARD. Leading at halftime 9-6, Flight held on to its margin to win their first game of the season. Art Vogeley was high scorer for the winners with six points and Jerry Teitelbaum for the losers with 10 points.


WHNTED: Pascengers from Briarfield, Besty Lee Gardens, or Copeland Park to East Area on $8: 15$ shift. Gordon Mercer, Research Staff Office.

FOR SALE: 1936 Plymouth. Call Hampton - 4466.

FOR SAIE: Record player in excellent condition. Plugs in radio, plays single records. Price - \$10. Cecil Burtner, Flight Research.

FOR SAIE: Univex Mercury, Ievid Feigenbaur, Stability Tunnel.

Coming back to compensate for their previous defeat, PARD took a 28-22 win over Physical Research. Jerry Teitelbaum and Bill Martz were top scorers with 9 and 8 points respectively. Kilgore and Bob Jaquis made most of the points for the losers with 9 and 8.

STANDINGS

| Team | W | L | AVg. |
| :--- | :--- | :--- | :--- |
| Structures | 4 | 1 | .800 |
| 8-Foot | 3 | 1 | .750 |
| West Shops | 2 | 1 | .667 |
| IRD | 2 | 1 | .667 |
| l9-Foot | 2 | 1 | .667 |
| Stability | 2 | 2 | .500 |
| l6-Foot | 1 | 2 | .333 |
| Flight | 1 | 2 | .333 |
| 9-Inch | 1 | 3 | .250 |
| PRD | 1 | 3 | .250 |
| PARD | 1 | 3 | .250 |

## GIRLS LEAGUE OPENS; 16-FOOT, AWT WIN

Getting off to a late start, the NACA Girls' Sasketball Lergue opened its season of play last Monday night at the Activities Building. Eight teams are in the league and the organization is headed up by Shirley Huxter, 16-Foot Tunnel.

In the opening game, the girls from 16 -Toot had smooth sailing all the way to defeat PRI 38-13. With the score 18-10 at halftime, the winners held FRD to only three points in the last half while they managed to chalk up an additional twonty points. All the 16 -Foot fcrwards came through with high scoring laurels, dividing the 38 points between Maxine Horne, Virginia Hall, and Marie Allen.

Getting off to a slow start, AXT, champs for the past two years, managed to hold Administration to a total of only six to win the game 19-6. Administration never gave the wincers any serious threat throughout the game, but. ANT seemed to have trouble raking their of fense cliok. At halftime, the champs were ahead 8-3. Lorean Cooper, a new addition to the team, scored twelve points for the winners.

All games will be played on Monday nights at the Activities Building. Games for Monday, January 20 are: 7 p.m. - AWT versus Presbyterian; 8 p.me -16-Foot Tunnel versus Loads; and 9 p.m. - PRD versus 7 X 10 。
WANTED: Passengers to Miami, Florida or points South. Leaving on Friday, January 24. Ed Kruszewski, Structures Research.

FOR SALE: "Machinery's Handbook" and "Photography and Platemaking for Photo-Lithography" by I. H. Sayre. Training office, phone 2256.

FOR SALE: Brand new Winchester .22 calibre pump gun in factory carton. Price - \$35.50. Dan Germansky, Instrument Calibration.

## REMAINING SCHEDULE FOR MEN'S BASKETBALL LEAGUE

| Time | Jan. 21 | Jan. 22 | Jan. 28 | Jan. 29 | Feb. 4 | For. 5 | Feb. 11 | Heb. 12 | \#eb. 18 | Feb. 19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6:30 | 3-4 | 9-7 | 11-7 | 10-4 | 1-8 | 3-6 | 2-8 | 10-5 | 11-10 | 2-9 |
| 45 | 11-6 | 1-6 | 9-8 | 2-6 | 10-9 | 4-5 | 4-6 | 3-7 | 4-7 | 1-10 |
| 9:00 | 10-8 | 2-5 | 3-5 | 1-7 | 2-7 | 11-8 | 1-9 | 11-9 | 3-8 | 5-6 |

Team numbers are: 1. 19-Foot Pressure Tunnel; 2. 9-Inch Supersonic; 3. Seals; 4. Flight Research; 5. Physical Research; 6. Stability; 7. Hest Shops; 8. Instrument Research; 9. 16-Foot Tunnel; 10. 8-Foot High © Speed Tunnel; and, 11. Pilotlass Aircraft Research.

311 games will be played at the Activities Building in West Area.

## CONDUCT FLIGHTS

## (Continued from pege 1)

of the fuselage. This installation is used to make exact measurements of the amount of heat required for ice-prevention on wings. This information will be applied to design suitable heat exchangers and duct systems. The windshields are also electrically heated by means of a special, transparent, conducive material. The propeller blades are fitted with electrically heated shoes, and one engine has been ecuipped with a device to measure the loss in propeller efficiency due to propeller icing. In addition, special instruments are installed to gather data on the two chief factors which determine the rate of ice formation. These are the size of the water droplets in the icing cloud, and the amount of free water contained in a given volume of the cloud.

Flights are being made over a consilerable portion of the United States, although the northwest region of the country is the favored area because the mountainous terrain and air movements from the Pacific combine to produce very heavy icing conditions. The usual operation procedure is to locate a probable icing region from a study of woather maps and air traneport pilot's reports and then fly back and forth in the region gathering the research c.ata.

The crew is composed of the following members: James L. Murray, pilot, NACA; Lyle W. Reynolds, co-pilot, United Air Lines, Inc.; Victor Bayard and Eldon Harris, mechanies, Nf:Ci; William Lewis, meteorologist, U. S. Weather Bureau; Carr B. Neel, George H. Holdaway, Frank A. DuWaldt, Charles Steinmetz, and Bernard A. Schlaff, research engineers, NACA.

## STACK SPEAKS AT AERL SMOKER

John Stack, Chief of the Compressibility Research Division, was guest speaker last Tuesday at a smoker for employees at the Cleveland Laboratory. Stack discussed his European experiences when he was there to deliver a lecture on "Phenomena at High Air Speeds", at the Sixth International Congress for Applied Mechanics which convened at the Sorbonne in Paris, September 22 through 29.

FOR SALE: 1946 Ford. Norris Huff, West Machine.

## COMING EVENTS

Printed below is a calendar of events scheduled to take place in the Activities Building throughout next week. A few dates are still available for basketball practices. Practice hours may be reserved by calling Arty Assadourian, Flight Research, telephone 2264.
Jan. 20 - Girls' Basketball
7-8 - AWT versus Presbyterian 8-9 - 16-Foot Tunnel versus Loads
9-10 - PRD versus 7 X 10
Jan. 21 - Men's Basketball
6:30 - Seals versus Flight
7:45-PARD versus Stebility
9:00-8-Foot versus IRD
Jan. 22 - Men's Basketball
6:30-16-Foot versus W. Shops
7:45-19-Foot versus Stability
9:00 - 9" Supersonic vs. PRD
Jan. 23 - 5-7 Men's Basketball Practice.
Jan. 24.- PP.D Party
Jan. 25 - Inst. Service Perty
FOR SALE: General Electric sun
lamp with extra bulbs and timer.
Bert Deis, Hampton - 8901
There are but two ways of rising in the world; either by one's own industry or profiting by the foolishness of others.
--La Bruyere
Matrimony - the high sea for which no compass has yet been invented. --Heine

The bowlers from $16-$ Foot Tunnel are leading the Monday night league with 25 wine and 11 losses. Sound Lab trails in second place with 24 wins and 12 insses and 19Foot Pressure Tunnel and Structures \#l are tied for the nember three spot with 21 wins ead 15 losses.

Last Monday night, Bill Gray of $16-$ Foot came through with the high game of the evening with 125 and Bobbie Buckner, Full Scale 朔, took high scoring laurels for the women with a 105 game gind 276 set. Kurt Strass, 16 -Font, took the high set with 296 and 16-Foot won high game and set with 510 and 1355.

|  | STANDINGS |  |  |
| :--- | :---: | :--- | :--- |
| Team | W | L | Pctg• |
| l6-Foot | 25 | 11 | .694 |
| Sound Lab | 24 | 12 | .667 |
| l9-Foot | 21 | 15 | .583 |
| Structures \#1 | 21 | 15 | .583 |
| Structiures \#2 | 18 | 15 | .545 |
| Tank | 18 | 15 | .545 |
| FST \#2 | 16 | 20 | .444 |
| FST \#l | 16 | 20 | .444 |
| Administretion | 14 | 22 | .389 |
| Electrical | 11 | 25 | .306 |
| Computars | 11 | 25 | .306 |

WANTFD: Passengers to Nashington, D. C. on week-end of January 24. Returning Sunday, Janụary 26. F. W. Schmidt, Meteorology Lab.

WANTED: Congenial girl to share apartment on Newport .News Ave. Will exchange references. Margaret Adams, Flight Research.

It is ersier for a women to defend her virtue against men than her reputetion egrinst womèn,
--roche brune


