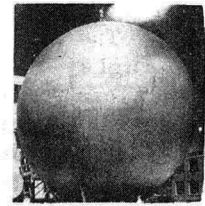
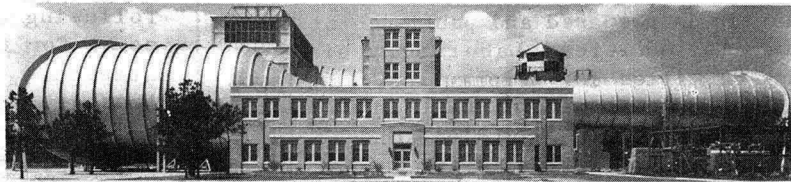
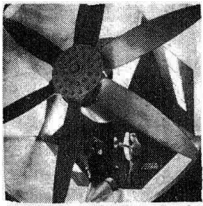


LMAL BULLETIN



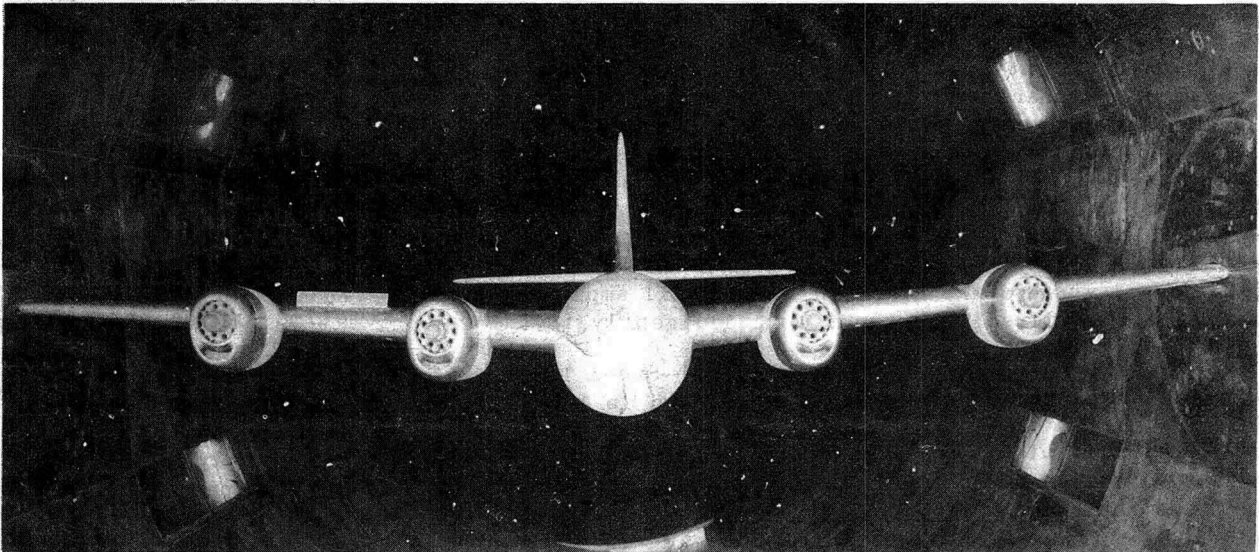
LANGLEY MEMORIAL AERONAUTICAL LABORATORY

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Page 1

JAPAN BOMBED BY B-29'S TESTED AT NACA



Model of Boeing B-29 Superfortress mounted for testing in 8-Foot High Speed Tunnel.

The giant B-29, the Boeing Superfortress, which filled the headlines of last week's newspapers with the story of its raid on the Japanese homeland is another of the army's top-flight warplanes which underwent early tests here at LMAL.

Early in 1942, a model of the XB-29 was set up in the eight foot high-speed tunnel for testing. The tests were completed in a relatively short time, and the technical report was written by John V. Becker and Donald D. Baals.

The late Eddie Allen, one of the world's foremost aeronautical engineers and test pilots wrote April 10, 1942 to thank the Laboratory for its part in the tests. His letter read, "The cooperation given.. in making possible the rapid development of the tests and the early availability of preliminary data has greatly en-

hanced the value of the tests and reduced the time required for their conduct and analysis, thus appreciably assisting in a material speed-up of operations." He added that he was "greatly impressed with the value of the eight foot high-speed wind tunnel as a design tool. The constancy of data obtained indicates the balance of this tunnel to be equivalent to any in this contractor's experience...The tunnel is operated by an experienced staff and this is in no small part greatly responsible for its satisfactory operation."

At the time that Allen wrote the letter, he was serving as Director of Flight and Aerodynamics, a position which he held with the Boeing Aircraft Company until his untimely death in a crash on February 18, 1943.

The Superfortress is de-

scribed briefly as the bomber which "flies farther, faster, and higher with a heavier bomb load." Its overall length is 98 feet, its wing span 141.2 feet, and the height of its vertical tail surface 27 feet. The fuselage is cylindrical in shape and the wing is mounted midway, in comparison with the high wing of the B-24 and the low wing of the B-17. The Superfortress has a tricycle landing gear with double wheels.

It is powered by four Wright Cyclone 18 cylinder radial engines, each with 2200 horsepower. The engines swing four bladed propellers which span 16-1/2 feet and are the largest in use.

The Superfortress is recognized as the most streamlined heavy bomber in existence. The drag is doubled when the landing gear is lowered.



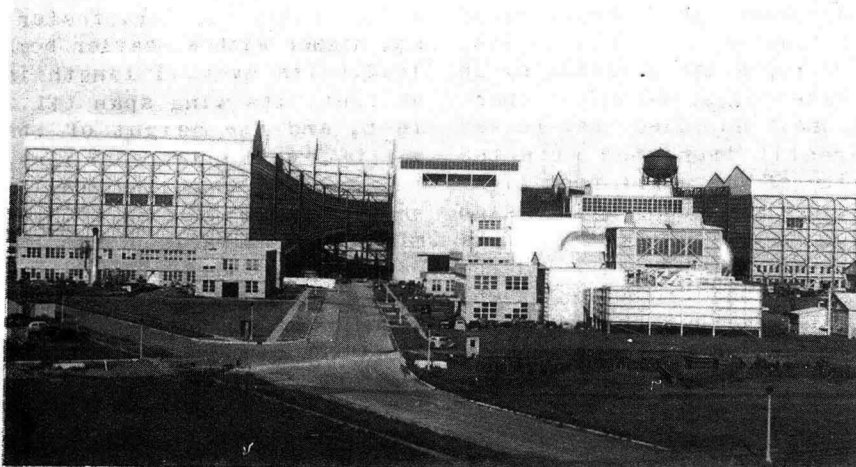
The LMAL Bulletin is prepared and published at the Langley Memorial Aeronautical Laboratory of the National Advisory Committee for Aeronautics, Langley Field, Virginia, in the interest of LMAL employees. Contributions of news and art should be sent to the Editor, in the Administration Building. Telephone: 376.

Editor Ruth E. Angel
 Associate Editor Audrey C. Lange
 Reporters LMAL Employees

We Backed The Attack

There is no one in the Laboratory who should feel that he or she did not have a part in the bombing of Japan. In the 8-Foot High-Speed Tunnel, where research tests were conducted on a model of the giant Boeing XB-29 in 1942, the engineers who assisted, the mechanics and modelmakers who did their share, the computers who worked up the data, the secretaries who typed and retyped the results, and the janitors and maids who kept the tunnel clean and suitable for work, all made their contribution for the final bombing of Japan. The reviewers of the report, the editors of the report, the typists, and members of the Photo Lab added their contribution. In the background are the Personnel workers who hired and placed all employees that contribute more directly but not more diligently to the war effort.

Not only these tests in the 8-Foot High-Speed Tunnel but also many previous and later tests conducted in the various other tunnels and theoretical work accomplished in still other sections contributed toward making the B-29 a true "Superfortress." Because of the many small and large factors at LMAL which made the bombing of Japan a reality, we can all feel our share in the triumph and thus put forth renewed effort into our work in order that more and more such missions may be possible.



Shown above is the Full Scale Tunnel at Ames Aeronautical Laboratory. This is the largest wind tunnel in the world.

**BUY MORE INVASION BONDS
 YOUR STEAK IN THE FUTURE**

MR. REID VISITS AMES

H. J. E. Reid returned to the Laboratory early this week following a trip to the west coast for the dual purpose of attending the dedication of Ames Aeronautical Laboratory and conferring with the heads of all three laboratories and officials of the Washington Office.

Mr. Reid said that he was very favorably impressed with the dedication and that he particularly enjoyed the tour of inspection of the facilities of Ames. The ceremonies were held in the new auditorium which seats around 600 people. The cafeteria is located directly underneath the auditorium and he said that the two furnish an ideal combination for holding official and social functions. Mr. Reid also expressed a hope that a similar setup be obtained here sometime in the not too distant future.

While in California, he visited Stanford University and talked with Professor E.G. Reid, formerly of LMAL, who is conducting propeller investigations on a university contract with the committee.

Mr. Reid said that he also enjoyed the opportunity of seeing many former Laboratory employees now on the staff at AAL. He also saw Marion B. Seyffert and Robert N. Stewart, two Laboratory employees who were sent out to install the scales in the full-scale tunnel at Ames.

*ENGINE LAB DESIGNATED
 AS UTILITY BUILDING*

The building formerly known as the Engine Research Laboratory has been designated the "Utility Building". This designation should be used in all official references to that building.

TELEPHONE NUMBER: Model Finishing Shop, located in west end of West Area Sheetmetal Shop, 219.

WANTED: Mast for Hampton I design. Contact John Houbolt at 216.

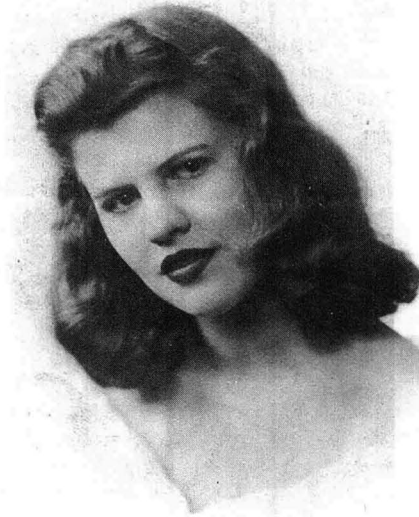
LOST: Plastic frame, brown leather case between Dynamic Model Shop and PX. Contact Edwin Cook, 217.



LMAL BEAUTIES

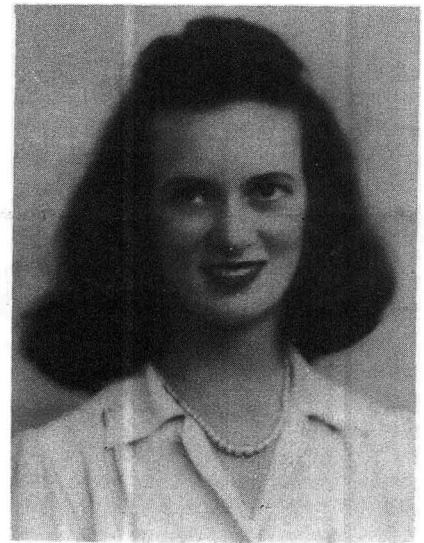
Shown on pages 3 and 4 are pictures of the 16 girls elected by members of the Laboratory for the Miss LMAL contest. In some cases the pictures used for the "Bulletin" will not be the same as those which will be sent away for the final judging.

Reading left to right, top row: Jean Allen, Files; Ruth Angel, Bulletin; Katie Banick, Leave. Second row: Audrey C. Lange, Bulletin; Dickie Creech, Messenger. Third row: Helen Hanks, Construction Purchase; Frances Leigh, Files; Mary Lou Mackie, Editorial Office.

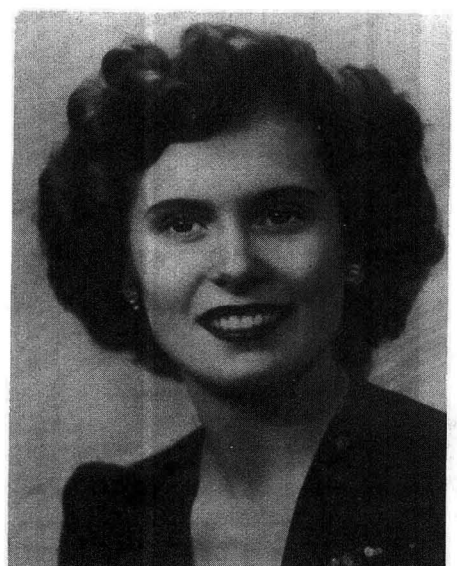




Reading left to right, top row: Nancy McCarthy, Messenger; Viva Michels, P. Crain's Office; Ruth Miller, Editorial Office. Second row: Louise Neal, Leave; Marijean Saunders, Receptionist. Third row: Elizabeth Scott, Administrative Office; Letitia Smith, Duplicating; Mary Margaret Soper, Cost Office.



It is interesting to notice that 3 of the 16 winners work in the West Area, and the remaining 13 are distributed throughout the East Area as follows: 9 in the Administrative Building; 2 in the Technical Service Building, 1 in the Old Engine Lab, and 1 in the Full-Scale area.



Girls' Softball

On Tuesday, June 20, one of the most exciting games of the season was played between Personnel and PRT. Frances Leigh pitched for Personnel and Doris Topping for PRT. At the end of the first of the last inning, PRT was leading by a score of 34-15; however, Personnel struck back in the last part of the last inning by defeating PRT by a final score of 35-34. Carlyle Moore was referee.

On Monday, June 19, AID walked all over 16-Foot by a score of 23-2. Jerry Crouch pitched for the winners; and Ferne Driver, who pitched for the losers, was the most outstanding player for 16-Foot. John Houbolt, Structures, was umpire.

16-Foot defeated Flight Research-Tank by a bare margin of 21-20 on Friday, June 16. Eleanor Johnson and Cynthia Lowe alternated as pitchers for FRT and Ferne Driver pitched for 16-Foot. Homeruns were made by Maxine Horne for the winners and Clara Christner for the losers. Sergeant Bill Grademan umpired.

On Thursday, June 15, Structures beat FGDA by a score of 16-9. Sybil Bateman pitched for Structures and Ginna Tucker for FGDA. Hank Fedziuk and Axel Mattson, re-knowned bachelors, were umpires.



SPORTS



With a little more than a month to go, the following teams show promise of getting into the playoffs: East Area Shops, still undefeated with six victories to their credit; Structures and 19-Foot Pressure Tunnel, with six wins and one loss each; and Full Scale, with four wins and one defeat. PRT, off to a slow start, is starting to go places and is expected to keep pace with the leading teams from now on. AWT is another team to watch, being a constant threat at all times. Flight Research and 8-Foot High Speed round out the teams which still have a good chance to get into the playoffs.

All captains, representatives, and umpires are notified that a meeting of the Softball League will be held Tuesday night, June 27, at the Hampton Industrial USO. The meeting will begin promptly at 8 p.m., and each team is urged to have a representative present.

In a hard fought contest, Structures overcame a three run deficit to nose out AWT 5-4. Each pitcher permitted only five hits. Ray Comenzo, AWT, was the batting star, getting a triple and double in four trips to the plate.

Coming to bat in the eighth inning with the score against them, PRT tallied four runs to defeat 8-Foot High Speed 8-7. Sam Vollo, the winning pitcher, allowed eight hits, but struck out ten men while walking 8. Burly Baals was the losing pitcher.

East Area Shops took advantage of several blunders to beat Stability 4-1. Dale Burrows was the winning pitcher and Dick Everett twirled for the losers.

Flight Research and Engineering Section engaged in a hitting contest with FRD emerging on top 9-5. Fred Daum was credited with the win.

Low Turbulence put forth an effort in the sixth and seventh innings to overcome a 11-run lead piled up by 19-Foot, but fell short of the goal with a score of 15-14. In the last two innings, Low Turbulence scored ten runs.

Softball Standings:

Pos.	Team	Won	Lost	Pct.	G.B.
1	East Area Shops (12)	6	0	1.000	-
2	Structures (8)	6	1	.857	1/2
2	19' Pressure (14)	6	1	.857	1/2
4	Full Scale (3)	4	1	.800	1-1/2
5	8' High Speed (4)	4	3	.577	2-1/2
5	AWT (6)	4	3	.577	2-1/2
5	PRT (10)	4	3	.577	2-1/2
5	Flight Research (13)	4	3	.577	2-1/2
9	Low Turbulence (7)	3	4	.429	3-1/2
10	Tank (5)	2	4	.333	4
11	Engineering (1)	2	5	.286	4-1/2
12	Instrument Research (9)	1	5	.167	5
13	Aircraft Loads (11)	0	6	.000	6
14	Stability (2)	0	7	.000	6-1/2

The HARD WAY



ON THURSDAY MAY 18, 1944 AN EMPLOYEE WAS REMOVING RUST FROM ONE OF THE EXHAUST STACKS OF THE ELECTRIC GENERATING PLANT. HE WAS USING A PORTABLE DISC GRINDER AND WAS REALLY DOING A JOB! THE RUST AND SCALE WERE FLYING! IN FACT, IT FLEW IN HIS EYE!

HE WAS WEARING GOGGLES!

HE WAS GIVEN THE GOGGLES BY HIS SUPERVISOR AND WAS TOLD THAT THE GOGGLES, IF WORN PROPERLY, WOULD PROTECT HIS EYES.

HE WAS WEARING GOGGLES - BUT AROUND HIS NECK!

THE ACCIDENT COULD HAVE BEEN PREVENTED!!!

A mother takes twenty years to make a man of her boy, and another woman makes a fool of him in twenty minutes.

--Frost

"The rapidly increasing divorce rate," remarked the

wit," indicates that America is indeed becoming the land of the free."

"Yes", replied the prosaic friend, "but the continued marriage rate suggests that it is still the home of the brave!"

Life At The Laboratory

HEIR MAIL: Thomas Turney, AWT, is the proud father of a baby girl, Frances Dianne, born June 15 at Dixie Hospital... James Armentrout, 16-Foot Tunnel, is the father of twin boys, born Friday, June 16... Leonard Bartone, Structures, is the father of a daughter, Mary Lenore, born June 14... Friends at the Laboratory have received word that Pauline Wede, formerly of Structures, is the mother of a son, Jan Scott, born May 28.

VISITORS: Mary Ann and Joanna Bartoshesky, formerly of Files, visited the Laboratory last week... Private Kenneth Brown, formerly of L Purchase, visited the Lab while on furlough... Pearl Young, former head of Editorial Office and now of AERL, is visiting Kitty and U. T. Joyner.

ILL WINDS: Arvid Keith, PRT, is recuperating at his home in Durham, N. C. from a recent operation... Betty Bohannon, Library, is back at the Lab after undergoing treatment at the Dixie Hospital... East Model welcomes back Tommy King who has been out several months... Raymond Swafford is back at East Model after receiving a medical discharge from the Army due to a bullet wound received while in battle.

PARTIES: Nancy Wall and Phyllis Reitheimer, 16-Foot Tunnel, had a bridge party Wednesday night, June 14, for the computers. Marie Bird Allen was high scorer... Marilyn Lawlor, Payroll, had a family reunion last week-end when her two brothers and mother visited her. It was the first time they had all been together in three years... Cowling and Cooling had a beach party at Grand View on Sunday, June 18. Outstanding event of the day was Doc Rubert's mastery of the art of swimming with his glasses on and a cigar in his mouth... Dorothy Yates, Structures, entertained at a shower on Wednesday, June 21, for Bernice Wienbarger who is getting married in July... Shirley Riley, Ann Merfeld, Becky McBride, Earlene Cook, Edna Earl Wright, Margaret Farmer, and Mary Little celebrated their paper anniversary at the NACA when they all met at Shirley Riley's apartment on Friday night, June 16.

VACATION RHAPSODY: Mrs. Emma McSmith, Supervisor of Charwomen, is visiting her son at McKellar Field, Tenn. This is her first vacation in 27 years... Bob White, Dynamic Model, is visiting in Americus, Ga... Barbara Brown, Editorial Office, has returned from a combined vacation and conference at Chatham Hall, Chatham... John Boshar, ALD, has returned from a trip to Roanoke... Billie Bentley, East Machine, is visiting her home in Garrett, Ky... Ansal Neihouse, Stability Tunnel, is back after attending the wedding of his brother in N. Y... Tommy McGrath and James Danke, East Machine, are back after recruiting for several weeks... Emily Stevens, Stability Tunnel, is back after a visit to Roanoke... William Schryer, E. Machine, has returned from Salisbury, N. C... William Sperry, Construction, is visiting his home in Vermont... Mark Nichols, PRT, is visiting his home in Washington... Rosemary Bryant, PRT, is vacationing at her home in Spartanburg, S. C... Sally Mills, AWT, is spending a few days with her Army husband in Roanoke Rapids... Marvin Schuldenfrei, AWT, is visiting friends in Detroit... Evelyn Renfro, Engineering Section, is visiting her home in Norton... Bernard Maggin, Free Flight Tunnel, is visiting his home in Detroit... George McDougall, Spin Tunnel, has returned from Baltimore... Eileen Pake, FRD, is vacationing at her home in North Carolina... Willie Gates, FRD, has returned from a visit with her Army husband in Georgia... Dorothy Hall, Library, is visiting her husband in Dothan, Ala.

"What kinda guy is your roommate?" "oh, the perversity of inanimate objects."

"Well, last night he barked his shins on a chair and said, mate objects."

Training for Workers

The Apprentice Training Plan of the Technical Service Department, now in its third year of operation, has graduated forty-six Apprentices as Journeymen in their trades. From its inception, the Apprentice Training Plan has greatly aided the Laboratory and the war effort through the training of employees to perform a wide range of skilled work required in various sections of the Laboratory. This plan, which provides for intensive training in ten different trades, was developed by the officials of NACA in conjunction with the Department of Labor and the Federal Committee on Apprenticeship. The State Department for Industrial Education for War Production Workers cooperated in training instructors and provided funds necessary for the operation of the related study program. The Apprentices selected to serve a trade are given a specified amount of experience in the various sections of the Laboratory as well as an intensive course in the theoretical aspects of their trade. New Apprentices receive credit for previous work experience when this previous experience is definitely reflected in the quality and quantity of the work produced by them. Before an employee can be selected as an Apprentice, he must have demonstrated above average ability during a two or three month orientation period.

The Apprentice Training Plan offers an excellent opportunity to unskilled employees to learn one of the following trades under the tutorship of skilled journeymen who work as shop instructors in the various shops: toolmaker, machinist, instrumentmaker, engineering design, draftsman, electrician (industrial), aviation metalsmith (experimental), aircraft woodworker, aircraft modelmaker, aircraft mechanic, and aeronautical laboratory technician.

For detailed information concerning the Apprentice Training Plan, call the Apprentice Administration.