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ARMY AIR FORCES HISTORICAL STUDIES: No. 21

THE AVIATION CADET GROUND DUTY PROGRAM

Policy, Procurement, and Assignment

The original of this monograph and the documents from which it was written are in the USAF Historical Division, Archives Branch, Bldg. 914, Maxwell Air Force Base, Alabama.

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November 1944

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It is the desire of the President, the Secretary of War, and the Commanding General, AAF, that a solid record of the experiences of the Army Air Forces be compiled. This is one of a series of studies prepared as "first narratives" in the projected over-all history of the AAF.

The decision to make the information contained herein available for staff and operational use without delay has prevented recourse to some primary sources. Readers familiar with this subject matter are invited to contribute additional facts, interpretations, and constructive suggestions.

This study will be handled in strict compliance with AR 380-5.

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Note: Readers are requested to forward comments and criticisms, and to this end perforated sheets, properly addressed, are appended at the back of the study.
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The Aviation Cadet Ground Duty Program:
Policy, Procurement, and Assignment
Chapter I

THE QUESTION OF POLICY BEFORE 1939

The experience of the Air Corps with the personnel policies and the procurement and assignment procedures of the ground duty program during and following World War I has relevance today, for it offers perspective, interesting comparisons, and some reflections on the failure to use the experiences of the war in which the airplane first played a part. This study discusses the similar problems of World War II. By the spring of 1944 the ground duty program included armament, communications, engineering, meteorology, and photography. The Air Service in World War I had engineer officers, radio-communications officers, meteorologists, and photographers. Both officers and enlisted men were trained in radio-communications. Training in photography for enlisted men expanded until the end of the war. But most important were the duties grouped under the title of engineer officer. Enlisted men were trained in a variety of mechanical specialties, but the need for them grew more rapidly than they could be trained. Even more difficult was the task of getting enough well-qualified men to serve as engineer officers.

As the Air Service expanded during the war, men with particular skills were given commissions. No point seems to have been made of preliminary training; no concern seems to have been shown because the upgraded personnel were not all pilots. The need for definite technical skills transcended essentially minor matters. Clear indication

1. The best summary of this is to be found in the Annual Report of the Director of the Air Service (1919).
of both the need and the attitude born of it was shown in a state-
ment of the qualifications of engineer officers and assistant engineer
officers embodied in a memorandum of 10 January 1918 to the Air Person-
nel Division. The applicant was to be over draft age if possible. He
was to be "officer material," able to command men and to take care of
property. While practical experience was to count more than theoret-
ical, a college education was desirable. Administrative and shop
management experience was important. Even if a man had not had the
exact experience required, he could get it at ground officers train-
ing schools. Electrical and mining engineers were such men. The
memorandum further suggested that in view of the absolute necessity
of having good engineer officers, such associations as the American
Society of Mining Engineers and the American Society of Electrical
Engineers should be asked to suggest candidates. Publicity was pro-
posed: publicity which would suggest how men of draft age could apply
for commissions, indicate the length of the course in ground officers
school, and give a résumé of the curriculum.

The need for engineer officers grew more urgent. In August 1918
it was asked that the process of commissioning enlisted men be speeded
up. It was predicted that as the output of planes and the need for
overseas officers increased, an overseas request for engineer officers
would cripple engineering depots in the field. A month later a letter

2. Memo for Air Personnel by Air Division, 10 Jan. 1918, in AAG 211, Engineering
    Officers; see also Annual Report of the Director of the Air Service
    (1919), 45.
3. Memo for Officer in Charge, Supply Section, by Capt. H. R. Eyrich,
    Engine and Plane Maintenance Branch, Supply Sec., 19 Aug. 1918, in
    AAG 211, Engineering Officers.
was sent to all commanding officers of fields and repair depots. It declared that engineering officers could be obtained from various sources. The Air Service could provide cadet engineers, enlisted men with technical training, practical experience, and military training. Other branches of the service could provide technically or practically trained enlisted men and commissioned officers. Engineers in civil life with practical or technical training could be looked to as a source of engineering officers. This letter indicates that necessity forced concentration on the procurement of skilled men without regard to their previous training or the more obviously military aspects of the commissioning process.

The lesson was learned in World War I that the maintenance of planes and equipment was of basic importance and that skilled officers specially trained or with particular skills were needed for that purpose. The lesson was not entirely forgotten once the war was over, but it soon lost some of its effectiveness as a guide in Air Service practice.

Demobilization began almost as soon as the Armistice was signed. Training schools were closed rapidly. Men were released from the Army and civilian personnel resigned. The Air Service itself was in a precarious state for it existed apart from the Signal Corps only as a result of executive order, and under the Overman Act was due to return to it six months after the end of the war. Many men in the Air

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Service were anxious to keep it both independent of the Signal Corps and an effective combat arm. Hope in the idea of an aeronautical West Point was expressed. The engineer group in the Air Service was anxious to keep up both its organization and its morale. The Air Service was set up by act of Congress in 1920, and thus its independence of the Signal Corps was assured.

Meanwhile a discussion of training policies during 1920 brought out most of the problems and arguments that were to turn up in 1939–1940. The discussion began with the authorization of an Air Service Engineering School and the passage of a bill permitting the Secretary of War to detail not more than 25 Army officers at any one time to take courses in aeronautical engineering and allied subjects in colleges and universities. The decisions made as a result of these discussions ignored past experience and in effect surrendered much of the independence of the Air Service in technical matters, for it had to depend on the Corps of Engineers, the Signal Corps, and other branches for skilled men and officers. For the next 20 years the emphasis was placed on the training of pilot officers with technical training as only an incidental part of such training. This continued to be the practice.

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7. Director of Military Aeronautics to District Supervisor, Group No. 1, Indianapolis, Ind., 16 Nov. 1918, in AAG 211, Engineering Officers; memo for Chief, Air Service Property Div. by Maj. W. R. Weaver, Chief, Engine and Plane Maintenance Sec., 21 Apr. 1919, in ibid.
10. Al Stat. 596. The passage of the act had been requested in a letter from Secretary of War Newton D. Baker to Senator James W. Riddleworth, 31 July 1919; in AAG 353.9 B, Training in Engineering.
until the late 1930's when the necessities of Air Corps expansion once more forced the training and commissioning of non-flying officers whose specialties were solely technical.

When the question arose in 1920, the Training and Operations Division stated that as a matter of policy "all Air Service officers . . . should complete [a] course of primary flying at Pilot School and be rated as Airplane Pilots." After this, those who were to be trained as engineer officers should go to the Air Service Mechanics school where they could take a special course for squadron engineer officers. Part of this course was to be practice with and supervision of enlisted mechanics' work. Officers with special aptitudes could go from this course to an advanced school after a period of service with an Air Service squadron. When they graduated they would be qualified to act as engineer officers for group, wing, and higher commands. Field officers taking the aeronautical engineering course at Langley Field were not necessarily engineer officers. It was planned that the course should not go into the technical details of aircraft engineering but should be conducted so as to give all Air Service officers a general knowledge of the organization and operations of engineering personnel and materiel in the Air Service.

A letter in reply from the chief of the Engineering Division put the question of policy involved very clearly. He declared that it was believed there were two decidedly different opinions as to what the

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education of an Air Service officer should be, and that before the
question of training in engineering and maintenance could be decided;
a vital question of policy must be agreed on. The two opposing opin-
on; as he stated them were:

1st. It is maintained by some that all Air Service officers
should have technical instruction to make them thoroughly
familiar with the equipment which they fly and the general
methods of manufacture and repair of this equipment, and
knowledge of machine shops, etc., at stations at which they
serve.

2nd. Another section of the Air Service believes that the
majority of Air Service officers should merely be trained
as flyers and in tactics, and that the entire maintenance
and all technical matters should be handled by a separate
class of maintenance or technically trained engineer
officers; this class of officers to have full charge of all
engineering, repair and maintenance in the field, including
squadron engineer officer's functions.

He made it plain that the Engineering Division preferred training all
officers in the Air Service in a general way. The alternative was to
set up an engineer corps in the Air Service as in the Army. But in
suggesting a course of general training he outlined a course so diffi-
cult that only recent graduates of engineering colleges could take it.
This was pointed out in one of the letters of comment upon the state-
ment of the case. His system could not be applied because only a
small percentage of Air Service officers at the time were graduates
of technical schools, or it had been so long since their schooling
that it would take a year of two for them to familiarise themselves
with engineering work. It was agreed, however, that complete engineering

12. Maj. Thurman H. Bane, Chief, Engineering Div., McCook Field, to
Director of the Air Service, 29 Apr. 1920, in ibid.
training for all Air Service officers was an ideal objective.

An advisory board finally made certain recommendations that took what it called a middle ground between the two extremes outlined by the Chief of the Engineering Division—that is, either a specialized engineer corps or general engineering training for all pilots.

The board stated that all Air Service officers should have technical instruction but that the most that could be expected was a very general knowledge, the details of which would blur soon after the completion of instruction. It would take years to accomplish this objective with limited school facilities and personnel. As much of the theoretical study as possible should be cut out of the engineering course which was given at Dayton, Ohio, so that it could be taken by Air Service officers who were without the education or the inclination for such a course.

The board went on to say that it was impossible to see how specialization could be avoided and that there must be officers whose work was purely technical, whose interests and tendencies were along technical lines. If this were not so, there could be no experimentation and progress, for the average Air Service officer could not keep abreast of all developments in various phases of aeronautical development. In this respect the Air Service was like the Army at large with its engineering, operations, and supply branches. It was hopeless to

make Air Service officers thoroughly familiar with all the various phases of engineering, operations, and supply. While the permanent officers in the Air Service should have technical training enough to make them familiar with the equipment they flew, "there must be a technical division of officers thoroughly trained as technicians." The act of Congress allowing the Secretary of War to pick 25 officers a year for aeronautical engineering training at various colleges and schools was cited as a means by which within a few years the Air Service would have a corps of technicians like the Navy's construction corps.

The board felt, however, that real engineers were the "designing engineers," not maintenance engineers who should be called "service engineers." Its recommendations were in line with this attitude: all Air Service officers should have a general practical knowledge of technical matters; a strong technical section should be built up from younger officers recently out of college; there should be special courses for maintenance or service engineers; certain maintenance engineers should be sent to Dayton for further schooling, and if education and aptitude permitted, to various colleges for even more training with a view to assignment in the technical section.

Whatever the merit of these discussions, the idea of specialised ground duty training for technical officers apart from pilot training, seems to have lost its effectiveness. The training instructions for 1922, for instance, provided that officers in various types of squadrons should have one hour of "ground instruction" a day in such subjects as

communications, cavalry and infantry liaison, theory and practice of bombing, adjustment of artillery fire, methods of operation and organization, photography, supply, and maintenance. The purpose of such superficial training was to enable pilot officers to direct the technical work of skilled enlisted men. Beyond this the officers engineering school at Dayton continued to train pilot officers for duty as engineer officers, but not enough graduates were turned out to supply the needs of the Air Service. When the Air Service became the Air Corps in 1926, it was provided by law that not more than 10 per cent of the permanent officer personnel could be non-pilots. This was followed the next year by the suggestion that the engineering school be closed because of shortage of officers.

Brig. Gen. W. E. Gillmore, the chief of the Material Division, protested against any such possible action. He pointed out that the Air Corps was a supply as well as a combat organization and that to carry on successfully in the Material Division, officers should have at least as much training as they could get in the engineering school. In fact, a continuous flow of officers should come from the engineering school because it was impossible to keep highly trained civilian personnel from leaving for civilian jobs. Actually there were many positions for highly trained technical officers which could not be filled because there were no officers with adequate training. This was a condition

16. The files for the period are filled with statements that both officer and enlisted personnel were inadequate in number for the Air Service.
17. 44 Stat. 780.
which he declared existed throughout the Air Corps.

The problem was restated in 1930, again by the Material Division.

There were not enough properly trained engineer officers for the engineering depots. Something was "fundamentally wrong with the educational system and assignment of personnel in the Air Corps." Depot engineer officers had to have "fundamental engineering education," but there were few such officers in the Air Corps and little or nothing was being done to develop them. But few names had been added to the eligible list in the last several years; many on the list had not been assigned to engineering, and others who were listed were not good engineer officers. The proposed solution was to select young officers from the maintenance engineering course at Chanute Field and assign them to the four depots where they would serve as apprentices. When trained, they could be added to the list of available officers instead of men who did not belong on it. The chief of the Personnel Division viewed such unorthodoxy with alarm. Young second lieutenants should have two years of duty with troops. These two years were the most important training that could be given young officers. If they were sent first to the Material Division, their future value would be seriously impaired.

Despite such apparently irrelevant but what seems to have been characteristic opposition, the idea that there must be more specific technical training in the Air Corps made some headway. Evidence of this is to be found in the training directives during the 1930's and in the comments on those directives sent in by the commanding officers of various air force units. Only a few of the commanding officers mentioned the problem, but those who did were vigorous in their statements. The Commandant of March Field declared that ground instruction for pilots should be curtailed and that in all air force units the primary objective of training should be to fit every man and officer to perform his particular function. The Commandant of Langley Field was more specific.

Individual ground and theoretical training was valuable, but it could not provide the essential training in such specialties as engineering, armament, communications, supply, and administration. There were no courses in supply and administration, and the lack of adequately trained officers in these fields caused more grief than in any others. Meanwhile the Air Corps was dependent on the Signal Corps, the Ordnance Department, and the Corps of Engineers for officers to act as instructors in Air Corps schools and for the maintenance of Air Corps equipment.

The impact of these facts was felt in the Air Corps training directives for 1933 and 1934. The first was issued in April 1933, and

it placed much more emphasis on ground crews than hitherto had been the case. This was followed by a series of amendments in February 1934. These amendments were almost entirely an elaboration of ground duty requirements. One innovation was the requirement that all officers and flying cadets with less than two years' service as rated pilots be assigned to ground crews and be continuously trained in repair, maintenance, and operation of airplanes, including such specialties as armament and communications. Also included for the first time was a two-year course of study in ground crew subjects to be taken by all junior officers.

There was sharp protest against the plan to attach cadets to ground crews composed of highly skilled enlisted men. The subordination of such men to unskilled cadets would be bad for morals, and reliable maintenance would be endangered. If the cadets were to work on airplanes, they would have to be crew chiefs, and if so, they would have to be trained, first. Airplane and engine maintenance and armament required intensive and thorough courses. The commander of a pursuit group commented: "Airplane and engine maintenance are all important . . . because upon good maintenance absolutely depends the safeguard-of life and property. Upon good armament maintenance depends the whole reason for the existence of pursuit planes. The guns have got to function." Four years later the chief of the Plans Section,

25. AG to various CO's of Air Corps units, 9 Feb. 1933, in AG 359.9B, Air Corps Training Directives, 1934-35.
Office of the Chief of the Air Corps, declared that: "All failures in the air can be directly or indirectly traceable to failure on the ground."

The commercial lines had long since learned the importance of good maintenance, and the Air Corps with its many models and types of planes and engines needed proper maintenance even more. One hundred and twenty officers should be trained as technical experts each year, and inadequate and antiquated school facilities should be overhauled. 

Despite such protests and the growing emphasis on ground duty problems, the practice of the Air Corps continued to be one which treated ground duty training for officers as an auxiliary phase of the training of pilots, with advanced training for men who showed aptitude or interest. The training directive for the fiscal year 1937 makes it plain that ground training for both flying personnel and enlisted men was to consist mainly of practical instruction. An outline of practical training for junior pilots with less than two years of pilot experience was included, the purpose being to provide a "general proficiency in all subjects rather than specialization in any one subject."

This continued to be the status of ground duty training until the beginnings of rapid Air Corps expansion in 1939-1940. Then, when faced with rapid expansion of every kind, the Air Corps once more debated policy. The sheer necessity imposed by the expanding technical requirements of modern aircraft and air warfare forced the Air Corps to

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28. HQ, GHQ AF to CC's, GHQ AF Wings, 25 Apr. 1936, in AAG 353.9A, GHQ AF Training Directives.
train and commission men as technical experts for ground duty, and to give up its insistence that pilot training was a prerequisite for officer standing.
Chapter II

ESTABLISHMENT OF THE GROUND DUTY PROGRAM, 1939-1941

The Need For Ground Duty Officers

The authorization for a rapid expansion of the Air Corps was provided in a law of 3 April 1939. Among other things this law provided for increased personnel and planes, enlarged pilot training facilities through the use of civilian schools, and an increased technical staff through technical instruction of Regular Army personnel in civilian schools. However, the main emphasis was not on technical training. The training of civilian pilots was provided for in June 1939, but proposals for the training of civilian mechanics were rejected because an interdepartmental committee studying the question had not arrived at the formulation of a policy.

Plans for expansion were begun before the passage of these laws. Toward the end of 1938 nearly 700 candidates were qualified for pilot training and were on hand for 1939 classes. A 500 per cent expansion during the next two years was mentioned. Many officers in the Air Corps were aware that it would need a substantial increase in

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1. 63 Stat. 555.
2. Legislation Relating to the Army Air Forces Training Program, 1939-1943, AAP Historical Studies; No. 7, Chap. II.
technically trained men--base, group, and squadron engineering officers and key enlisted specialists. But in the first stages of the "Augmentation Program" little attention was paid to the need of training technical officers as such, or even to the continuation of technical training for pilot officers. No clearer evidence of this can be found than the fact that on 25 February 1939 the Chief of the Air Corps issued an order canceling all future classes for the training of officers in ground duty functions. The purpose of the order was to free the personnel and facilities of Air Corps technical schools for the training of greater numbers of enlisted men.

The attitude which had been dominant in the 1920's and 1930's was expressed by the Chief of the Plans Division in January 1940. The Air Corps expansion program did not contemplate any officer instruction in ground duty subjects until the completion of the program in July 1941. Attention was called to a recent memo recommending that young officers be detailed to Air Corps depots for instruction in practical engineering, pending completion of the program. Training in other specialties must be accomplished in tactical organizations and, if done in this way, these officers could continue training as

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4. Col. C. W. Russell to C/AG, 18 Apr. 1939, in 385.9B, Training in Engineering. See also an unsigned document in A/C Br. files, dated 14 Dec. 1938, in which every effort is urged on recruiting services and station commanders to interest high school graduates, men with college training, and/or men possessing mechanical skills in enlisting. See also a mimeographed circular entitled "The Air Corps Soldier," used in March Field recruiting activities in the fall of 1939, in AAF 354.1, Reports of Flying Cadet Examining Boards.

members of combat crews at the same time. The chief of Plans declared that: "Air Corps pilots have always performed these duties in addition to their duties as members of combat crews and there appears to be no reason for departing from the practice at this time."

But there were many reasons, the chief of the Materiel Division explained in some detail. He declared that the unsatisfactory reports being sent in by the various stations of the Air Corps made it perfectly clear that the engineering personnel who made the reports were not thoroughly familiar with the equipment they were handling. Furthermore, many of the faults found with equipment were really due to inadequately trained handling personnel. Tactical commanders were in a serious quandary as to what to do when expansion took place. How could they maintain their equipment? The backbone of any tactical organisation was its trained and experienced technical personnel, and this class was being spread very thin, so thin in fact that engineering officers were ineffective. To top it all, aircraft accessories and parts, including armament and radio, were becoming so complicated that a thorough knowledge of their operation was necessary to make them work effectively.


7. R&R, Chief, Materiel Div. to G/AC, 11 Jan. 1940, in AA 355.98, Training in Engineering. The solution of the problem offered by the chief of the Materiel Division was to station 12 recently commissioned second lieutenants, having a year of active duty behind them, at each Air Corps depot and to give them a one-year course in maintenance engineering and a short course in Air Corps supply. They would thus have a maximum of practical instruction, but they would not be used as handy men for such tasks as grinding valves.
The result of the situation was a request from the Chief of the Air Corps to the Commanding General of the ORA Air Force at Langley Field. He pointed to the existence of a belief that the failure to train junior officers in maintenance engineering would have a bad effect on the operation of air force units. There were various methods of training: (1) reinstitute officer training in the Air Corps technical schools for a five-month course similar to that given enlisted airplane and engine mechanics; (2) train them at Air Corps depots for six months by rotation through the several departments for observation and practical experience; (3) send squadron engineering officers to factories for instruction in the particular equipment they were to maintain; or (4) send factory representatives to Air Corps stations receiving new equipment for the purpose of training squadron engineering officers and enlisted personnel in its upkeep.

The Commanding General of the ORA Air Force was opposed to opening officer classes in technical training before 1 July 1941, because he felt there were not enough officers and that new officers should have one year of training with a tactical unit first. He said it would be a waste of good personnel to send men in tactical units to technical schools; engineering officers and enlisted personnel should be sent to factories to learn about the new equipment they were to use.

Such suggestions proposed no solution to the basic problem of getting enough thoroughly trained officers to supervise the work of enlisted personnel. Skilled enlisted men had been scarce ever since World War I, and by 1940 they were even more so. New men were not so well trained. Hence, the great need was truly technically trained officers who knew more than the men, not pilot officers who had been given only incidental technical training. It was this fact that some Air Corps personnel seemed reluctant to face at the time.

The Question of Legality

But some of the men responsible did realize the necessity of substantial training for technical officers, and plans for such training were made. In so doing the question of legality arose, for the law that applied was the law of 1919 creating the grade of "flying cadet." Could a man who did not fly be trained for ground duty only and still be a "flying cadet?" Or could he remain in that status after he had "washed out" as a pilot trainee? The Office of the Chief of the Air Corps addressed these questions to the Judge Advocate General. The training program was to be expanded immediately, subject to pending legislation. Pilot trainees would be procured as formerly, but trainees for other programs were to be men eliminated from pilot training. The legal question involved was whether or not a flying cadet eliminated from pilot training could continue voluntarily in

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10. RH, Chief, Materiel Div. to C/AC, 11 Jan. 1940, in AMD.
that status while training as a bombardier, navigator, aerial observer, meteorologist, airplane engineer, communications officer, or in other subjects incident to aviation. Or could an eliminated flying cadet retain status while attending a civilian school for the purpose of instruction in subjects relating to aviation?

The Judge Advocate General replied immediately. He pointed out that the legal question involved an interpretation of the meaning of the words "flying schools" and "aviation students," terms not expressly defined by either law or regulation. The Judge Advocate General said that the Air Commerce Act of 1926 had defined an "airman" as virtually anyone who had anything to do with the flying or maintenance of airplanes. After citing a similar opinion of the Secretary of War, further congressional legislation, and War Department regulations, he concluded that there was no legal objection to continuation of flying cadets in status while receiving non-pilot training.

Despite the clearance of the legal obstacle some time elapsed before concrete action was taken. A War Department press release in June 1940 announcing the expansion program did not mention the subject of ground duty expansion. The subject was under discussion, however, and there seems to have been opposition or at least procrastination on

12. 1st ind. (to same), Col. F. W. Llewellyn, Office of JAG, to O/AG, 29 May 1940, in AOC Brs. files.
the part of the Plans Division. Training and Operations was very specific in its statement of the need of specific training for ground duty purposes. It presented as relevant detail the following points:

(a) Engineering Officers are required for the efficient operation of tactical units, and provision for such assignments have been made on Tables of Organization.
(b) Only a sufficient number of pilots are being trained to man combat crews.
(c) It is impracticable for officer members of combat crews to perform the duties of engineering officers as a sideline, except in a purely peace time Air Force.
(d) There are an insufficient number of non-commissioned officers to perform the duties normal to those grades.
(e) Short courses of instruction at factories and depots will not produce qualified engineering officers.

This statement of the situation faced by the Air Corps was followed by a recommendation that 100 men with college degrees in engineering be enlisted as flying cadets and given the regular airplane engine and mechanics courses.

The Assistant Chief of the Air Corps elaborated this plan by requesting and getting permission from the Adjutant General to give 100 such men a three-month preliminary course in engineering theory relating to the maintenance of aircraft at New York University. After this had been done, they would be sent to an Air Corps technical school for the regular enlisted mechanics course and then commissioned and assigned as squadron engineering officers. The need was critical, he

15. RAR, TAO Div. to Exec. through Plans Div., 9 Sep. 1940, in ibid.
declared, for the complexity of new aircraft and the scarcity of experienced enlisted personnel made closer supervision more necessary than ever. It would be impractical to train pilots for technical purposes since a shortage of pilots was expected. Once the request was approved, the commanding general of the Air Corps Technical School at Chanute Field was given complete charge of technical training requirements and directed to open negotiations with New York University. Personnel was requested to procure the necessary 100 men as flying cadets.

While the greatest need was for engineering officers, plans were also made for the training of armament, communications, meteorological, and photographic officers. A conference was held at Chanute Field in November 1940, with representatives from various universities on hand, and a curriculum was outlined.

The first classes for squadron engineering officers were planned for January 1941 at New York and Purdue universities. The first communications classes were planned for Scott Field for January and April 1941; armament and photographic officer classes were to start at Lowry Field in April and July 1941. This program was announced in a

radiogram from the CGS to commanding officers of various Air Corps training detachments. This message said that specialised flying cadet training for ground duty would begin shortly. It was planned that the training would take approximately as long as pilot training and, on completion, would lead to a Reserve commission. Training was to be for duties as squadron officers in engineering, communications, armament, and photography; first priority was to be given eliminated cadets, and publicity was to be avoided.

The requirements for engineering were either a degree in engineering or senior college standing in an engineering school. Applicants for communications training must be college graduates with some knowledge of electricity or radio. Applicants for armament training must be college graduates especially recommended by commanding officers of training detachments for such training. Applicants for photographic training must be college graduates with knowledge of geology or chemistry. The applications for such training from cadets eliminated from other courses should be transmitted by radio as had been done in case of eliminatees recommended for navigator and bombardier training.

With preliminary engineering training thus arranged for at New York University and Purdue University, with classes in communications started at Scott Field, and with armament and photography courses

begun at Lowry Field, the training of ground duty officers got under way early in 1941. From that time on, these programs grew in the numbers of courses offered and in the number of men being trained as the over-all programs of the Army air arm expanded.

The Legal Framework

The whole program for aircrew and ground crew was given a legal framework in a series of laws from 1940 to 1943, and within this framework the procurement, assignment, and training of ground duty cadets takes place. Prior to June 1941 the legal basis was embodied in the Army appropriation act for 1920. This act created the grade of "flying cadet" and directed the Secretary of War to establish one or more flying schools. Not more than 1,500 cadets were to be enlisted for training at one time. Their pay was to be $75 a month. On completion of training they were to be eligible for commissions as second lieutenants in the Officers' Reserve Corps. Flying cadets could be appointed from among enlisted men in the Regular Army, officers and enlisted men in the National Guard, Reserve officers and members of the Enlisted Reserve Corps, and from civilians.

There was little change in the law from 1919 to 1941 except for increases in the number of cadets who might be trained, and all limitations were removed in July 1940. There were certain reasons for changing the law when Air Corps expansion began. One was that


the term "flying cadet" no longer covered the requirements of the Air Corps. While the Judge Advocate General had through legal exegesis decided that "flying cadets" could be trained exclusively for ground duty functions, the provisions of the old law were also subject to interpretation by the more literal-minded. Even more important was the desire to put Army aviation cadets on a parity with naval and Marine Corps cadets, who had every advantage as to pay, insurance, uniform allowances, and bonuses for each year of service. It was the opinion in the OAH that unless this equality were established, the Air Corps could not compete with the Navy in the procurement of cadets.

The result was a request for new legislation, in the summer of 1940. The Senate passed the necessary bill, but the politics incident to the election of 1940 kept the House from considering any new legislation, with the result that the bill creating the grade of aviation cadet in the Air Corps, Regular Army, was not passed until 5 June 1941. The bill authorized the establishment of schools for the training of cadets and provided that male citizens could enlist and enlisted men in the Regular Army could be appointed as cadets. Cadets must agree to accept commissions as second lieutenants on completion of training and serve for three years in Air Corps Reserve unless released. After three years as a second lieutenant, a commission as first lieutenant in the Air Corps Reserve could be given. The Secretary of War could release or discharge aviation cadets or officers at any time. Base pay was to be $75 a month, which included flying pay and one dollar a day subsistence pay; cadets were to have
$10,000 life insurance while training, with the option of continuation at their own expense on completion of training; whenever released from active duty each Air Corps Reserve officer was to be given a lump sum of $500 for each year of active service.

This law has been the basic framework for the aviation cadet program so far as ground duty is concerned, although other legislation affected it indirectly. On 5 November 1942 Section 3 of this law was suspended for the duration of the war and six months thereafter. Enlistments were to be for the duration and six months unless sooner terminated by the President. A cadet failing to complete training could be required to serve in any enlisted grade with appropriate pay and allowances. Other provisions of this act related primarily to pilot trainees rather than to ground duty cadets.

The heavy demands of the expansion program made the Air Corps anxious to tap all possible sources of suitable flying personnel. There were not enough applications from National Guard officers and Reserve officers from other branches than the Air Corps. Regulations required such personnel to train in the grade of flying cadet and to accept the rank of second lieutenant in the Air Corps Reserve regardless of rank held before. These conditions, involving both loss of pay and rank for many men, naturally served as an obstacle to procurement at a time when the need was growing ever greater. The Air Corps secured an amendment to the law allowing any officer of the Army of the United States to be trained in grade in civilian schools. This measure was intended primarily to get more men into pilot training.
but the question arose as to its application to Reserve and National Guard officers training in grade, who wished to take courses in meteorology, engineering, armament, communications, and photography. Training and Operations advised that all such courses were open, but that the applicants should be limited to those officers having special qualifications of education or experience which would make their training in grade especially desirable.

The foregoing acts are the major legislation affecting the procurement of ground duty officers. Further framework was provided by the various Army regulations and procedures established for procurement and training of such men, and it is to these that one must turn to understand the actual process as it worked from 1941 to 1944.

The Problem of Commissioning Ground Duty Officers

One serious issue arose and was settled early in the expansion program. This was the question of giving commissions to men trained...

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24. This Summary is based on Legislation Relating to the Army Air Forces Training Programs, 1939-1943, Chap. III.
25. Ibid. The Flight Officer Act had no actual relation to ground duty training. That act provided that an aviation cadet or aviation student might be made either a second lieutenant or a flight officer, and the question arose as to whether or not it should apply to ground duty. It was decided that this act was not applicable and that ground duty aviation cadets would continue to be commissioned as second lieutenants in the Army of the United States.

The Aviation Student Act had virtually no relationship to ground duty training except in one particular. This was the reluctance of certain noncommissioned officers to train as aviation cadets because it would involve a loss of pay. The result was a decision in February 1943 that any enlisted man of the first three grades who was qualified might, at his option, train either as an aviation student in his enlisted grade or as an aviation cadet. See RAR, APPMP to Adj/AS, A-1, 15 Feb. 1943, and attached comments, in Adj 355, Aviation Cadet Training.
for ground duty only. One group in the Air Corps held tenaciously to the theory that only a pilot should be an officer, but the reality of an expansion program and impending war forced the surrender of an essentially peacetime luxury. Once this question had been settled, the next issue that arose was how long a ground duty officer must remain in training before he could be commissioned. In August 1940 Maj. Gen. Henry H. Arnold, Chief of the Air Corps, informed the Adjutant General that the plan to commission flying cadets being trained as bombardiers and navigators had not yet been approved. He recommended that these men be commissioned when they had finished their courses plus six months service with a tactical unit. The courses were 10 to 12 weeks in length.

The Adjutant General agreed that, pending a final decision on the entire matter, the flying cadets then in training should be given commissions as second lieutenants. He declared that while these particular men could have their commissions, in the future the course should include six months of further training. In the meantime the first 20 meteorology cadets had been told that they would be commissioned on the completion of training, and this had been agreed to by the OCAC. After making the agreement, the OCAC insisted that the cadets must serve a total of nine months before getting their commissions. The matter was presented to an "Officer Committee" which

26. 12 Aug. 1940, in AAF 211EI, Cadets.
27. 1st ind. (to same), A0 to C/AC, 31 Aug. 1940, in Abid.; RAR, Plans Div. to Personnel Div., 15 Nov. 1940, in Abid.
recommended to the Executive of the OCAO that the agreement be carried out, but that in the future no exceptions should be made to the requirement of at least nine months' training before granting commissions.

The whole problem revolved around the fact that it took about six months longer to train a pilot than the average ground duty officer. One group within the Air Corps and The Adjutant General seemed determined that no non-pilot officer in the Air Corps should be commissioned until he had been in training the same amount of time a pilot spent in training. In November 1940 the OCAO declared that such was its policy because it would be "unjust to the most important of the various training groups" to commission flying cadets in non-pilot categories ahead of those in pilot training.

AAF Regulation No. 35–2, dated 5 August 1941, indicates that this policy was adopted. But it was by no means accepted as a final decision. The question was reopened in the spring of 1941 in a letter from the OCAO to The Adjutant General. This letter stated that the various cadet training courses varied from 10 weeks to 9 months in length and that at the time 7½ months were required to train a pilot. Recent experience had shown that it was highly desirable to commission

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28. RMA, Officer Committee to Exec., 18 Nov. 1940, in *Abridg. Aus*
29. 2d ind. (basic unknown), OCAO to AG, 25 Nov. 1940, in *A/C Br.* files. On 28 November 1940 the Chief of the Air Corps in a letter to the Commanding General of the Gulf Coast Training Center said that the normal period of training was nine months. "This period is considered the minimum consistent with producing the proper calibre of officer technicians." In *A/C Br.* files.
students when graduated from a course, rather than to assign them to a tactical or other unit as flying cadets. This policy, the OCAC held, should be changed, and flying cadets should be commissioned second lieutenants on graduation.

The Adjutant General refused flatly to consider the matter, with the result that it was carried to the Chief of Staff. Finally, in the fall of 1941 the Secretary of War directed that duly qualified and recommended aviation cadet graduates should be commissioned upon the completion of courses of instruction prescribed by the Chief of the 30 Air Corps.

A year later the issue cropped up again. The Directorate of Air Defense proposed to the Assistant Chief of Air Staff, A-1 a means of getting around the directive of the Secretary of War. It pointed out that "washouts" from a long course might enter a shorter course and thus be commissioned before their former fellow trainees who had continued successfully in the longer course. The directorate offered a scheme for the dating of commissions that was actually illegal. It proposed that an officer's commission should be dated, not as of the date of graduation from a course, but at a time subsequent to his entrance into the course equal to the time of the shortest course of instruction in which any man could get a commission. Thus if it took 7½ months to train a pilot, and the shortest ground duty officer course was 12 weeks in length, the date of the pilot's commission

would be 12 weeks after his entry into the pilot training course.

In the various comments on this proposal one has a fair index
to the variety of opinion. Some branches concurred in the idea but
quoted the law which made it illegal. Another pointed out that the
matter of relative rank was unimportant in time of war, but still
another insisted that it was, especially among junior officers. The
most practical suggestion was that promotions could be used to correct
obvious injustices and that it was best to wait until the end of the
war for remedial legislation. The final result was that all aviation
cadets continued to be commissioned on the date of their graduation
whatever the length of the courses they took.

attached comments, in A&O 211 #1, Cadets.
The administration of the ground duty phase of the aviation cadet program was in the hands of the Aviation Cadet Branch of the Military Personnel Division during the greater part of the period covered by this study. There was a Flying Cadet Section in the OCAC early in 1940. By July 1941 (following the passage of the Aviation Cadet Act) this was known as the Aviation Cadet Section, and eventually it became a branch in subsequent reorganizations. Ground duty matters were handled by the Ground Duty Unit, which later became a section under the Aviation Cadet Branch. Finally this was changed to the Special Training Section for the purpose of handling the multifold problems arising under the ground duty program and student officer training.

A survey of this section in the spring of 1944 outlined its functions as follows: It initiates and recommends policies for selection for ground duty training, including the establishment of educational qualifications; it handles procedures relative to procurement, promotions, and publicity; it processes applications, authorizes examinations, maintains lists of qualified candidates for various

1. Correspondence on file in the Aviation Cadet Branch shows that the designation "Aviation Cadet Section" was in use as early as 25 June 1941.
types of training, and notifies selectees of eligibility and class assignment; it orders students into classes on the basis of requirements furnished by the Requirements and Resources Branch, Military Personnel Division, and prepares requests for orders assigning qualified candidates to pre-technical or technical schools for training; it maintains liaison with AC/AS, Training and training commands to determine requirements in anticipation of changes in programs; it receives and processes applications from officers for training in grade for aircrew and ground duty assignments and requests orders for transfer and assignment to training of eligible officers; it handles outgoing correspondence and interviews with applicants.

This outline of the functions of the Special Training Section came at the end of the program when in fact most of the functions outlined had become at best vestigial. In the beginning none of these routines was very clearly defined, although certain basic principles were established early in the program and maintained throughout its existence. On the whole these principles were: (1) maintenance of centralized control in the Aviation Cadet Branch over the appointment of cadets; (2) the maintenance of educational prerequisites for admission to ground duty training.

The Development of Policies

Once the policy of training ground duty officers was agreed on.

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in 1940, it was planned to place the burden of procurement on the regular flying cadet examining boards. The Personnel Division requested authority of the Adjutant General to handle examinations, the submission of applications, the maintenance of lists of eligible applicants, and assignment to classes according to the procedures already used in the procurement of cadets for flying training. Authority for the review of medical qualifications by the Medical Division was also requested. Subsequent procedures show that such authority was granted.

The bulk of the men required for the first training program in 1940-1941 was expected to come from those eliminated from aircrew training. The grounds of the Personnel Division for this policy were its closer acquaintance with the candidates and the fact that eliminees had preliminary military training. The only exceptions to this were in fields with educational requirements which few eliminated aircrew cadets could meet. This was true of meteorology where 117 of 135 meteorologists then in service had no previous military experience.

Educational requirements were to play a far more important part in ground duty training than in aircrew training. The Air Corps had maintained as a policy ever since World War I the idea that its officers should have at least two years of college or the equivalent.

3. Liaison memo for AG by Chief, Personnel Div., 1 Nov. 1940, in A/C Br. files.
4. RAR, Personnel Div. to F&O Div., 28 Nov. 1940, in A/C Br. files. For a fuller discussion of the reasons for preferring eliminees, see Chapter IV.
in experience. This policy was maintained despite congressional and popular opposition until January 1942. Then, after the outbreak of war, it was dropped for aircrew candidates. But it was maintained throughout for ground duty candidates because of the very nature of the specialized training they were to receive.

When plans for ground duty training were being discussed in 1940 the Chief of the Air Corps suggested to the Adjutant General that the physical qualifications for flying cadets were relatively high, the educational qualifications relatively low, and that better qualified candidates might be obtained by shifting these two factors somewhat. Thus if students were eliminated from pilot training, they would be better able to take various kinds of technical training.

As the plans were developed, Training and Operations decided that all ground duty candidates except photographic officers must be graduate engineers to be admitted to training. The explanation for this requirement was a practical one. The Air Corps was a technical branch, and its officer personnel must include enough technically qualified individuals to insure efficient performance of its functions. It was impractical to give all officer candidates the necessary technical background in service schools. Short intensive courses must be depended on, and the men taking those courses must have the necessary intellectual and technical capacity and background. Training and Operations declared, however, that regardless of the

5. C/AC to AG, 2 July 1940, in A/C Br. files.
requirements, the standards must be flexible and subject to downward revision if the supply failed to keep pace with the demand.

The educational standards set were given official circulation on 20 November 1940 in a radiogram to the commanding officers of various Air Corps training detachments. Ground duty training was to last about as long as pilot training, with a Reserve commission given at the end of it. In general all ground duty candidates were required to have college degrees. The only exceptions were engineering candidates with senior standing in college engineering courses. Communications candidates were required to have a knowledge of electricity or radio. Photographic candidates had to have some knowledge of chemistry or geology. Armament candidates, who were to come exclusively from the ranks of eliminants, had to be especially recommended by the commanding officers of their training detachments for ground duty training.

In time, as the demand for candidates grew faster than the supply, the educational requirements were to be lowered. But with exceptions for men with significant practical experience, some form of college training remained a prerequisite for admission to candidacy as a ground

7. CCAG to CO, ACTD, Alabama Institute of Aeronautics, Tuscaloosa, Ala. (and to other training detachments), 20 Nov. 1940, in A/C Br. files.
duty officer.

In some instances the lowering of educational requirements went so far as to contribute to the growth of overlarge backlogs. This was the case in communications where by January 1942 the requirement was two years of "engineering studies" in an accredited college or two years of college with an amateur radio license. In April this was lowered still further, two years of college with one year of college physics or two years of college with an amateur or commercial radio license. The applications increased so rapidly that the Aviation Cadet Branch found it difficult to process them, and by July 1942 so many applications had been approved that all quotas for 1942 classes and most of the 1943 classes were filled.

To remedy this situation the Aviation Cadet Branch recommended that the qualifications be raised at once to two years of a college engineering or physics curriculum or two years of college with a currently valid amateur or commercial radio operator's license.

This was accepted for the most part, but even so the more drastic

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8. Capt. W. H. Redit, Asst. Chief, A/C Sec'y, to President, A/C Examing Board, Morris Field, N. C., 31 Aug. 1942, in A/C Br. files. Captain Redit stated that many applicants then in training were selected on the basis of their experience rather than upon their educational qualifications. Various private schools of aeronautics were investigated from time to time, and if found acceptable, their graduates were allowed to use their training in lieu of formal college requirements. For an example of procedure in examining these schools, see, Eq., IV District, Technical Training Command, to CG, APTTC, 22 June 1942, in A/C Br. files.
step of closing all applications was taken in July 1943.

The principle of educational requirements for ground duty training was even more badly used in the case of armament training where educational requirements were raised and lowered to get rid of difficulties that seem to have been the result of lack of foresight in planning. Until January 1942 armament training was restricted to eliminore from aircrew training, although a few civilians and enlisted men were permitted to enter despite this restriction. At the start a college degree was required. This was restated in a letter of 16 June 15 1941 to the commanding generals of the training centers. Within a short time the training quota was raised from 55 to 74 each month. Because the training centers did not meet their quotas, the educational requirements were revised downwards in August 1941. Only two years of college were required, preferably in engineering or physical science, plus a special recommendation for mechanical aptitude from the commanding officer of the Air Corps school or training detachment from which the candidates were eliminated. By December of 1941 the number of eliminore was so great that Military Personnel suggested that either the training quotas be increased or that the educational requirements be raised by requiring the completion of at least one year of college physics. Since the quota could not be raised, the

13. Asst. C/AC to CO’s, Training Centers, 16 June 1941, in AGO 555.9, Specialised Training; conversation with personnel in A/C Br. files.
educational requirements were, and a radiogram on 11 December made the requirement of a year of college physics effective as of that date.

There followed a bulletin in January 1942 which failed to state the educational qualifications for armament training but included civilians as potential cadets. The next bulletin came in April. It stated that civilian candidates must have two years of college engineering while eliminate candidates must have two years of college with a year of college physics. The confusion was not less confounded by the fact that responsible authorities apparently did not read the bulletins. On 4 April, 1942, the day the bulletin above was issued, Military Personnel declared that armament was restricted to eliminate and asked that it be extended to civilians and enlisted men because there was an inadequate supply of trainees and because civilians and enlisted men were constantly demanding it.

Meanwhile the failure to use the educational requirement properly as a principle brought bad results in training, for the eliminate in the technical school were not satisfactory candidates. They usually met only the minimum educational requirements. It was requested that the uniform requirement be made two years of college engineering, especially in view of the fact that there was a large eligible list of

15. EAR, AFPM to Training Div., 4 Dec. 1941; AFPM to CG, ACTTC, 11 Dec. 1941 (radiogram), in A/C Br. files.
17. EAR, AFPM to AFROF, 4 Apr. 1942, in A/C Br. files.
civilians and enlisted men with two years of college engineering. This was done on 12 August 1942, but its effectiveness in the whole program cannot be judged because by October the applications were closed for all further training.

Thus in one instance the educational requirement was not used for the only purpose for which it was valid to secure adequately trained men for a specific form of duty. Instead it was used because the planning was of such uncertain character, or so lacking in coordination between various divisions, that an even flow from procurement through to training classes could not be maintained. The effect on the morale of individuals caught in sudden changes of policy without warning can only be guessed at, but any such guess could only be on the side of assuming that the aviation cadets who were made the "goats" of maladministration were not any happier therefor.

Other qualifications, except age, remained fairly static. Candidates had to be citizens for at least 10 years immediately before the date of appointment. After January 1942 married men were accepted if they signed statements that their families had independent means of support. The physical requirements from the start were less rigid than for aircrew cadets; the candidate was simply required to meet the standards prescribed for Reserve officers on extended active duty.

18. RAR, AFEPM to AFRI, 12 Aug. 1942, in A/C Br. files.
19. Note on Ibid.
In the early part of the program candidates were required to be between the ages of 20 and 26. By January 1942 this was extended to include men from 18 to 26. Shortly thereafter a move to raise the age limit to 30 was begun in the case of meteorology cadets. Difficulty was expected in getting qualified personnel under 27, and a good many men between 27 and 30 were qualified. Furthermore it was asserted that weather officers had duties requiring mature judgment and emotional stability, and these qualities, it was said, were commonly associated with men over the age of 26. The point was won in the case of meteorology. By November 1942 the top age limit for all ground duty candidates was made 30 years. The demand for this extension was based on an expected increase in the training rate in engineering which was expected to reduce the number of qualified candidates below the age of 27 to a very low level. It was said that many exceptionally well-qualified men had been rejected because they were over 27 although they had not yet reached the age of 30. Meteorology had already raised the limit to 30, and greater uniformity would result if the age limit for all classes of ground duty were raised to that level. In addition it would broaden the opportunity for enlisted graduates of technical schools.

By January 1943 Military Personnel again asked that the age limit be raised. This time it said that the reduction in the rate of output from officer candidate school would drastically limit the commissioning of qualified enlisted men. There were current shortages in engineering officers, and eligible men would be increasingly difficult to find in civilian life. Personnel declared that it believed firmly that ground duty officers needed leadership and organizational experience since their duties involved to a major degree the supervision, leadership, and organization of a group of enlisted men. The selection of men below 30 provided the technical ingredient but not necessarily the leadership and practical experience to keep a squadron in the field in commission. For these reasons the age limit for ground duty should be raised to 38, and to 45 if necessary. Furthermore the educational qualifications should be subject to waiver if the applicant (1) had performed equivalent technical duties in civilian life in an outstanding manner or (2) showed an extensive background of technical experience supported by trade school experience and marked qualities of leadership during his Army duties.

This request was sent to the General Staff by the AC/AS, Personnel with one change: the age limit should be 38 and this should be subject to waiver. The final decision was to waive the age limit to 38, appoint no one over that age, and limit waivers to enlisted men in the Army Air Forces on active duty.

The practical enforcement of these various qualifications, with one exception, lay with the aviation cadet examining boards. The exception was the educational requirement. Throughout the ground duty program the Aviation Cadet Branch insisted on a final check on the educational qualifications of candidates for ground duty training. The procedures established were given formal standing in the instructions sent out to the aviation cadet examining boards on 7 January 1942. For the most part these instructions give a picture of what the process had been up to the outbreak of war in December 1941.

The bulk of the applications for ground duty training was submitted by the applicants directly to the Chief of the Air Corps. If submitted to the examining boards, they were sent on to headquarters where they were treated as if they had come directly from the applicant. The applications included a birth certificate, a transcript of the applicant's college record, and three letters of recommendation. The Aviation Cadet Branch examined the educational qualifications, and if these were satisfactory, the application was sent to the aviation cadet examining board nearest the applicant with an authorization for examination. The examining board then notified the candidate to appear for examination. This consisted of a physical examination for commission and extended active duty and a "moral" examination to determine the candidate's fitness for an officer's commission. If accepted by the board, the papers were returned to the Aviation Cadet Branch for
final decision.

Under this system the Aviation Cadet Branch had a double check on candidates: a check on educational qualifications, and a check on the final papers. After war began some changes took place. On 13 December 1941, the Adjutant General authorized presidents of aviation cadet examining boards to enlist aviation cadets immediately on approval by the boards without first sending their papers to the Chief of the Air Corps. The instructions of 7 January 1942 ratified this procedure for aircrew candidates but specifically stated that ground duty cadets were not to be so enlisted. The papers were to be sent to the Aviation Cadet Branch after approval by the examining boards, and enlistments were to be requested of the Adjutant General by the branch.

Despite the instructions, aviation cadet examining boards seem to have enlisted ground duty cadets. Then on 1 June 1942, the Adjutant General directed that applications for ground duty were to be forwarded directly to Headquarters, AAF for certification of educational qualifications, except where special circumstances called for immediate physical and moral examinations by the board. Upon return of the papers with educational qualifications approved, the examining board would give the physical and moral examination, and then enlist the candidate, if he was approved, in the Air Corps Enlisted Reserve.

The real check thus left to the Aviation Cadet Branch was its examination of the candidate's educational qualifications and its authorisation of examinations. It did not, however, take any less interest in the qualifications of the men finally enlisted. Its files have many letters complaining of the carelessness of the examining boards. One applicant, for example, was interviewed by officers in the Aviation Cadet Branch in the fall of 1942. He met the educational qualifications but it was the opinion of the interviewing officers that he was not officer material. Subsequently the examining board at Grand Central Palace in New York qualified and enlisted him. The Aviation Cadet Branch then called on the Adjutant General for an investigation of the board and asked that the candidate concerned be re-examined and discharged from the Air Corps Enlisted Reserve. Whether or not the Adjutant General agreed does not appear, but the problem was evidently a continuous one.

The Aviation Cadet Branch worked both through the Adjutant General and in direct contact with the examining boards. By the spring of 1943 it was stated that the situation was improving although many of the ground duty candidates reporting that spring had been examined in the summer and fall of 1942. The Aviation Cadet Branch gave its hearty approval to any steps taken by the training schools to eliminate men passed by examining boards but who were judged unfit.

for officer training after they reached the schools.

The Aviation Cadet Branch's insistence on centralized control was based on the belief that it was the only way to insure the appointment of high-quality men. If, for instance, the commander of a field were given a quota of men he might send in for training as aviation cadets, he would as often as not send in men he wanted to get rid of rather than men well qualified for such training. A final check at headquarters helped to prevent this sort of thing. Furthermore, it was possible to make a further check on the candidates' "moral" qualifications. Investigations by headquarters after men had been approved by examining boards revealed such undesirables as German bundists and sexual perverts. Even so there were instances in which sundry such gentry were declared officers and gentlemen before the discovery of peculiar habits and character traits.

Assignment to Classes and the Problems Involved

Once candidates were procured, they were kept on an eligible list maintained by the Aviation Cadet Branch. From this list the branch assigned them to training classes. About one month before the beginning of a class, the branch selected men for assignment to the class and requested the Adjutant General to issue orders for their assignment. The Adjutant General in turn notified commanding officers.

29. Interview with Capt. John A. Brown, Jr., A/C Br., 2 May 1944.
of the service commands, who had likewise received copies of the
cadets' papers, to issue the orders to individual cadets directing
them to report to class.

Several problems resulted from this method of assignment. Early
in 1941 it was found that commanding officers at Lowry and Scott
fields were selecting candidates from the eliminated cadets stationed
at their fields and assigning them to classes. These cadets who were
awaiting assignment to ground duty training had not had their qualifi-
cations examined and approved by the Aviation Cadet Branch. The
Military Personnel Division declared that "this assumption of control
and disregard of orders has caused considera... confusion in the
records of this office and has entailed much correspondence
straitening out the situations arising therefrom."

There is evidence to indicate that assignments were made by
other Air Corps units from time to time although it does not appear
to have been a serious problem. The training centers in turn had
complaints to make. In the fall of 1941 Scott Field protested that
students were arriving too shortly before or even after the start of
communications classes. Scott Field recommended that cadets arrive at
least a week before classes because Cadets needed administrative pro-
cessing after their arrival at a new station. Also, there was a con-
siderable problem of orientation, particularly for students from
civilian life. These things could not be imposed on top of a full

1941, in A/C Brs. files.
schedule of academic work. Where this had to be done during the first week of training, scholarship suffered severely. Failures occurring in this first week were due to the distractions of barracks life, whereas there were no failures in the second week. Scott Field cited the case of the class of 18 August 1941. Seven students arrived a week before school started. Fifty arrived at the end of the working week. Fifty-five arrived the first day of the class, and 64 arrived after the first week was already over.

Delay in assignments and in arrival at classes seems to have been fairly common if one may judge from the complaints in the files. Upon one occasion in 1942 the chief of the Ground Duty Unit explained delays that time. He pointed out that the procurement system for ground duty cadets had been revised in June on the basis of the Air Corps Enlisted Reserve, and that there were then large numbers of eligible civilian candidates on the list for assignment to classes in July, August, and September. Their papers were sent to The Adjutant General with a request for immediate enlistment in the Air Corps Enlisted Reserve and that the Aviation Cadet Branch be notified immediately of their enlistment. Either The Adjutant General or the service command failed to comply with the request for notification, and this in many cases resulted in vacancies in July and August classes. Every effort had been made to get a report from The Adjutant General and the

service commands, but complete reports had not been received. Therefore it was necessary to fill the vacancies at the last minute, with the result that cadets reported late for classes. Ordinarily it was the policy of the ground duty unit to request orders to have the men report to school one week before the starting of a class, but the lack of clerical help at the time resulted in delay. However, a change of policy resulted in asking for orders from the Adjutant General a month before the starting of classes in order to give service commands enough time to issue individual orders.

Slowness in assignment affected also eliminaees who expected further training as ground duty cadets. In October 1942 the Adjutant General declared that information had been received that eliminated aviation cadets had been kept waiting for assignment to ground duty for six months and more. He sent out orders to every station in the United States directing them to report to the Aviation Cadet Branch the names, the date of reporting to station, and the type of ground duty training applied for, of all eliminated flying cadets. In the future such cadets reporting for assignment at stations were to be similarly reported if no action had been taken within four weeks of their arrival.

33. As to CO's air forces, AAF commands, CO's, all stations and activities of AAF in continental U.S., 12 Oct. 1942, in files of Secretary of Air Staff.
Aside from the useless procedure of sending orders through three offices in order to get a cadet on the eligible list into school—a procedure necessitated by Adjutant General control—the major cause of delay in assignment as time went on was the large backlog of candidates for ground duty built up as a result of recruitment. When the backlog became so large that training could not be begun for months or even a year, there were usually repercussions from the men.

One further problem of assignment was that relating to the desire of many cadets to transfer from one form of training to another. Pilot trainees would decide that they wanted to be ground duty officers, and ground duty trainees often decided they wanted to be pilots. Early in the program there was an informal understanding between Personnel and Training and Operations to the effect that men enlisted as cadets for the purpose of training as non-pilot members of combat crews or as ground duty officers, would not be eligible for pilot instruction. In December 1941 it was urged that this understanding be announced as a formal policy. However, there seems to have been no objection to transferring from one phase of ground duty training to another as long as the cadets were in the pre-technical training stage and were educationally qualified.

There were likewise numerous trainees who desired to change from pilot training to ground duty training. The question came up in November 1942 in connection with men enlisted in the Air Corps Enlisted Reserve on the deferred plan. They had completed enough college work to qualify them for ground duty. At the time it was stated that they might apply for ground duty in the usual way. But a little over a year later the policy was changed. As a result of inquiries from aircrew trainees both in pre-aviation cadet college training and in various phases of aircrew training, it was declared that Headquarters, AAF would not consider favorably any request for transfer to ground duty training. The only way for a trainee to get into ground duty training was to be eliminated by the usual procedures, but he was to be told that after being eliminated for the purpose of taking a ground duty course he would not be eligible for reinstatement to aircrew training.

One type of transfer not so common as the above was that of men who had been trained in one specialty and then wanted training in another. This resulted in an order that a man must serve for a year in the specialty in which he was trained before he could take a course of instruction in another field.

37. AAF Reg. No. 60-6, 19 May 1942.
Chapter IV

THE SOURCES AND PROBLEMS OF SUPPLY

The Over-all Pattern of Procurement

The procurement of ground duty aviation cadets must be seen against the background of Air Corps expansion as a whole from 1939 to 1944 in order to keep it in proper perspective. Until 1938-1939 there was little change in policy or in rates of training and procurement, but after the beginning of the expansion program one plan was piled on another before the preceding plan could be well started, much less completed. In July 1939 the 25 Group Program calling for the training of 1,200 pilots a year was announced. This was followed by one project after another until the peak was reached in October 1942 with the 273 Group Program calling for the training of 102,000 pilots a year. Not until April 1943 was this goal reduced to 80,000 pilots a year, a goal raised somewhat later, but never to the height of the 273 Group Program.

These pilot training goals were accompanied by plans for the training of technicians. In September 1940 it was planned to train 50,000 technicians a year. In November 1941 the figure was raised to 100,000 a year, and after Pearl Harbor the peak was reached with a program calling for the training of 300,000 technicians a year.

Besides such figures the plans for the training of ground duty officers are remarkably slim, but the goals set were much nearer the
possibility of achievement. During 1940 when it was planned to train
12,000 pilots and 50,000 technicians a year, plans were made for the
training of only 1,681 ground duty officers in armament, communications,
engineering, meteorology, and photography. Even then it was not planned
to complete the training in this number until early in 1942.

During 1941 men were recruited steadily but slowly and with little
publicity for ground duty. Officials were worried about the creation
of too large a backlog awaiting training. If this happened, candidates
and their relatives would write to congressmen, and the latter would
make inquiries. Hence, it was thought best to restrict sharply the
list of men available for training.

By the fall of 1941 this cautious policy was abandoned. In Octo-
ber training center commanders were urged to inform all candidates
that it was the policy of the Chief of the Air Corps to train as many
candidates as possible as flying officers, and if men were eliminated
from pilot training they should apply for training as navigator, bom-
bardier, engineer, communications, armament, meteorology, or photo-
graphic officers.

A month later much more emphasis was put on ground duty. It was
then announced that in the future as many aviation cadets as possible
would be trained, either as flying or non-flying officers. Students
were to be given preference forms to fill out and were to be given

1. Maj. Gen. Jacob E. Fickel to CG, AACTS, Chanute Field, 9 Oct. 1940,
in AAF 353.9E, Training, Miscellaneous.
files; liaison memo for AG by Chief, Personnel Div., 1 Nov. 1940,
in A/C Br. files.
3. "History of Scott Field, 1 Jan. 1939-7 Dec. 1941," 39; R&R, C/AS
to C/AG, 22 Oct. 1941, in A/C Br. files.
opportunity to change preferences when eliminated from any training program. A radio address by Maj. Gen. Delos C. Emmons on 1 December 1941 shows something of the new emphasis. In his appeal for aircrew and ground crew recruits he declared that mechanics literally held the planes aloft in their hands—that it took 6 to 22 maintenance men on the ground for every plane in the air.

The outbreak of war brought an immediate change in policy in the enlistment of aviation cadets. Until then cadets recruited from civilian life had been discharged from the Army on elimination from training. Now, however, men were not to be discharged unless they were physically or mentally unfit. Therefore, the War Department issued a ruling that after 1 February 1942, all would-be aviation cadets must first enlist as privates in the Air Corps and then be assigned as aviation cadets. If they washed out of any course, they would then revert to the rank of private and thus could be held in the Air Corps whether they wanted to stay or not—and without danger of losing them to other branches.

Meanwhile the outbreak of the war resulted in a rapid growth of recruitment, a growth so rapid that an enormous backlog of candidates for all kinds of training had to be "stored" at various fields to await training classes. This meant serious pressure on housing and supply.

facilities and an even more serious morale problem among thousands of young men who were given nothing of significance to do for months on end.

The final solution of this problem was the establishment of the Air Corps Enlisted Reserve. Under this plan civilians who had passed the aviation cadet examinations could do one of three things: (1) enlist as privates in the Army Air Forces, unassigned, for immediate active duty while awaiting appointment as aviation cadets, (2) enlist in the Air Corps Enlisted Reserve and be ordered to duty by corps area commanders as training facilities became available, or (3) men between the ages of 18 and 26 enrolled full time in accredited colleges could enlist as privates in the Air Corps Enlisted Reserve and continue in college until graduation or withdrawal from college, but with the understanding that the deferment would be terminable at any time. So far as ground duty was concerned, candidates could not enlist in the Air Corps Enlisted Reserve unless they met the preliminary educational qualifications.

By the fall of 1942 there was a definite surplus of accepted ground duty candidates awaiting training. In September there were 1,400 eligible candidates for communications training with 1,300 applications pending approval. It was presumed that 1,100 of these would be approved. Training facilities during 1943 could take care of 1,700 men. This would leave 800 men who could not get into classes at all.

7. See "Revised U.S. Army Air Force Aviation Cadet Program," 4 Apr. 1942; also Procurement of Aircrotn Trainers, AAF Historical Studies No. 15.
in 1943. The Executive of AC/AS, A-1 urged that steps be taken to use these excess communications candidates in other courses for which they might be qualified. The Directorate of Personnel replied that many of these men were continuing their college training while awaiting assignment and were being urged to take studies in preparation for radio communications work, but that the problem was being studied.

Meanwhile it was declared to be a War Department policy not to allow more than one year's supply of candidates in advance of training. Because of this all applications for armament and photography were closed until further notice on 21 September 1942. After a survey, the Aviation Cadet Branch reported in November that it had on hand an 8-month supply of engineering, a 12-month supply of armament, a 24-month supply of communications, and a 12-month supply of photography candidates. AC/AS, A-1 cited these figures and asked the Directorate of Personnel what action could be taken to reduce the backlog of candidates to a six-month supply.

The Directorate of Personnel was opposed to the release of any ground duty candidates then on eligible lists. Their academic backgrounds were relatively high, and in the future very few aviation cadets would be expected to possess the educational qualifications hitherto maintained as a requirement for ground duty training. With some acuity the directorate suggested that inasmuch as there was an actual shortage of ground duty officers, perhaps one means of reducing

the backlog was through increasing the training rate or the size of training classes. Actually the oversupply was not a serious problem for such ground duty courses as engineering and meteorology.

The next problem that arose in procurement was the result of the termination of voluntary enlistment in the armed forces by a presidential proclamation of 5 December 1942. The great bulk of aviation cadets had come to the Air Corps through voluntary enlistment. Now they were supposed to come through the draft process. However, exceptions were made almost at once for aircrew candidates. Ground duty procurement was not so fortunate. The proclamation came at a time when there was an increased need for meteorology and engineering candidates. Military Personnel got sanction for a program of voluntary enlistment for civilians wanting meteorology training, but this was to last only until 31 January 1943. This caused a search among the enlisted personnel in the Air Corps for men who might be qualified for engineering and meteorology training.

The problem was not a real one, for by May of 1943 there was such a backlog of candidates in all fields that all applications were being rejected. From then on until the spring of 1944 when the whole program was for all practical purposes discontinued because of an adequate supply of officers and candidates for officer training, there was no serious problem of procurement. From time to time men were procured in small numbers, mainly from top-ranking graduates of the enlisted men’s programs.

courses in the various technical schools. The program of voluntary re-
assignment from category of ground duty to another was tried. In the
fall of 1943 changes in training rates made it necessary to reopen engi-
neering and communications courses to new applicants. Such applicants
had to come entirely from the ranks of enlisted men. While civilians
might apply, no action could be taken until they had been inducted into
the Army. But the reopening was only short-lived, for on 29 March 1944
the Aviation Cadet Branch recommended to the Adjutant General that all
aviation cadet examining boards be advised that no further examinations
would be conducted for aviation cadet ground duty training, regardless
of whether or not they had been authorized. All existing quotas were
filled. All applications forwarded to examining boards were to be re-
turned to headquarters for disposition.

The foregoing outline of the main elements in procurement from
1939 to 1944 furnish a necessary background for consideration of the
particular sources of supply for ground duty cadets and the problems
involved in their procurement.

Eliminace as a Source of Supply

When the expansion program began, flying schools were flunking
out about 50 per cent of those who entered flying training. Some of the
men eliminated wanted to stay in the Air Corps. Perhaps the following

15. Capt. J. A. Brown, jr., to CO, Base School, Orlando Army Air Base,
17 June 1943, in A/C Br. files.
Training.
19. Daily Diary, A/C Br., 2 Mar. 1944, in AFIHI files; memo for AO by
letter from an ex-flying cadet in 1940 is not typical, but it purports to speak for many:

I wonder if this letter will ever get to whom it is addressed? This letter speaks for quite a large number of young men who once gave up jobs, school and everything to be of service to Uncle Sam. I am talking about us outcasts ex-flying cadets, unable to find employment.

With all this uproar about rearmament, why not give us fellows another chance. We all have had some experience in flying, and perhaps with a fresh start, we may get through this time. We all think that a group of ex-flying cadets, given a fresh start, are in a better position to go through than a fresh batch of rookies. Perhaps we are wrong—I suppose so—yes we know—into the waste basket goes this letter.

The Air Corps likewise was interested in doing something with the men thus eliminated although it did not indicate that it thought second chance at pilot training was the answer. Rather it looked to such men first of all for training as bombardier and navigator instructors, and this training was practically completed by the end of 1940. It next turned to them for use in further aircrew training and in ground duty training. In November 1940 the Personnel Division declared that it was its policy to appoint ex-flying cadets to specialized training, other considerations being equal. There were some instances where civilians had special qualifications and education that made them especially desirable for certain forms of training, and these men had been selected for various classes. An example was meteorology which called for qualifications which few ex-flying cadets possessed. Of the 135 meteorologists

21. 1st Ind. (basic unknown), Personnel Div. to Capt. Frank R. Grunder, Flying Cadet Board No. 1, Fort Hayes, Ohio, 2 Nov. 1940, in A/G Br. files.
in the service at the time, 117 were men without previous military experience, appointed from civilian life.

But on the whole the Personnel Division at that time believed that eliminations were better material than civilians. For one thing they had passed before two examining boards; the flying cadet examining board on entry into the Army and the elimination board when flunking out. The elimination board which made recommendations as to suitability for non-pilot training was in daily contact with the individual over an extended period. In addition the eliminated cadet had had military training. On the other hand the applicant direct from civilian life passed before a flying cadet examining board in a few minutes and as a rule had had no previous military experience. This was declared to be an additional hardship on the specialized school concerned.

The chief of the Flying Cadet Section put the attitude of that section in a letter to Chanute Field early in January 1941:

We give priority on all appointments to specialized training to washed out pilot trainees. The doggone flying schools are still eliminating between 40% and 50% and it helps our pilot boys when they enter to know that if they can meet the educational qualifications for specialized training such training will be given them ahead of civilians. In addition to this we have the advantage of having them under close military supervision for a period of time and the judgment of the officer who has had him under supervision in regard to his suitability for these types of specialized training.

The first plans called for the training of approximately 1,681 ground duty officers by June 1942. With the exceptions noted above,

the men for this training were expected to come from the ranks of eliminees. In fact ordnance training was open only to such men.

Procedures for the handling of eliminees were soon established. If a pilot trainee was eliminated and his school recommended him for further training of a non-pilot nature, the Personnel Division made a study of his educational record to see if it measured up to the standards which at that time were set by Training and Operations. If these standards were met, the candidate was assigned to some form of non-pilot training. One further factor, until after the outbreak of war, was the preference of the candidate: before 1940 the eliminee was discharged from the Army, but in the new program he was given the choice of continuing as a cadet if he was qualified for specialized training.

The first classes were small, with the result that there was an excess of pilot-eliminees qualified for ground duty training. By February 1941 the Gulf Coast Training Center reported that all quotas for non-pilot training classes were filled for the next several classes. It recommended that commanding officers of Air Corps schools and training detachments be authorized to discharge eliminated cadets who had been recommended for non-pilot training. These eliminated cadets were being held in the training detachments awaiting action by the CCAG. Ultimately they were discharged and sent home to await reappointment and assignment to non-pilot training. Meanwhile large

numbers of them were frequently held for several days or even weeks to the detriment of the morale of themselves and the flying students with whom they associated. In addition, the Gulf Coast Training Center requested authority to discharge immediately eliminees not recommended for further training, an authority that hitherto had been exercised only by the Chief of the Air Corps. In justification it was pointed out that in no case known had a cadet whose application for non-pilot training had been rejected by his local commanding officer, been selected by the Chief of the Air Corps for such training.

Headquarters agreed to the latter recommendation but insisted that eliminees qualified for ground duty training and waiting for classes were not to be discharged. They were to be transferred to reception centers to await assignment to a definite class. Procedures were outlined again: commanding officers should submit by radio direct to the Personnel Division the names of cadets, the type of training desired by each cadet in order of preference, and the type of training for which recommended. The Aviation Cadet Branch would determine the eligibility of the candidate and either request The Adjutant General to issue orders requesting the transfer of those found eligible to reception centers or authorizing commanding officers to discharge those not found eligible.

By June of 1941 more emphasis was being put on the procurement of eliminees. Evidence of this is the more precise set of instructions

27. Hq., Acting Chief, P/C Sec. to Chief, AFFMP, 12 Mar. 1941, in A/C Br. files.
sent to the training centers and the relaxation of the educational qualifications for eliminees. Armament training was still limited to eliminees only, and applicants were required to have a college degree and be especially recommended by their commanding officers because of superior qualifications. But the classes were still small. Only 33 men were entering classes every four weeks, and this meant a quota of 11 for each training center. When quotas were filled for one class, no further applicants were accepted until after that class began training. This was to prevent candidates from being held too long. Communications still maintained a first priority for college graduates in electrical engineering but gave a second to graduates in other types of engineering, a third priority to those who had completed two years of engineering, and a fourth priority to college graduates with an amateur radio operator's license. Engineering qualifications still gave a first priority to college graduates in engineering, but those who had had three years with a specified group of subjects were to have second priority. Photography demanded a college degree with a major in chemistry, geology, or engineering.

Further emphasis on the use of eliminees came in the fall when all restraints on the numbers to be trained were removed and training center commanders were instructed to tell eliminees from pilot training that they should not hesitate to apply immediately for other forms of aircrew and ground duty training. Training center commanders were particularly instructed to take as much of the "sting" as they could out of elimination.

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28. Unsigned copy of letter to CG's, ACTG's, 16 June 1941, in A/G Br. files.
from pilot training and to popularize the ground duty courses to which
the eliminees could transfer if they qualified.

Eliminees were directly affected also by a new ruling by the War
Department after the outbreak of war. Eliminees qualified for other
forms of training had been discharged to await other training when they
were re-enlisted as aviation cadets. There was danger that they might
be lost to other services during the period they were awaiting assign-
ment to classes. Hence, authority was requested and given to place
eliminees who qualified for ground duty training on a furlough status
until they could be assigned to non-pilot training. In January 1942
the War Department ruled that all aviation cadets enlisted after 1 Feb-
uary 1942 were to be continued in service as enlisted men if they
washed out of any courses during training. The plan adopted was to
enlist all qualified civilian applicants as privates in the Air Corps
to which status they would revert whenever they washed out. Those en-
listed as aviation cadets directly from civilian life before the adopt-
tion of this practice presented a more difficult problem. The procedure
adopted was to discharge them from the service. They were then offered
enlistment in the Air Corps with the grade of private. If they refused
re-enlistment, they were to be warned to register with their draft boards
within five days from the date of discharge.

Stratemeyer to CO, WAC/TC, 21 Nov. 1941, in A/G Br. files.
30. R&R, AFPPP to AC/AS, A-1, 7 Dec. 1941, in AG 211E2, Cadets; memo
for O/AC by Brig. Gen. Ralph P. Cousins, 3 Jan. 1942, in ibid.;
AG to O/AFY, O/AC, CO's, AFCC, RTC's, corps areas, ACTC's, 14 Jan.
1942, in AG 221.99 (1-3-42) BR.
After the establishment of the above procedures there were no significant changes relating to the procurement of eligibles for ground duty training. There were difficulties, of course, arising from the complexities of administration. The Headquarters of the Technical Training Command complained that eligibles were being sent to AAF replacement training centers with no notice of whether or not they were qualified for further aviation cadet training. At the training centers three things could be done: assign them to an aviation cadet course other than flying, reassign them as unassigned enlisted men to various stations, or detail them to an officer candidate school. The difficulty was that when an eliminated cadet was received at a replacement training center neither he nor the commanding officer knew what disposition was to be made of him. The need was for specific and immediate information from headquarters.

Subsequently there were complaints that men were being held at stations for months because of delay in action upon applications or because of lost papers. Such delays on assignment were serious enough to call forth an order requiring that all men at stations should be reported to the Aviation Cadet Branch with subsequent reports for any eliminated cadet waiting for an assignment for longer than a month.

With the general tightening up of applications for ground duty which came with the overlarge backlog late in 1942, eligibles found it

31. Hq., AFTTC to CG, AAF, 27 May 1942, in AAG 211F, Cadets.
32. Hq., AAF to CO's, all stations and activities of AAF in continental U. S., 30 Sep. 1942, in APIHE files; Hq., AAFMP to AFMAC, 23 Sep. 1942, in A/C Br. files.
more and more difficult to continue as aviation cadets for ground duty. There was much opposition to them both from the Aviation Cadet Branch and the Technical Training Command, and full quotas for training classes meant that by the early spring of 1943 there were no further openings for eliminees. In terms of actual numbers they did not bulk large, perhaps not over 4 per cent of all ground duty cadets, but in terms of policy and training they were a major problem.

**Enlisted Men as a Source of Supply**

A second source of supply was the enlisted men in the Army generally and in the AAF in particular. Emphasis was put on them fairly early in the expansion program although the bulk of them did not come into the program until 1943-1944. Early in 1941 eliminees were coming to Scott Field for communications training. Considerable emphasis was put on men with practical experience in electricity and radio. This emphasis, says the history of Scott Field, opened the way for many enlisted men, and this in turn produced better communications officers.

Previous to this development the War Department had issued a press release in December 1940 announcing courses for civilians and former flying cadets to prepare them to become squadron engineering officers. There was protest from Headquarters, GHQ Air Force at Langley Field that this proposed scheme did not provide for enlisted men in the service at the time. The result was a general letter from The Adjutant General outlining a course in aeronautical engineering as an opportunity for

33. AFDOP to CG, AFTTC, 3 Mar. 1943, in AAG 353.182 #3, Deficiency.
enlisted men in the Army. If they met educational qualifications, they could be appointed aviation cadets, take the nine-month course, and receive commissions as second lieutenants. Applications from enlisted men were to be forwarded through their commanding officers to headquarters.

Available evidence does not indicate how successful this appeal was in getting enlisted men from the Army. It is apparent that many unit commanders did not want to lose their good men and hence discouraged them in one way and another from applying for aviation cadet appointment. This situation was serious enough to call forth what amounted to a blast from General Arnold in May 1942. In a letter to the commanding officers of various air forces and commands he was speaking of aviation cadet recruitment as a whole, but what he had to say probably applied in proportion to technically trained men interested in ground duty appointment. He declared that the program at the time called for the entry of 150,000 men a year into cadet training, that all the properly qualified men could not be obtained from civilian life, and that thousands must come from the Army itself and particularly from the AAF which was probably the best source because of its high standards.

General Arnold declared that persistent and confirmed reports showed that commanders were reluctant to encourage men to apply for appointment. High-quality men should not only be recommended when they applied; they should be encouraged to apply. The importance of this was to be brought

35. Col. C. E. Stratemeyer, Exso., OCAG, to AG, 9 Jan. 1941, in AAG 353.99, Training/Engineering; AG to CO’s, all Armys, corps areas, and departments, 22 Jan. 1941, in AG 221.99 Flying Cadets (1-9-41) E.
to the attention of every officer in command in such a way as to leave no doubt as to the purpose of the letter. And when investigation revealed failure to comply with the letter and spirit of instructions, action should be taken. The responsibility was fixed squarely on the higher commanders, and General Arnold made it very plain that such was his intention. This letter was followed by an order from the Air Adjutant General directing that all enlisted men qualifying for aviation cadet appointment should be transferred by local commanders to the Air Corps, unassigned, and held at their present stations pending action.

Enlisted men in other branches of the service who were qualified for ground duty training likewise found it difficult to transfer. This difficulty gave rise to directive from The Adjutant General in June 1943 ordering that any enlisted man could apply to the local aviation cadet examining board through his commanding officer, or if there was no board at his station, the application was to be sent to the commanding general of the local service command and thence to the board nearest the applicant's station. However, there is no evidence as to the effectiveness of this order, for complaints came in much later with regard to difficulties in making such transfers. It should have been obvious that the requirement that the enlisted man must apply through his commanding officer would effectively negative such transfers in most cases, but the regard for "channels" seems to have been greater than the desire

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36. 20 May 1942, in AAF 221.99.
37. 2 June 1942, in files of Secretary of Air Staff.
for effective procurement, or was a means of thwarting Air Corps efforts to secure good men from other branches.

The ending of voluntary enlistment in December 1942 meant that henceforth dependence for further recruitment had to be almost entirely on enlisted men. In January 1943 the Director of Personnel sent out a general letter describing the opportunities in engineering and meteorology for enlisted men. Less emphasis was placed on educational qualifications than hitherto. In February Military Personnel declared that there was an immediate need for qualified men in ground duty training in maintenance engineering and that there were many enlisted men who had either the educational qualifications or the equivalent experience and quality of leadership which would qualify them for training. Since many of the enlisted men would be reluctant to accept appointment as aviation cadet because it would mean a cut in pay, it was provided that enlisted men in the first three grades could train in grade and hence not lose any pay. In addition the age limit for AAF enlisted men in ground duty was raised to 38 years.

By the time these various steps had been taken the problem seems to have been one of overlarge backlogs in most categories rather than scarcities. Various fields were opened up to applications for short periods of time, and whenever they were open the enlisted men got the bulk of the places. By November 1943 the transfers of enlisted men from


other branches were beginning to be more difficult. At that time the transfer or assignment of Army Service or Army Ground Force personnel replacement training centers was forbidden. They could transfer, however, when they had finished their basic training and had been assigned to units or installations. Even this loophole was plugged in February 1944 when all transfers of officers and men to the Army Air Forces were forbidden.

One separate group of enlisted men was an important source of ground duty officers, at least in terms of quality and experience. This group was made up of the graduates of the enlisted men's technical schools. Technician training was a huge program that at one time projected the training of 300,000 technicians a year. It was inevitable that in so vast a program there would be large numbers of men worthy of commissions as ground duty officers, and often even more worthy than the regular cadets. This seems to have been the case in armament training, which in the beginning of the ground duty program had been limited to elimines and remained limited to them in practice until the middle of 1942, but since all applications were closed in May 1943, there is legitimate doubt that armament training offered much opportunity to civilians or enlisted men.

But the question of enlisted men in armament training at Lowry Field and their relations to the elimines training as cadets was a very real one. The bulletins of instruction of 7 January 1942 and 4 April 1942

41. AG to CG, 2d Service Command, 26 Nov. 1943, in AAG 220.33, Transfer between Arms and Services; Daily Diary, A/G Br., 24 Feb. 1944, citing directive of 22 Feb. 1944, in AFHMI files.
both declared that armament training was open to civilians, but they did not mention enlisted men. In April Military Personnel declared that armament training for cadets should be open to both civilians and enlisted men, on the grounds that the supply was inadequate and that there were constant demands for such training from civilians and enlisted men. It is obvious that someone was not reading the bulletins published for the guidance of procurement officers.

But the real complaints came from Lowry Field itself. The Commanding General of the Fourth District of the Technical Training Command declared that there were constantly recurring problems of morale and administration growing out of the "present unfair method of selecting Armament Officers," and he demanded changes. This was in June 1942. He declared that the only absolute method of appointment was through elimination from flying training, for while limited numbers of cadets were coming from enlisted ranks, the aviation cadet examining boards in the Fourth District had received no concrete instructions on the acceptance of applications from enlisted men. The result was that there was little incentive for armament students to work for commissions as a reward of outstanding work and ability, and consequently the morale of the whole enlisted group was low.

This problem was further accentuated by the fact that frequently the enlisted sections of the same courses and schools were of higher quality than the aviation cadet sections, and this was apparent to the men themselves, the instructors, and the officers in charge. Hence, there was a critical attitude bordering on resentment.
At this time 288 enlisted men were entering the school every week for a twelve-week course. Many of these men were college graduates, and others had from one to four years of college. The armament cadets were entering at the rate of 74 every three weeks for an almost identical course. Most of these were eliminees from flying training and their attitude was bad. They lacked both enthusiasm and ambition. At the same time their instructors were enlisted men who had graduated from the armament course, and yet for these there was no hope of commission despite the fact that they were better equipped than the eliminees they instructed.

The recommendations were to change the regulations to allow for armament applications directly from civilians and enlisted men and to select at least half of the officer quota from the top 20 per cent of the men in the enlisted armament course. The appeal and the evidence were effective, for a quota of 30 out of each 74 aviation cadets entering the armament classes was allotted to Lowry Field. These men were to be appointed cadets, given four weeks of additional training in other aviation cadet courses not covered in armament, and then commissioned second lieutenants.

The Technical Training Command now asked for the authority to commission technical officers from other enlisted men's courses as well. It declared that 50 per cent of the technical officer requirements could and should be fulfilled by graduates of enlisted men's courses. Such a policy would improve morale, students would work harder, and the

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technical officers selected would be equal if not superior to those
produced from the ranks of the aviation cadets.

Military Personnel vetoed this suggestion. It agreed that it was
a good idea to give opportunity to such enlisted men, but it argued
that 50 per cent of the aviation cadet quotas could not be allotted
to the graduates of enlisted men's technical schools because of the
large number of candidates, including both civilian and enlisted per-
sonnel on the qualified list waiting for assignment to training. It
agreed that a quota of not more than 10 graduates a class could be
allotted to communications and engineering. It was suggested also
that additional numbers of selected enlisted graduates could be used
to fill existing vacancies in the scheduled graduation quotas of
aviation cadet classes. Although headquarters did make a concession,
partly to build up morale among enlisted men and, as in the case of
armament, to allay well-justified discontent, the commitments already
made to men on the eligible list could not be disregarded.

Once this modified plan of the Technical Training Command was
approved, the command went ahead to make plans, which were disapproved.
It proposed to select the graduates of the technical schools, commission
them, give them five weeks of further technical training, and then
send them for six weeks to officer training school. This last step

43. Col. C. W. Howard, Hq., AFTTC, to CG, AAF, 15 Aug. 1942, in A/C
    Br. files.
44. Col. John H. Ives, Asst. Chief, AFEMF, to Col. C. P. Bradley, AFTTC,
45. See letter from the Assistant Chief of the A/C Br. to John L. Riley,
    Boston Public Schools, 3 June 1943, in A/C Br. files.
was rejected by Military Personnel. It pointed out that these enlisted graduates had been described as equal or superior to the average cadets taking the same courses, and if this were the case, they did not need the additional training to attain the same proficiency as cadets. Also it was stated, "the demands of the service at this time for qualified technical officers do not justify holding these men for assignment the extra six weeks." Officer training schools should be limited to those with no previous military training.

These discussions and arrangements were preliminary to the establishment of an over-all program. In December 1942 the Commanding General, AAF authorized a special aviation cadet training program for men selected from the top 20 per cent of the graduates of certain technical courses in the AAF technical schools. The men were to be selected on the basis of their general qualifications as well as for their academic qualifications by the commanding officers of the technical schools. The quotas were to be set by the Commanding General of the AAF Technical Training Command. Once selected, the graduates were to be examined by the nearest aviation cadet examining board and appointed cadets. To speed up the process, local examining boards were authorized to accept the certification of commanding officers in lieu of the usual procedure of certification of educational requirements by the Aviation Cadet Branch.

47. 1st ind. (to same), AFDOP to CG, AFTTC, 2 Oct. 1942, in A/C Br. files; BRR, AFDOP to AFTR, 6 Oct. 1942, in AHI files.
Within a short time there were complaints that the Technical Training Command was sending far more graduates into the aviation cadet short course than had ever been planned or expected by headquarters. The number sent into armament and communications in particular had grown until the number in the aviation cadet short course was greater than in the regular aviation cadet course, and in the case of communications, just twice as many. The Aviation Cadet Branch had made commitments to men in the Air Corps Enlisted Reserve waiting for armament and communications training, and the great numbers of enlisted men being commissioned would make this period of waiting even longer. It would be necessary to cut quotas shortly, and some men might be compelled to wait years for training. It was therefore recommended that the quotas for the aviation short course be cut to a figure that could be reconciled with the original intent of the program.

Presumably this was done, especially as larger and larger numbers were trained and commissioned and the ground duty program tapered off. But for some time men were selected from this group after all other applications were rejected. One incidental aspect of this phase was the fact that in the early stages, the privilege was limited to Air Corps, unassigned, men. Assigned men were prevented from becoming aviation cadets. This was changed in the spring of 1943 so that assigned men were given the same privileges as those unassigned.

51. Hq. AFFTC to CG, AAF, 7 Apr. 1943, in A/C Br. files; Chief, Enlisted Br., AFFMC to CG, AFFTC, 22 Apr. 1943, in AAF 220.1, Appointment of Aviation Cadets.
Despite the difficulties, it is estimated that about half of the men who went into aviation cadet ground duty training came from the various groups of enlisted men in the three branches of the Army.

**Officers from Other Branches as a Source of Supply**

The assignment of officers to the Air Corps for training in various specialties was accepted practice in the Army in the years between the two world wars and involved no particular break with tradition during the period of rapid expansion. These officers ordinarily had taken pilot training and continued to do so after 1939. When some of them were eliminated, apparently they requested ground duty training. The Air Corps had no established policy, for in September 1941 the Commanding General of the Gulf Coast Training Center was told that Regular Army officers eliminated from pilot training were not to be considered for specialized non-pilot training. But in November it was declared that there was no objection to such an officer taking ground duty training if he had remaining within his one-year detail with the Air Corps enough time left to complete the course. If he had this time, he could apply for transfer to the Air Corps on completing the course.

There was much more uncertainty with regard to the training of Reserve and National Guard officers who before July 1941 could train only as aviation cadets. An act of 3 July 1941 provided that such officers could train in grade. There followed considerable discussion of the relation of this to ground duty, and it was finally decided

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52. Exec., OCAC to OG, OCACFG, 26 Sep. 1941, in A/G Br. files; R&R, G/AS to G/AC, 12 Nov. 1941, in A/G Br. files.
that all ground duty subjects were open but that they should be limited to men with special qualifications of education or experience. There was one serious limitation on this before the outbreak of war. This was the lack of funds. There was not enough money to place officers in inactive status on active duty, with the result that only Reserve and National Guard officers on active duty were considered for transfer to ground duty training.

For reasons not indicated, a good many pilot officers applied for ground duty training. After the outbreak of war all such applications were turned down as a matter of policy. The only exceptions were those disqualified from flying duty for physical reasons. Somewhat later it was declared that any officer who held an aeronautical rating was eligible for another course of instruction with the AAF only after he had served a year within the specialty for which he had been trained.

Officers from other branches of the service were not important numerically in the ground duty program although they were a steady if slight source of supply. In May 1943 it was announced that no further applications for ground duty training in officer grade were being accepted at the time. There were inquiries about such training coming in as late as that fall, and perhaps a few men went in when there were

54. Lt Ind. (basic unknown), A/G Sec. to President, A/G Examining Board, Orlando AAB, 19 Nov. 1941, in A/G Br. files.
56. AAF Reg. No. 50-9, 31 Dec. 1942.
openings, until February 1944 when all transfers were forbidden.

Civilians as a Source of Supply

The greatest single source of supply for aviation cadets, and indirectly the source of supply for all cadets, was the civilian population. Most of the procedures discussed so far have related to the procurement of civilians; indirectly in the case of eliminations from pilot training and enlisted men, and directly in the case of men enlisting from civil life until the end of voluntary inductions in December 1942.

Long before the beginning of the expansion program there were numerous complaints with regard to lack of skilled technicians in the Air Corps. Various kinds of publicity were tried to induce men to enlist. Young men were appealed to on the grounds of economic opportunity and congenial associations. It was pointed out that noncommissioned officer ratings could be earned.

In the Air Corps itself there was considerable diversity of opinion as to whether or not the idea of ground duty officers should be adopted at all, and secondly, once that had been agreed to, whether or not it should be publicized. But before the war began in December 1941 the idea of specialized training for ground duty officers was well established and was open to civilians enlisting directly. In the first place, expanding programs demanded more men than elimination from pilot training could provide. In the second place, the high educational qual-

60. See Chaps. I and II.
ifications at the start, averaging four years of college, ruled out many of the eliminees themselves. Thus civilians were admitted to ground duty aviation cadet training from the beginning. In the fall of 1940 both meteorology and engineering candidates had been sought from civilian life, although these had been special cases, and until 1942 armament training was limited to eliminees only.

The pyramiding expansion programs had ended most restrictions, and the outbreak of war swept the remnants away with a rush. On 13 December 1941 the War Department sent out an appeal for a quota of 20,000 applicants a month between the ages of 20 and 26 for aviation cadet training, plus 150,000 more between 18 and 35 as technical enlisted men. Early in January 1942 the age limit was lowered to 18 for aircrew trainees. Married men were declared eligible if they would sign a statement that their dependents had other means of support. Armament training was extended to civilians and to men then undergoing instruction. Educational requirements were lowered. In April 1942 the Air Corps Enlisted Reserve plan was devised to provide a pool for men who could not get into training because training schedules were overflowing. In May, The Adjutant General declared that qualified applicants would be enlisted only on his authority and that enlistment would be limited to those on the eligible list at headquarters and to applicants

   Training in Engineering; "History of Scott Field, 1 Jan. 1939-7 Dec.
   1941," 39.
63. WD Press Release, 15 Jan. 1942; "Instructions for Aviation Cadet
whose qualifications were yet to be determined by examining boards.

On 5 December 1942 a presidential proclamation terminated all voluntary enlistment in the Army. Henceforth all procurement had to come through the workings of selective service. Aircrew candidates were soon excepted from this ruling, and meteorology candidates were excepted until the end of January 1943, but other ground duty candidates had to come from the ranks of the enlisted men. This did not create a serious problem, for most ground duty categories had an oversupply of men on hand at the end of 1942. The following table indicates the situation at that time:

<table>
<thead>
<tr>
<th>Number in ACER Immediate Service</th>
<th>ACER Deferred</th>
<th>Applications Pending</th>
<th>Enlisted Man Eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meteorology</td>
<td>245</td>
<td>600</td>
<td>8</td>
</tr>
<tr>
<td>Engineering</td>
<td>445</td>
<td>915</td>
<td>23</td>
</tr>
<tr>
<td>Armament</td>
<td>249</td>
<td>674</td>
<td>59</td>
</tr>
<tr>
<td>Communications</td>
<td>152</td>
<td>223</td>
<td>98</td>
</tr>
<tr>
<td>Photography</td>
<td>89</td>
<td>151</td>
<td>60</td>
</tr>
</tbody>
</table>

The result of such numbers on hand was that ground duty training, with here and there an exception, was closed to applicants except for graduates from enlisted men's schools. Applications did continue to come in from civilians, and they were sent to the Aviation Cadet Branch, but no action could be taken on them until the applicants had been

65. AG to CG's, all corps areas and departments, 19 May 1942, in A/C Br. files.
Even this slim chance was closed in early 1944 when the ground duty program had reached a stage where no more applications were needed and the supply of officers on hand was adequate for any expected purpose.

Chapter V

THE RESULTS OF THE AVIATION CADET GROUND DUTY PROGRAM

The procurement phase of the aviation cadet ground duty program came to an end in the spring of 1944. It had got under way slowly during 1940. This slowness was due in part to the opposition to the training of ground duty officers as such, and partly to the small scale of the program once it was adopted. Early plans called for the restriction of the program to eliminees from pilot training, but later it was opened to civilians as well. The period of rapid procurement came immediately after the outbreak of war and lasted until near the end of 1942. By that time there were overlarge backlogs of candidates awaiting training. So great were some of these backlogs that the War Department declared that henceforth its policy was not to keep more than a year's supply on hand in advance of training. Men were scarcer in engineering than in any other field, but even here the difficulty either was not great or it had been resolved by the spring of 1943. In May of that year the backlogs in all fields were so great that no further applications were being accepted.

Step by step the procurement program came to an end. In November 1943 transfer from or reassignment of personnel in training at Army Service Forces and Army Ground Forces replacement training centers was brought to an end. In February 1944 the transfer of Army Serv-

1. A9 to C9, 2d Service Command, 26 Nov. 1943, in A9 220.33, Transfer between Armes and Services.
Ice Forces and Army Ground Forces officers and enlisted men to the 2 Air Forces also was closed. Finally on 29 March 1944 the Aviation Cadet Branch recommended to The Adjutant General that all aviation cadet examining boards be advised that no further examinations would be conducted for applicants for ground duty training, even if such examinations had been authorized. All existing quotas were filled and all applications which had been sent to examining boards were to be returned to headquarters for disposition.

This officially marked the end of procurement, which in practice had ended long before, although it did not mean the closing of the training program. On 31 May 1944 approximately 4,577 men were training in ground duty courses. During this same month 677 were admitted to training classes. Of the total number in training, 77 were officers training in grade and 4,500 were regular ground duty cadets.

Altogether by this time 29,325 men had been admitted to ground duty training, 717 being officers training in grade. Of this number 21,823 had been graduated from the various courses, and 2,921 had left the courses either through elimination or transfer to some other field of training.

The five ground duty fields presented the following picture, in terms of statistics as of 31 May 1944:

---

Admitted to Classes  Graduated  In Training  "Losses"

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Admitted</th>
<th>Graduated</th>
<th>In Training</th>
<th>&quot;Losses&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armament</td>
<td>3,419</td>
<td>2,505</td>
<td>414</td>
<td>238</td>
</tr>
<tr>
<td>Communications</td>
<td>7,815</td>
<td>5,715</td>
<td>1,502</td>
<td>593</td>
</tr>
<tr>
<td>Engineering</td>
<td>7,650</td>
<td>6,464</td>
<td>926</td>
<td>151</td>
</tr>
<tr>
<td>Meteorology</td>
<td>7,474</td>
<td>4,377</td>
<td>1,387</td>
<td>1,710</td>
</tr>
<tr>
<td>Photography</td>
<td>1,518</td>
<td>1,335</td>
<td>85</td>
<td>45</td>
</tr>
</tbody>
</table>

In terms of sources of origin the total number coming into ground duty training was about equally divided between candidates from civilian life and enlisted men from the Army. The bulk of civilians came in before the end of voluntary enlistment in December 1942. Conversely, the bulk of enlisted men came into the program after that date although, because of backlogs, certain civilian candidates continued to come into training for some time thereafter. Of the enlisted men who took ground duty training, about 30 per cent came from the AAF and the other 70 per cent came from the Ground and Service Forces.

In terms of previous qualifications the enlisted men divide as follows: About 60 per cent of them came into ground duty training because they qualified in the usual manner by meeting the necessary educational requirements and passing the aviation cadet examining boards, and about 40 per cent came into the program as top graduates of enlisted men's courses in the technical schools for enlisted men. Such men were given a course of additional training and then commissioned as if they had gone through the procedures for men from civilian life.

5. Interview with Maj. J. A. Brown, Jr., A/C Br., 18 July 1944. The above statistics and those following, as well as the opinions expressed, are based on materials obtained in this interview.
The opportunity was not really open to enlisted men until the middle of 1932, and even then it came at a time when training loads were already heavy. It took considerable time to overcome the reluctance of those in authority to accept enlisted men as future officers. There appears a curious dichotomy in the kind of thinking which would accept a man as an officer if he had been selected directly from civilian life, but which balked if he had come from civilian life by way of an enlisted men's technical school. Such an attitude is in the spirit of the early opposition to ground duty training as such.

Transfer from enlisted men's status was never easy. No matter how well qualified, the enlisted man was under the orders of his superior officer. For instance, if a graduate engineer appeared to be doing good work in a position which, regardless of its nature, was deemed important to the command to which he was attached, his superior officer in many cases made it difficult for him to apply for officer training.

Fortunately the Aviation Cadet Branch functioned as a personnel organization within which the individual was treated as such. The buck private could and did ignore channels. He could write in his complaints or go in and talk. And if pressure had been put on him to prevent application or if his application had been pigeonholed, the problem could be investigated. And where facts supported the complaints, it was sometimes possible to correct situations in which officers were acting as bottlenecks.

Despite the difficulties, about 50 per cent of the men in the
ground duty program did come from the ranks of enlisted men. How many more could have been procured if the idea of commissioning the best enlisted men had been accepted at the start, no one can tell. But the lesson for future planning is obvious and can be ignored only in times of relative security. This lesson is that in modern war, any policy which refuses to use the best men as officers, whatever their source, is as suicidal as to refuse the best weapons and machines.

Included in the over-all figures for enlisted men are those for eliminess from aircrew training. It is estimated that only 4 per cent of all ground duty cadets came from this group, a figure surprisingly small in view of the amount of discussion involved and the training difficulties that were experienced. However, when the ground duty program began the concentration was upon eliminess and, in the case of armament, was limited to this category until the middle of 1943. Eliminess seem to have been the biggest single problem at Lowry Field where armament training was given. The Training Command was increas-ingly opposed to using them. The assumption—and it was based on considerable evidence—was that eliminess from aircrew training looked on ground duty training merely as a means of getting a commission. They wanted to fly, not serve on the ground; they resented the fact that they had flunked out and hence did not put into ground duty training the necessary kind of spirit and work. Furthermore the educational requirements for eliminess in armament training were lower than for civilians taking the same work and to that extent they were less well qualified.

Increasing opposition by the Training Command to the use of elimi-
nese brought about a change in practice if not in expressed policy.

Early in the program eliminees were encouraged to go in for ground duty training. As opposition increased less and less encouragement was offered. If an eliminee was qualified and wanted to go into ground duty training, he was allowed to do so, but he was not asked or encouraged to apply.

Elimination from ground duty training itself was not a serious problem. Reports of class after class show but few eliminees and sometimes none at all, an indication that trainees were well selected.

The numbers are so few that they can be accounted for on normal grounds of lack of preparation, lack of interest, personality difficulties, and the like. The "losses" indicated for the various categories are perhaps more the result of transfers to other kinds of duty than of elimination because of class failure.

There was one further point of contact between the Aviation Cadet Branch and the Training Command. One of the major difficulties of procurement was the necessity of relating it to the capacities of the Training Command. If ground duty cadets had been trained at a steady rate, or even at a steadily increasing rate, it would have been possible for the Aviation Cadet Branch to plan ahead and recruit men in an orderly fashion. It would have been possible to avoid both oversupply and undersupply of men awaiting training. Oversupply meant that men had to wait undue lengths of time before assignment to class. The result often was bad publicity in local areas and protests to congressmen and the Army from disgruntled candidates and their parents, or from the parents of boys already in the Army. If the supply were too small,
there was constant danger of not having enough men to fill classes, with a resultant waste of training time and instruction.

The variations in the training rate were the chief cause of trouble. There were many and sudden changes in the rates at which the Training Command asked men delivered to classes. This affected procurement in the following ways. If there was a backlog of 600 students on hand for a given form of ground duty and the training rate was 100 a month, the 600 constituted a six-month backlog. These men could be assigned to classes in an orderly fashion, and others could be procured for future classes with some precision. But if the rate of training was jumped to 200 a month, what had been a six-month backlog became, in an instant, only a three-month backlog. Conversely, if the training rate was cut to 50 a month, the automatic result was a year’s backlog. There was at one time, in view of the current training rate, a six months’ supply of communications and photography candidates. The training rate was reduced suddenly so that the six-month supply became a two-year supply.

The consequences were had so far as candidates were concerned. The Aviation Cadet Branch has the record of one man who had to be assigned to five different entering classes, with dates ranging over a period of a year and a half, because of the changing training rates in his particular field. It was difficult also to plan for the future with any degree of certainty, either in terms of regular procurement or of assignment to classes. The solution of the problem lay, perhaps, in more farsighted and orderly planning in echelons higher than the Aviation Cadet Branch. Whether or not any solution was attempted does not appear. The continued existence of sudden changes would seem to indicate that if attempted, it was not effective.
GLOSSARY

AAB  Army Air Base
AAF  Army Air Forces
AAJ  Air Adjutant General (used to indicate AAF Central Files)
AOC  Air Corps
AO/AS  Assistant Chief of Air Staff
ACTC  Air Corps Training Center
ACTD  Air Corps Training Detachment
ACIS  Air Corps Technical School
ACTC  Air Corps Technical Training Command
AFCC  Air Force Combat Command
AFMOS  Directorate of Management Control
AFDPO  Directorate of Personnel
AFTC  Flying Training Command
AFHPI  Historical Division, AG/AS, Intelligence
AGJG  Adjutant General
AGMP  Military Personnel Division
AFTID  Directorate of Individual Training
AFTRC  Training Command
AFTEC  Technical Training Command
AG  The Adjutant General
Asst.  Assistant

Br.  Branch
BCT  Basic Training Center

C/AAF  Chief of the Army Air Forces
C/AO  Chief of the Air Corps
C/AS  Chief of the Air Staff
CG  Commanding General
CO  Commanding Officer

Dist.  District
Div.  Division

Exec.  Executive

F/C  Flying Cadet

GCASTC  Gulf Coast Air Corps Training Center
GHQ AF  General Headquarters Air Force
GO  General Orders
Hq.

OCAO

Office of the Chief of the Air Corps

R&F

Routing and Record Sheet

RTC

Replacement Training Center

SACOG

Southeast Air Corps Training Center

Sec.

Section

Stat.

United States Statutes at Large

T&O

Training and Operations

WCAOG

West Coast Air Corps Training Center

WD

War Department
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211B Cadets
211C Cadets
211D Cadets
211E Cadets
211F Cadets
211 Radio and Communications Officers—Meteorologists
211A Radio Operators—Meteorologists—Weather Service
220.1 Appointment of Aviation Cadets
220.33 Transfer between Arms and Services
221 Armorerers
221 Engineers
221 F1 Cadets
221 F2 Cadets
221 F3 Cadets
221 Engineering Officers
221 Photographers

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Next to the files in the Aviation Cadet Branch, these Central Files volumes were the most important source of information for this study. The material ranges from 1917 to 1944 in time and is very diverse. Some of the file volumes were of little use except for background reading.

Aviation Cadet Branch

The files in the Aviation Cadet Branch, Military Personnel Division, office of the Assistant Chief of Air Staff, Personnel, contain copies of correspondence and other documents upon which this study is primarily based. While much of the material is duplicated in Central Files, some of the important documents were found only in the Aviation Cadet Branch and they were more compactly arranged and more readily usable there.

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221.99  Aviation Cadets (5-12-42) ES
Special Studies

Bonheur Maintenance Training in the AAF. AAF Historical Studies: No. 8, June 1944.

Useful for materials on origins of the ground duty program.


Detailed account of the legislative background.

Procurement of Aircrew Trainees. AAF Historical Studies: No. 15, August 1944.

A closely related study based on some of the same materials.

Miscellaneous

Folder of micrographed releases of The Adjutant General's Office, in the files of the Secretary of the Air Staff.

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Interviews with Maj. John A. Brown, Jr., Aviation Cadet Branch, 2 May 1944, 18 July 1944.

Appendix

SUMMARY OF EDUCATIONAL REQUIREMENTS FOR GROUND DUTY TRAINING

20 November 1940

ARMAMENT: college graduates especially recommended by commanding officers of training detachments from which candidates eliminated.

COMMUNICATIONS: college graduates with some knowledge of electricity or radio.

ENGINEERING: first priority, college degree in engineering; second priority, senior standing in engineering college.

PHOTOGRAPHY: college graduates with knowledge of chemistry or geology.

23 July 1941

ARMAMENT: restricted to eliminess; college graduates especially recommended by commanding officers for mechanical aptitude.

COMMUNICATIONS: open to all applicants; enlisted men with two full years of college and who have completed radio course at Scott Field and who are recommended by commanding officer are eligible.

ENGINEERING: open to all qualified candidates.

PHOTOGRAPHY: applications not accepted because of large eligible list.

7 January 1943

ARMAMENT: open to civilians, former aviation cadets, and cadets currently undergoing instruction; "preferably men who have had training in engineering or science." This was amended in letter from TAG to commanding generals, corps areas, 23 February 1943: "Armament limited to former aviation cadets eliminated from pilot instruction because of flying deficiency, who have completed two years of college with one year of physics and who are recommended by commanding officer of Air Corps Training Detachment for such training.

ENGINEERING: completion of at least three years of engineering at an accredited college or university.
COMUNICATIONS: open to men who have completed two years of engineering at an accredited college or university or who have completed two years of college and who hold an amateur radio license.

Annexed, TAC to commanding generals of corps areas, 23 February 1942: "Candidates must have completed at least two years of engineering training in college, or two years of college and hold a current amateur radio license, or two years of college with one year of physics."

METEOROLOGY: college graduates who have specialized in sciences, engineering, and who have satisfactorily completed thorough courses in mathematics including differential and integral calculus and physics, including heat and thermodynamics.

PHOTOGRAPHY: completion of at least three years of chemistry or geology in an accredited college, preferably with professional or considerable amateur experience (applications not being accepted until further notice).

4 April 1942

ARMAMENT: Applicants may be civilians or former aviation oads who have not failed in ground school subjects or who are recommended by commanding officers. Civilians must have two years of college engineering; former oads must have two years of college with one year of physics.

COMUNICATIONS: two years of college including one year of physics or two years of college with an amateur or commercial radio operator's license.

ENGINEERING: three years of engineering in accredited college.

METEOROLOGY: three years of training at accredited college, majoring in sciences or engineering; should have completed differential and integral calculus and physics, including heat and thermodynamics; must have been in upper third of class in college.

PHOTOGRAPHY: at least three years of chemistry or geology, including physiography, at accredited college and amateur or professional experience.

10 September 1942

ARMAMENT: Civilian candidates and candidates from enlisted ranks must have completed two years of college engineering; shopwork and chemistry desirable.
COMMUNICATIONS: two years of college engineering, or two years of college and an amateur radio license.

ENGINEERING: at least three years of engineering in accredited college.

METEOROLOGY: as in Manual of 4 April 1942.

PHOTOGRAPHY: as in Manual of 4 April 1942.

22 February 1943

ARMAMENT: as above (closed to new applicants).

COMMUNICATIONS: as above (closed to new applicants).

ENGINEERING: two years of engineering or the equivalent thereof. ("... this means that men who have graduated from the technical training course for enlisted men with high marks and/or who have had line experience or civilian experience which would, along with qualities of leadership, qualify them for this training.")

PHOTOGRAPHY: two years of college with amateur or professional experience (closed to new applicants although a few very well qualified enlisted men are being accepted).

METEOROLOGY: satisfactory completion of two years of engineering or science, with thorough courses in differential and integral calculus, and one year of college physics (this is taken from 1st endorsement dated 16 February 1943 on basis: Headquarters, Basic Training Center No. 9, 5th Dist., AAFTC, Miami Beach, Fla., to TAG).

15 December 1943

ARMAMENT: two years of engineering at accredited college.

COMMUNICATIONS: two years of engineering at accredited school or two years of college, with an amateur radio license.

ENGINEERING: two years of engineering at accredited college.

PHOTOGRAPHY: three years of chemistry or geology at accredited college and amateur or professional experience.
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