HISTORY OF THE OHIO STATE UNIVERSITY DEPARTMENT OF AVIATION

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THE BEGINNINGS OF AVIATION ON THE CAMPUS

The resources of the University were called upon to meet the emergencies of World War I. In the spring of 1917 the War Department decided to establish Schools of Military Aeronautics at six universities, namely, California, Cornell, Illinois, Massachusetts Institute of Technology, Texas, and Ohio State. The need for these schools was pressing, for there were already 2,500 applicants for enlistment in the Aviation Corps, besides the 600 who had been accepted. On May 2, 1917, the Department of Military Science and Tactics at the University received official notice of the decision to open these schools. of the chosen institutions was directed to send three representatives for a brief training course to the Royal Aviation School at Toronto, Canada, and President Thompson appointed for this purpose Professor William T. Magruder of the Department of Mechanical Engineering, Professor Henry C. Lord of the Department of Astonomy, and Professor William A. Knight of the Department of Industrial Arts. These gentlemen-the first members of the civilian academic staff of the new school-left for Toronto, May 5, and were back again by the middle of the same month with the necessary information in regard to the technical instruction

to be given in the aviation ground school. On the day of their return President Thompson departed for Washington to complete arrangements for the opening and operation of the school.

Both the curriculum and organization of this school, as of those at the other universities, were determined by the Signal Corps at Washington, the chief signal officer sending the requisite instructions to the Academic Board, which was the administrative committee in charge of the school at Ohio State. The Academic Board comprised the military staff and the heads of departments of the civil academic staff. From the beginning of the school until December 1, 1917, Dr. W. O. Thompson was the president of the board. He then appointed Professor F. C. Blake of the Department of Physics as his successor. principal military officers on the board were the commandant, the adjutant, and the supply officer. Major George L. Converse served as the commandant until the assignment of Captain George Stratemeyer, a graduate of West Point and of the Army School of Aeronautics at San Diego, Calif., at the close of May 1917. Captain Stratemeyer was succeeded, June 15, 1918, by Major George R. Harrison, also a graduate of the United States Military Academy. The commandant and his staff gave the military instruction to the aviation cadets or pilots, while the scientific and technical instruction was in the hands of the following departments: (1) Signalling and Radio, (2) Gunnery, (3) Aids to Flight,

(4) Airplanes, (5) Engines, and (6) Aerial Observation.

The total number of civilian instructors in the departments just named during the continuation of the School of Aeronautics and the other co-existant military schools was about one hundred. This number represents the original appointees and the later ones who replaced those who resigned from time to time to go into active service. Not a few of these instructors were more or less advanced students in the College of Engineering. About one-fourth of the total number was made up of University instructors.

The School of Aeronautics opened May 21, 1917, when the first "squadron" or group of 16 cadets reported. They were quartered in Hayes Hall and took their meals in the dining room of the Ohio Union.

At the end of the first three weeks of intensive military training the squadron entered upon five weeks of theoretical and technical instruction in military aeronautics, that is, in signal-ling, gunnery, airplanes, engines, and aerial observation.

The first pilot squadron graduated, July 16, 1917 (see

Figure 1). Meantime, each week brought a new squadron of cadets,

the first six or eight squadrons being all college men; and each

week after July 16 saw a squadron graduate and leave for the

Wilbur Wright Flying Field at Dayton, Ohio, for instruction in

the art of flying. The Aviation Laboratory was built for the

purpose of teaching students the rudiments of aircraft construction and maintenance. The Communications Laboratory, including WOSU radio, now occupies the building (see Figure 2). The total number of men trained in the School of Military Aeronautics was 1,291. It was closed August 31, 1918. At that time such of them as had not graduated were sent to the ground schools at the Universities of Illinois and California. During the next two months the School of Military Aeronautics was in abeyance on campus. For about three weeks, that is, from December 23 to January 12, the University would have been entirely without cadets had it not been for the opening of the School for Aero-Squadron Engineer Officers late in the previous October; and there were but 29 men in this school during the period named. But with the starting of a School for Aero-Squadron Adjutants on January 12, the number of cadets soon rose to nearly 350. Before the end of February airplane pilots were again being sent to the University, and the School of Aeronautics was revived. continued in existence during the next six months, or until August 31, when it was closed permanently. During this interval the school received its squadron of cadets each week, the total number being 27 squadrons.

On October 19, 1917, the second of the United States military schools was opened at the University, when a squadron

of seven cadets arrived for training as aero-squadron engineer officers. The School for Engineer Officers lasted only a little more than three months and was attended by but 36 cadets before it was closed on June 26, 1918.

The third of the United States military schools opened at the University of January 12, 1918, with the arrival of the first squadron of men for training as aero-squadron adjutants. The curriculum for the new school on the campus, which was the only one of the kind in the United States, was furnished by the War Department and covered a period of eight weeks. The School for Aero-Squadron Adjutants closed on July 13, 1918, having trained 887 men.

The last of the four military schools at the University began on March 13 and closed on August 3, 1918. Like the School for Aero-Squardon Adjutants, this School for Balloon Officers was the only one of its kind in the United States. The men sent to it had already received their balloon training at Fort Omaha, Neb., or in Texas, which was now supplemented by a seven weeks' course to prepare them for officers' work. The number of men trained in the balloon officers' school was 219.

In 1917, Charles F. Kettering became the first member of the Board of Trustees to arrive at the University by airplane for a Trustees meeting. He landed at the landing field on the Campus, west of Neil Avenue, after a flight from Dayton, Ohio. (see Figure 3).

With the return to peace, aviation became dormant on the campus. At least one event, however, served to remind the University that aviation was still close at hand.

In celebration of Engineers' Day, May 24, 1928, the holder of the world's altitude record landed his Waco biplane on the Oval of the Ohio State University campus. Lieutenant MacReady, in knickerbockers, was greeted by then Dean of Engineering E. A. Hitchcock. MacReady addressed an aeronautical society at Ohio State that evening. The campus newspaper reported that the pilot had no difficulty landing on the Oval, a couple of hundred yards of "front lawn" reserved for campus activities at Ohio State, but that, on takeoff, the plane almost became tangled in the trees. MacReady's altitude record in 1928 was 38,418 feet (see Figure 4).

THE ACADEMIC PROGRAM

A. THE CIVILIAN PILOT TRAINING PROGRAM

Ohio State was one of a number of universities that took
part in the Civilian Pilot Training Program begun in 1939 under
the sponsorship of the Civil Aeronautics Administration. Its
purpose was to foster private flying, but when the war came on
it was tied in quickly with the war effort. Prof. Karl W.
Stinson, of mechanical engineering, was the faculty co-ordinator.

In a resume written in October, 1944, Stinson remarked that "It was a well-established fact that as of December, 1940 the Civilian Pilot Training Program . . . had assumed a position of major importance alongside the Army, Navy and Coast Guard in the National Defense Organization." In support of this, he noted that as of June, 1941, 7403 C.P.T.P. trainees had entered the Army or Navy and 1262 had become flight instructors in some phase of the national defense program. On December 7, 1941, the name of the service was changed to "Civil Aeronautics Administration-War Training Service."

The campus C.P.T. program was administered originally by a committee consisting of Vice President Morrill, Business Manager Steeb, and Deans MacQuigg (Engineering) and Stradley (Arts and Sciences). Harvey M. Rice, of history, was assistant co-ordinator. At first both men and women students, chosen carefully, were admitted to the program. But from the spring of 1941 women were

no longer accepted. By the next spring (1942), all enrollees had to enlist in either the Army or Navy air arm. In December, 1942, the University was designated as a Naval Aviation Cadet training center. On August 3, 1944, the Navy discontinued the C.A.A.W.T.S. facilities on the campus and elsewhere.

From 1939 to that date, 498 Ohio State trainees took the advanced course in both ground and flight training. In all, 802 trainees had the elementary course. Of those enrolled in the elementary course, 462 were Naval Aviation cadets. Most of these continued through the advanced course.

Four flight contractors handled the flight instruction.

They were the Lane Aviation Corp., the Miller Flying School,

the Northway Flying Service, and the Sullivant Flying School.

They supplied airplanes for flight training and both operators

and airplanes were under rigid government inspection and approval.

Much of the earlier instruction was given at Port Columbus until the Navy took it over, and at the Sullivant Airport. The Lane Aviation Corp. transferred its training activities in August, 1943, to the new University airport. It continued there until the program was closed out. Students in the 1942 summer class used the Sullivant Airport where, in the words of Prof. Stinson, conditions were "very congested and dangerous."

Since the actual flying schools were at some distance from the campus, the University first hired private carriers to transport the trainees. Later it bought a 7-passenger car and a 36-passenger bus for this purpose. Stinson called the total program "one of the most important steps in preparation for World War II" as well as "one of the great forces for the advancement of aviation in the history of this country."

B. THE SCHOOL OF AVIATION

Several years before World War II, Ohio State and three other Midwestern universities-Michigan, Purdue and Wisconsin-took part in a conference at which the question of aeronautical engineering was discussed. One decision was that Ohio State would not enter this field. But with the advent of the C.P.T. program on the campus in 1939, followed by Pearl Harbor, the University reversed its position considerably before the end of 1942.

A major result of this was the creation on November 9, 1942, in separate actions by the Board of Trustees of a Graduate Aviation Center at Dayton and a School of Aviation on the campus. The Graduate Center at Dayton, to quote the Board minutes, was set up "to offer opportunity for qualified graduate students in that area to pursue advanced courses in aerodynamics, airplane structures, communication engineering, applied mechanics,

theoretical physics, mathematics, etc."

The School of Aviation program was far more inclusive.

In a prefatory statement to the Board, Dr. Bevis stressed "the importance of air power in war and the likelihood of a vast expansion of aviation in the post-war period. In these developments, both in war and peace, the State of Ohio has and should continue to have a prominent place. Modern aviation had its birth in Ohio." He cited these further facts: many industries essential to aviation development, including several major ones, were based in Ohio; one-fourth of all expenditures for airplanes and their accessories was spent in Ohio; and airports and flying fields were being established throughout the state.

All of this, he emphasized, indicated "the desirability of a centrally located School of Aviation with proper laboratories and other equipment," and that such a school "ought to be established at the Ohio State University" which already had many of the necessary component parts. In support of this contention, he cited a dozen favorable factors in terms of appropriate courses, facilities and personnel. Besides these, he added, were "important" research programs in progress in high altitude physiology, meterology, and psychological factors. Finally, "an excellent flying field" was being developed, providing unusual training, instructional and research opportunities.

The Trustees thereupon adopted a resolution offered by Dr.

Bevis that "a comprehensive program of Aeronautics" be developed at the University. This was to include the establishment of a School of Aviation under a director, and with an advisory committee representing nine related departments. Undergraduate curricula were to be developed in five fields: aeronautical engineering, meteorology, air transport, photogrammetry, and aviation psychology and physiology. Provision was to be made also for graduate and research work in those fields, along with the necessary personnel, laboratories, equipment and apparatus.

The Board created the department of aeronautical engineering on March 8, 1943. The view of Dean MacQuigg was accepted that the development of aviation on the campus, including the related research and academic program, was "a University function and that the interests of the whole University must be considered" in future planning in that area. Col Brunzell, retired R.O.T.C. commandant, was named acting director of the School of Aviation, effective January 1, 1944. A 21-man advisory committee was appointed also.

A major step that had been taken in 1942-43, to quote Dr.

Bevis' fourth annual report further, was "the inauguration of a program intended to make Ohio State the nation's foremost college training center for aviation." This prospect was enhanced during the year, by the purchase of land for the establishment

of an airport seven miles northwest of the campus on which the first buildings in a long-range program were constructed.

On the academic side, along with this physical development, were the creation of a School of Aviation and a department of aeronautical engineering, plus curricula in aeronautical engineering and air transportation management, and the Graduate Aviation Center at Dayton. The University, Dr. Bevis commented, was preparing to help Ohio to maintain its leadership in the aviation industry.

The first flight instruction offered by the Ohio State University was during the Spring Quarter, 1945.

In June, 1945, the School of Aviation, which had been created in November, 1942, was transferred to the President's Division. Col. Brunzell, the former R.O.T.C. commandant continued as acting director of the School. Some months earlier, Lieut. Col. George A. Stone, commander of the Ohio Wing of the Civil Air Patrol, was named adviser to the director.

Aviation was now firmly established at the Ohio State
University. The philosophical relation of the aviation program
to that of the University community had also been defined on
two occasions:

(1) By resolution adopted by the Board of Trustees on November 9, 1942, stating that a School of Aviation be established with a Director and an

Advisory Committee charged with the responsibility of coordinating and developing the different phases of instruction and research in aviation.

(2) By Dean MacQuigg, Chairman of the Aviation

Policy Committee, in 1943 who stated that the

development of aviation was a University

function, thereby implying the support of

other University departments as a prerequisite

to the development of aviation.

After WWII, the aviation industry did not grow at the rate it had been forecast to grow by its advocates. Nor did aviation studies develop at Ohio State to the extent envisioned by the early planners of aviation in the University.

In 1956, the School of Aviation was transferred to the College of Engineering for administration. The course structure of the School remained essentially unchanged and operationally oriented until 1963.

By 1959, seven different directors had served the School of Aviation:

Otto L. Brunzell, Acting Director January 1944-February 1947
C. J. Pierce, Director March 1947-March 1951
R. D. Barden, Acting Director May 1951-June 1955
C. P. Wacker, Acting Director July 1955-March 1957
C. P. Roberts, Acting Director March 1957-October 1957
John P. Scotford, Director October 1957-November 1958
J. J. Eggspuehler, Director December 1958-January 1963

C. THE DEPARTMENT OF AVIATION

In February, 1963, the Council on Instruction approved the change of the School of Aviation to the Department of Aviation. A new program of instruction was also approved.

J. J. Eggspuehler was elected Chairman of the Department (see Figure 5).

Although Aviation received Academic status within the University by becoming a Department, it does not grant degrees. The new program of instruction improved and strengthened the course structure. It also recognized that individuals from all academic disciplines have contributed to the development and growth of aviation.

The Department of Aviation, therefore, has adopted a philosophy of offering courses which are adjunct to other major curricula of the University. The Department is in a supportive role in that it offers courses to those students who wish to relate aviation to their major area of study. A student may enroll in Aviation courses with the objective of obtaining a broad knowledge of the aviation industry, or to procure a background in support of their major area of study.

At present, approximately 200 students per year receive flight instruction for one or more of the pilot certificates and ratings from the Private Pilot Certificate through the

Airline Transport Pilot Certificate. In addition to the flight laboratory courses, approximately 400 students per year enroll in the classroom courses provided by the Department. During the nine academic years ending June, 1969, some 3,200 students had enrolled in aviation courses.

The Department holds a Federal Aviation Administration flying school certificate which is endorsed with the following certificated pilot school ratings:

- Primary Flying School Airplanes (With Examining Authority)
- 2. Commercial Flying School Airplanes
- Instrument Flying School
- 4. Flight Instructor School
- 5. Basic Ground School
- 6. Advanced Ground School

In addition to the University fleet of approximately twenty aircraft ranging from two-place trainers to executive DC-3's, ground based trainers operated by the Department include two Link trainers and two procedures trainers. A simulator laboratory and aviation classroom are maintained on campus (see Figures 6 and 7).

The Department's full time faculty and staff currently number over forty. Of this number, seven hold faculty appointments, each holding pilot certificates and all but one are

FAA certificated flight instructors. Three members of the faculty are FAA designated pilot examiners.

Each year, two scholarships are awarded to qualified students having a career interest in aviation. The Robert W. Butche Foundation Scholarship in Aviation is sponsored by Robert W. Butche, president of Astro Corporation, a Columbus-based aviation electronics firm. In May, 1969, the J. B. Hartranft Scholarship in Aviation was established by contributions from the faculty and staff of the Department. The scholarship was set up in Hartranft's name to recognize the contributions of the Aircraft Owners and Pilots Association under 30 years of Hartranft's leadership (see Figure 8).

AVIATION RESEARCH

The provision for aviation research was included in the plan for the development of the School of Aviation, which was incorporated in the policy approved by the Board of Trustees for developing a comprehensive program of aeronautics at Ohio State.

A. EARLY AVIATION RESEARCH

Dr. Olpin, Director of the Research Foundation, noted in 1942 that since aviation was born in Ohio and "has been largely developed here," it gave him "a great deal of satisfaction" to report that "a large majority of the projects on the campus are concerned with aviation problems."

Aviation projects in progress on the campus had to do with engine design problems, fuel synthesis and testing, pilot performance, communication between ground and aerial crews, and high altitude flying.

Of notable achievement were research projects concerned with the training of personnel to operate airplanes. This work was going on under contracts with several government agencies and the psychology department. Actually there were two major projects: one on determining criteria for flight competence or the selection and training of aircraft pilots, with Dr. Robert Y. Walker as supervisor. The other, as indicated, was the instant recognition of aircraft and surface ships, both friendly and enemy, with

Dr. Renshaw in charge.

The determination of the criteria of flight competence grew out of a project undertaken in December, 1939 for the National Research Council. A number of tests of mental ability, physical condition and muscular coordination were devised and these were developed further on the campus in 1940. They were revised again in 1940-41 and were tested by actual field use. In 1941-42 the National Research Council Committee set up the campus project as a field unit, using fifteen selective tests on all students in the Civilian Pilot Training courses. (Some of this was carried on at other universities.) For 1942-43 the Ohio State project was expanded to take in the problem of improving instructor training techniques.

A policy regarding aviation research had evolved by 1950 which placed the School of Aviation in a supportive role on the one hand and in an independent role on the other: "The school of Aviation shall encourage and promote research activity in fields concerned with Aviation by provision of available facilities and personnel at University Airport. It shall aid various departments to secure equipment needed for research work and shall cooperate with departments in the preparation of research proposals. It will attempt to encourage research projects which can be handled jointly with one or more existing departments of the University."

Aviation research conducted by the School of Aviation prior

to 1960 was oriented to the agricultural applications of aircraft. Although aviation research was being conducted by other University departments the School was not directly involved.

B. RECENT AVIATION RESEARCH

The Department has steadily acquired an independent competence in aviation research. Since 1960, the Department has conducted more than seventeen sponsored research programs for business and government. Research activities of the Department are presently oriented toward basic and applied research and development in aviation, with emphasis on flight instruction and pilot certification (see Figures 9 and 10). Appendix A lists by sponsor selected research accomplished by the Department.

In addition to sponsored research, the Department has initiated and completed a number of programs for the Link Foundation and Aircraft Owners and Pilots Association intended to upgrade the skill, knowledge and experience of the general aviation pilot.

The Department enjoys the many advantages of an interdisciplinary environment, and is fortunate to receive professional
support from such departments as Industrial Engineering, Electrical
Engineering, Mathematics, Psychology, Education, Speech, and
Preventive Medicine.

SERVICE

Because of its particular capabilities in aviation, over the years the Department has been able to render a wide range of services to the public.

The Department serves the University community by operating an air transportation service for faculty and staff traveling on University business. The service was inaugurated in March, 1948, between O.S.U. Airport and the University's Graduate Center at Wright Field, Dayton (see Figure 11). In 1958, the service flew 41,860 passenger miles. In 1968, by comparison, 1,070,964 passenger miles, 187,749 plane miles, and 1,377 hours were flown. The service provides air transportation for University administration, faculty, department instructional field trips, and athletic teams. The air transportation service will continue to provide a valuable service to the University by making its off campus centers more accessible (see Figures 12 and 13).

Continued service to the nation can be maintained through the ROTC flight training programs. Department Chairman J. J. Eggspuehler represented the United States in establishing an agricultural pilot training program in Israel in 1962.

Service to the student community is accomplished through support by the Department of student activities, including those

of the O.S.U. Flying Club, advised by members of the Department. The purpose of the O.S.U. Flying Club is to promote the economic, educational, scientific and recreational development of private flying (see Figure 14). In 1960, the Department supported the Flying Club in hosting the National Intercollegiate Flying Association national convention and air meet.

The general public is served by the Department in numerous ways. Each Spring, Aviation Day, an open house, is held at the University Airport to acquaint the local community with aviation and the functions of the airport in the community (see Figure 15). The Ohio High School Superintendents Aviation Education Seminar is held annually at the airport. The airport facility contributes to the business and economy of the City of Columbus. An extension program in aviation instruction has been established to serve members of the local community unable to enroll in regular University courses. Finally, the Department supplies speakers on aviation subjects to the local community and OSU Alumni clubs.

The Department provides the aviation community with a variety of services. Under a grant from the Link Foundation in 1963, the Department developed the first flight instructor recertification course. Today, more than 50,000 flight instructors must be recertified every two years, many of them participating in a

course patterned after the one developed at Ohio State. An agricultural pilots short course was developed by the Department in 1960. The course contributed to the development of Federal Aviation Regulations and flight standards relating to agricultural aviation. The Department annually sponsors a General Aviation Management Short Course, the objective of which is to expose fixed base operator managements to basic principles and skills as applied to their business.

The airport facility serves business aircraft as well as personal aircraft, and provides a meeting place for numerous aviation organizations, including the Civil Air Patrol and Flying Farmers. Frequently, the Department sponsors "hangar flying sessions" designed to acquaint local pilots and aircraft owners with programs of current aviation interest.

The National Business Aircraft Association held their annual management seminar at Ohio State in 1968. The Department has co-sponsored several flight clinics with the Aircraft Owners and Pilots Association, which are designed to upgrade the skills and knowledge of pilots.

Department faculty members are active in numerous aviation organizations, serving as committee members and officers.

Faculty members often participate as teaching faculty in aviation short courses throughout the country.

AIRPORT DEVELOPMENT

The University took a long step forward in a new direction when in June, 1942, it undertook to acquire 382.5 acres of land for an airport seven miles northwest of the campus. The original area was larger than Port Columbus at the time. The initial \$100,000 cost of the airport site, including provision for a hangar, runways, shops, grading and fencing, came through the transfer of funds from building appropriations frozen because of priorities. Dr. Bevis told the Board at its May 11, 1942, meeting that the University "cannot afford to lose the position it now occupies in the training of pilots and aeronautical engineers." A rendering of the University Airport long range plan is shown in Figure 16.

The first plane, piloted by Major George Stone, Commander of the Ohio Wing of the Civil Air Patrol, landed at the field on November 5, 1942, in the presence of Governor Bricker and other officials. Stone had as a passenger his father, Julius F. Stone, chairman emeritus of the Board of Trustees (see Figure 17).

An article from the Ohio State University MONTHLY, November 1942, describes the event:

"This is really quite an occasion," asserted an 87-year-old man, remarkably keen-minded in spite of his advanced years, as he stepped from a Fairchild monoplane on a windy, rainy day this month. The plane that smoothly sat down on a nondescript field was the first plane to land on the University's new 387-acre airport, seven miles from the campus between Brookside Golf course and Case Road.

The 87-year-old man was Julius F. Stone, industrialist, explorer, emeritus chairman of the Board of Trustees. Piloting the plane was his son, Major George Stone, commander of Wing 40 of the Ohio Civil Air Patrol. The occasion was the opening of the new airport.

Governor Bricker, '16, '20 driving his own car, snaked across the muddy field to reach the plane. President Bevis, other University and state officials, completed the official party which huddled close to the plane for protection from the wind.

To a casual observer, the field's muddy roads, weeds, lack of facilities look like anything but an airport. To the men braving the weather, the field meant the beginning of a program that will make Ohio State one of the foremost centers of aeronautical engineering in the United States. One hundred thousand dollars will be spent on hangars, shops and runways.

State and University officials present included Fred Adams, Bowling Green, chairman of the Senate finance committee; Representative Paul Ballard, chairman of the House finance committee; Deputy State Auditor Norman Beck and State Finance Director Herbert Deffenbacher; University

business manager Carl Steeb, B.Ph., '99; Paul H. Elleman, B.M.E., '18 maintenance engineer; and Professor Karl Stinson, B.M.E., '16, M.E., '24, coordinator of the University's civilian pilot training program.

At its September 20, 1943, meeting the Board authorized a request to the State Board of Control to release \$277,500 from frozen appropriations for buildings and equipment at the airport, of which \$187,500 was for runways, taxiways and field drainage and \$45,000 for building additions.

Contracts were let for the first two airport buildings, a hangar 80 by 112 feet, and a shops building 60 by 98 feet.

These were completed in the early spring of 1943. Two hard surface runways, each 2200 feet long, were built along with the necessary taxiways and aprons. These were ready early in 1944 (see Figures 18 and 19).

On recommendation of Dr. Bevis the Trustees on November 1, 1943 named the University's new airport Don Scott Field in honor and memory of the former athlete who died in a bomber crash in England on October 1, 1943.

Capt. Don F. Scott, w'41, was one of the brightest stars in Ohio State's athletic firmament when he joined the Army Air Corps in March, 1941. He was a standout quarterback on the football teams of '38, '39 and '40, was a guard in basketball,

and a shotputter in track.

Nine months after he was sworn in he was commissioned at Kelly Field, Texas. Operational training at other Army Air Corps bases followed before he finally went overseas. Late in 1941 a pursuit plane swooped low over the campus from the east and "buzzed" High St. and fraternity row. Later it was disclosed that Scott was the pilot and this was his way of coming home after earning his wings.

Trouble came to a bomber he was piloting in bad weather over England on October 1, 1943. It crashed and its three occupants, including Scott, died in the crash. Exactly a week later his wife gave birth in a Columbus hospital to a son who was named Don Sands Scott. October 10 was the Scotts' first wedding anniversary. Scott was the 100th Ohio State alumnus or former student to die in World War II.

The Ohio State University Airport has grown with aviation activity and the needs of the community. Today, the airport consists of 524 acres (see Figures 20 and 21). Department of Aviation offices are located on the field. Scheduled bus transportation is available between campus and the airport on weekdays. The airport now has three hard surface runways, the longest of which is 4,400 feet. Other facilities include a fire-crash rescue facility, storage, maintenance, and hangars. There is

an approved instrument approach procedure for the airport.

The major secondary airport in the Columbus metropolitan area, the number of aircraft operations reached 183,733 during the year ending June 1969. The airport was the fifth busiest in the state in 1968. A Federal Aviation Administration operated control tower on the airport was commissioned in December 1967 (see Figure 22).

Approximately 170 business, private, and government owned aircraft are based on the airport. Offices of the Ohio Army Air National Guard and the State of Ohio Division of Aviation are also located on the airport. Turbine aircraft regularly operate from the airport. A Boeing 707 airliner even landed at the airport by mistake in 1967 (see Figure 23).

The Department also maintains a complete aircraft maintenance facility which operates under FAA Approved Repair Station Certificate 1038 for radio, airframe, and powerplant repairs.

PICTURE CAPTIONS

- Figure 1. Honor men of the first pilot squadron, July 1917.
- Figure 2. The WWI "Jenny" airplane at the OSU School of Military Aeronautics, 1918.
- Figure 3. Charles F. Kettering arriving at OSU by airplane, 1917.
- Figure 4. Lieutenant MacReady and Dean of Engineering E. A. Hitchcock on the oval, May 24, 1928
- Figure 5. Department Chairman J. J. Eggspuehler.
- Figure 6. An Aviation classroom.
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- Figure 8. Aircraft Owners and Pilots Association President J. B. Hartranft and OSU Vice President Gordon B. Carson at Aviation Day banquet, May 1969.
- Figure 9. Aviation research.
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- Figure 11. Inauguration of air transportation service, March 1948, School of Aviation Director C. J. Pierce shown at left.
- Figure 12. Air transportation service DC-3.
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- Figure 16. 1943 architectural sketch of long range plan for OSU Airport.
- Figure 17. Opening day at The Ohio State University Airport,
 November 5, 1942. (1. to r.) Julius F. Stone, emeritus
 chairman of the Board of Trustees, Dr. Howard L. Bevis,
 President of Ohio State University, Major George Stone,
 Civil Air Patrol, and John W. Bricker, Governor of Ohio.

- Figure 18. University Airport under construction, March 1943.
- Figure 19. University Airport, circa 1945-1946.
- Figure 20. University Airport, 1967.
- Figure 21. University Airport, 1967.
- Figure 22. FAA Control Tower, University Airport.
- Figure 23. Boeing 707 jet airliner at University Airport, July 1967.



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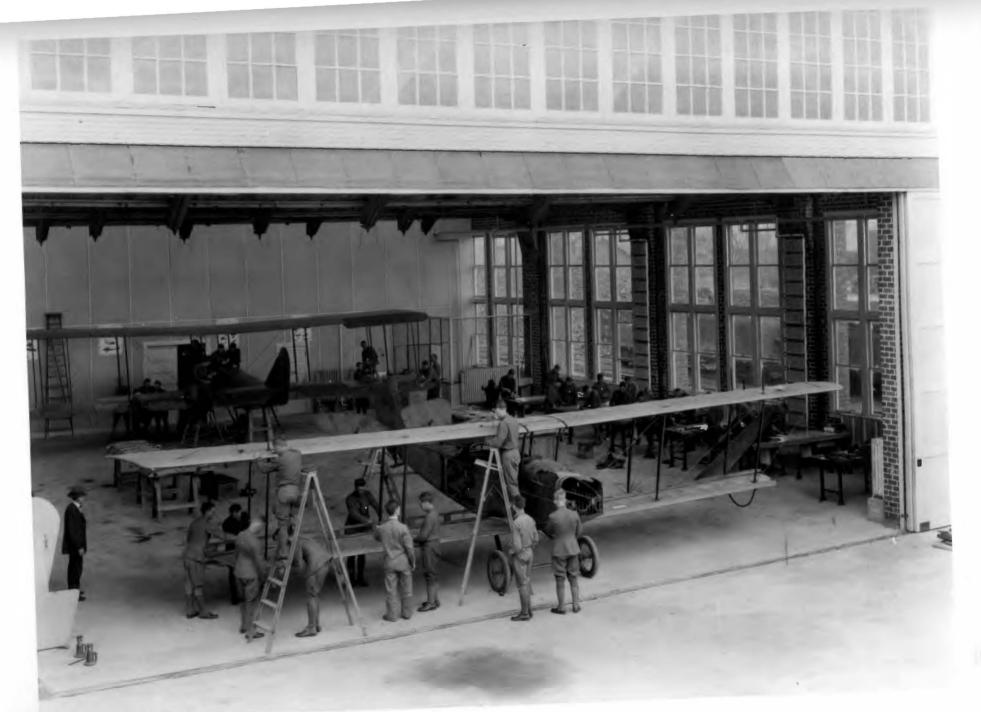


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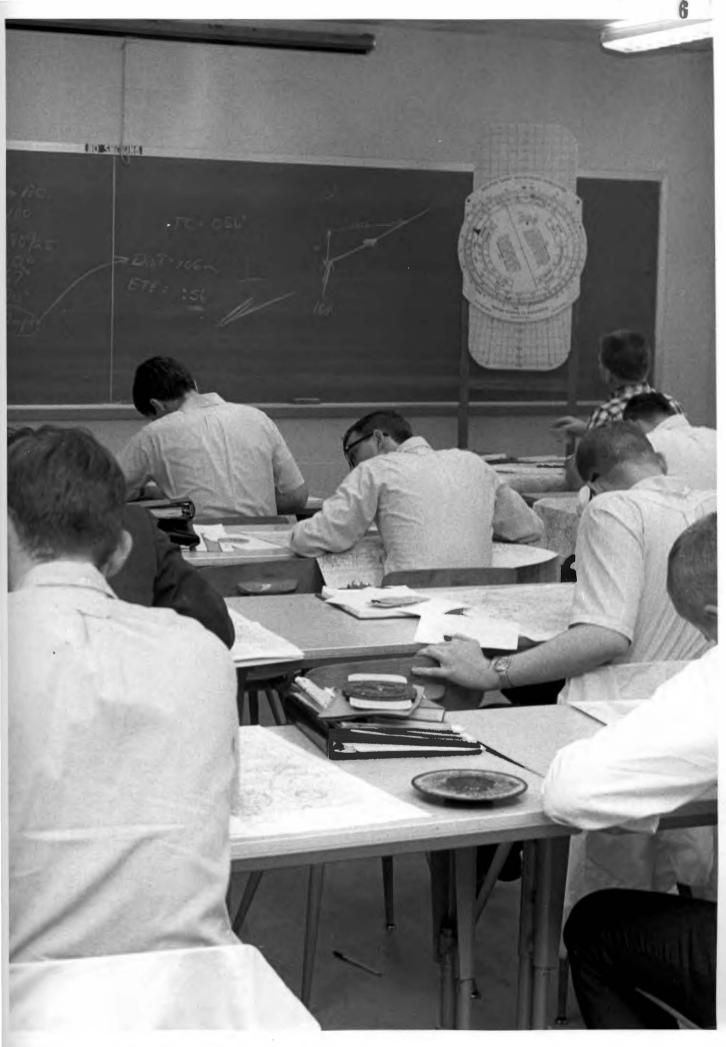
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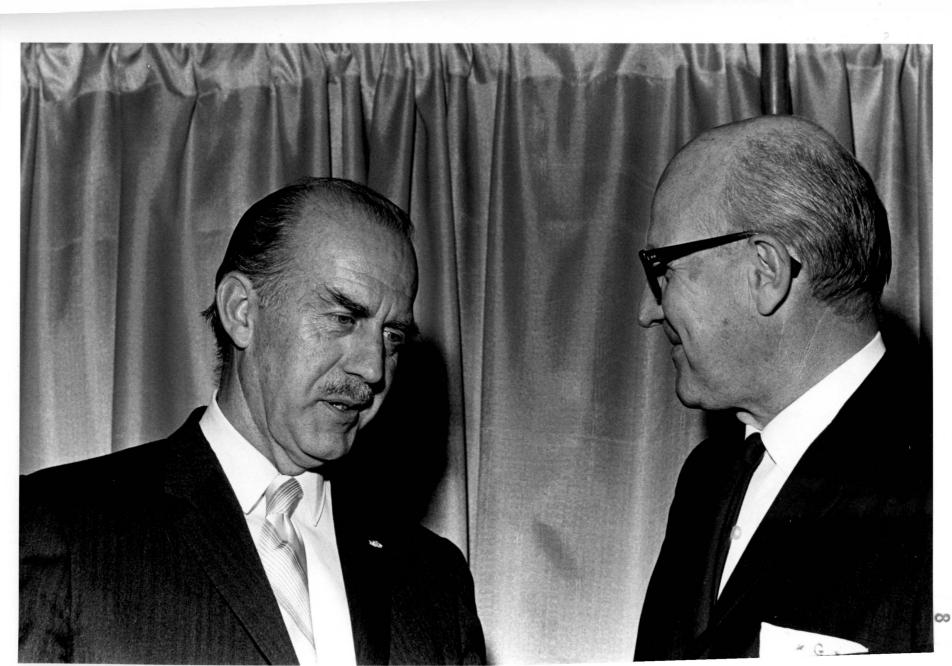
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PHOTO-HISTORY

No. Insugurating flight from Subject Don Scott Fuld to Wright Field, Dayton PLEASE GIVE CREDIT

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PHOTO-HISTORY
No. Orok. Sketch of
Subject Ochysort 174
PLEASE GIVE CREDIT

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The Obio State University



PHOTO-HISTORY

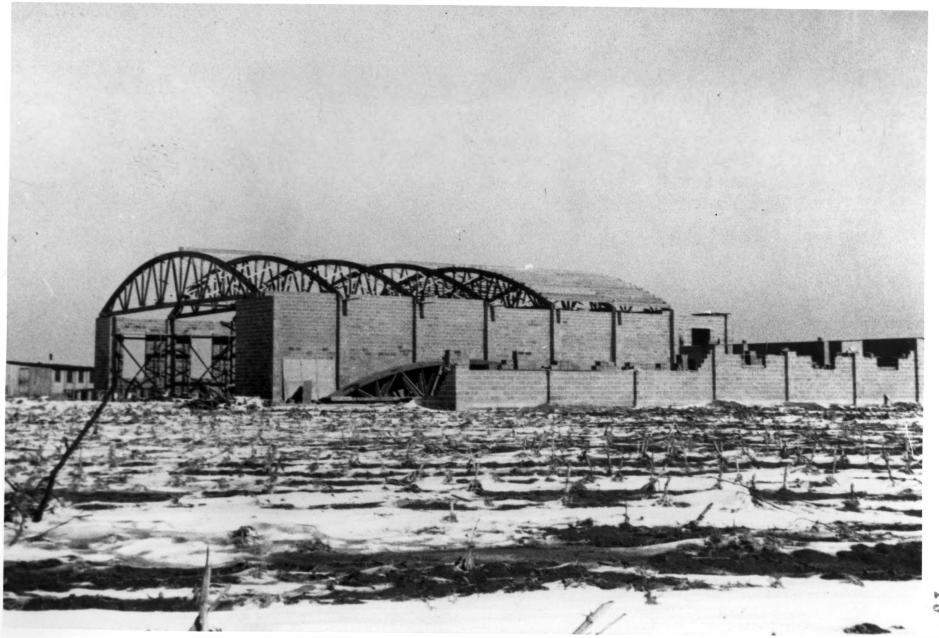


PHOTO-HISTORY

No. Moref 4, 1943.
Subject airport construction

PLEASE GIVE CREDIT

Department of Photography
The Obio State University



PHOTO-HISTORY
No. Curport
Subject C 1945-46

PLEASE GIVE CREDIT Department of Photography The Ohio State University



No. 461-AIR VIEW 6/67

PLEASE GIVE CREDIT



No. 459- AIR VIEW

467

PLEASE GIVE CREDIT





APPENDIX A

SELECTED RESEARCH CONDUCTED BY THE DEPARTMENT OF AVIATION

- 1. Coffing Industries, Inc; A Comparison of the Standard and the Coffing 3-D Artifical Horizon Display. April 1961.
- 2. Scott Aviation Corporation; The Effect of Induced Hypoxia on Instrument Flying Proficiency.

 December 1962.
- 3. College of Medicine, The Ohio State University; Stress in the Aviation Environment. September 1963.
- 4. North American Aviation; A Basic Study of Factors Related to Minimum Distance Barrier Landings.
 January 1964.
- 5. U. S. Public Health Service; Man-Machine Compatibility in Very Low Altitude Flight. Phase I, January 1964. Phase II, October 1964.
- 6. North American Aviation; Very Low Altitude Flight Training Program for Test Pilots. July 1965.
- 7. Federal Aviation Agency; Control Stability
 Augmentation System Evaluation. December 1965.
- 8. Federal Aviation Agency; An Experimental Assessment of a Ground Pilot Trainer in General Aviation. February 1966.
- 9. U. S. Army Medical Research and Development Command; Studies of Pilot Performance in the Flight Environment. May 1966.
- 10. National Aviation Trades Association and The Ohio State University College of Engineering; Survey of General Aviation Dropouts. November 1966.
- 11. Ohio Agriculture Research and Development Center; Opportunities for Aerial Application in Ohio Agriculture. December 1966.

- 12. Department of Aviation, The Ohio State University; Flight Test Research Program Dealing with Ground Effect. June 1967.
- 13. U. S. Army Medical Research and Development Command; Studies of Pilot Performance in Helicopters. June 1967.
- 14. Federal Aviation Administration; Study to Determine the Flight Profile and Mission of the Certificated Private Pilot. July 1968.
- 15. Federal Aviation Administration; Evaluation of Angle of Attack Instrumentation in the Training of Student Pilots to Private Pilot Certification. August 1968.
- 16. Federal Aviation Administration; Experimental Training Program Utilizing an Integrated VFR-IFR Curriculum. August 1968.
- 17. Federal Aviation Administration; Study to Determine the Operational Profile and Mission of the Certificated Instrument Rated Private and Commercial Pilot. In progress.

BIBLIOGRAPHY

- Department of Aviation, The Ohio State University, files and records.
- Minutes of Meeting of Policy Sub-Committee of the School of Aviation, May 10, 1950.
- News in Engineering, The Ohio State University, November 1968.
- The Ohio_State University MONTHLY, November 1942.
- Pollard, James E. <u>History of the Ohio State University</u>, <u>Vol. VIII, Part 1: The University in a World at War, 1940-1945</u>. Columbus: The Ohio State University Press, 1967.
- Siebert, Wilbur H. <u>History of the Ohio State University</u>, <u>Vol. IV, Part 1: Wartime on the Campus</u>. Columbus: The Ohio State University Press, 1934.

PICTURE CREDITS

Department of Photography, The Ohio State University.

Engineering Experiment Station, The Ohio State University.