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STUDENT REPORT

THE ENLISTED PILOT PROGRAM IN THE
USAAF 1941-1942: WAS IT SUCCESSFUL?

MAJOR HARRY O. MAMAUX, III 84-1655

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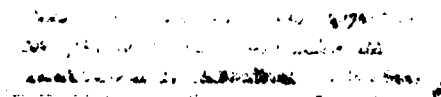
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This paper reviews a unique program of pilot accession in WWII. The controversy between the need for pilots and the need for officers is discussed in light of Army traditions and Congressional action. The problems encountered with enlisted men as front line pilots are reviewed. Interviews with former enlisted pilots provide an additional perspective. The importance of this historical study and its future application is addressed.		

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PREFACE

The Enlisted Pilot Program in the U.S. Army Air Forces lasted less than two years. It began with the signing of the Aviation Student Act (Public Law 99) on 4 June 1941 and the first class, Class 42-C beginning on 23 August 1941. The end was signaled with the passage of the Flight Officer Act (Public Law 658) on 8 July 1942 and the program terminated with the graduation of Class 42-J on 10 November 1942. During the period 23 August 1941 to 10 November 1942 over 2580 enlisted men were trained in grade and graduated as Staff Sergeant Pilots. This training tested a controversy that had raged in the Army and Congress for almost thirty years: the need for pilots versus the need for officers.

The training of enlisted pilots began in the spring of 1912 but was continually attacked by traditionalists who felt only officers and college educated individuals possessed adequate mental abilities to fly. Impending war and critical pilot shortages brought Congressional action during 1940, directing the Army to tap this additional source of pilots. Army and Congressional action was swift but serious problems emerged.

While the enlisted pilots were highly motivated, capable, and successful, attempts at matching enlisted and officer pilots to the same duties created serious morale problems. Key to the cancellation of the program was the question of equal work for equal pay. Termination of the Enlisted Pilot Program in 1942 did not eliminate all enlisted pilots.

The program trained fully qualified universal pilots who wore the same pilot wings as officers. The Air Corps continued to train enlisted men as limited duty pilots such as Glider or "G" pilots and Liaison or "L" pilots. These pilots should not be confused with the regular enlisted pilots. Their training was less, their duties limited, and their pilot wings contained the "G" or "L" of their specialty. In the eyes of the 2580 enlisted pilots these others were not pilots.

Many of the enlisted pilots continued in the military, were commissioned, and retired as senior officers. The program clearly provided a new source of pilots and tested one's need of college education to fly a plane. Our ability to adequately man combat aircraft in the next century may require a look at this unique program of WWII.

CONTINUED

I would like to extend my thanks to Dr. James C. Hasdorff of the Oral History Department (USAFHRC/OH) for his assistance in directing me in the proper methods of obtaining the oral histories of four former enlisted pilots. I must also express my appreciation to the following individuals who gave freely of their time and experiences to assist me and record those years that they so fondly remember and that shaped their lives and our nation's history:

Edgar A. Armogast, Lt. Col., USAF (Ret)	Class 42-D
James E. Beck, Major, USAF (Ret)	Class 42-H
Bernard Makowski, Lt. Col, USAF (Ret)	Class 42-J
Walter F. Mayer, CW01, USAF (Ret)	Class 42-J

Their recollections will be transcribed and become a permanent part of the USAF Historical Research Center. But most importantly, I thank my wife for her patience and typing of this study.

ABOUT THE AUTHOR

Major Harry O. Mamaux, III earned his commission through the Air Force ROTC program while attending Lehigh University. He holds a B.S. in Business and Economics from Lehigh and an M.S. in Management from the University of Arkansas. During his career in the Air Force, Major Mamaux has served various tours as Chief of Services, Food Service Officer, and Commissary Officer. He has served with SAC, USAFSS, PACAF, ADCOM and AFCOMS, and his overseas tours include Turkey, Thailand, and Spain. In 1977 he attended the Air Force Institute of Technology Education-With-Industry program in grocery management with J. Weingarten, Inc. of Houston, Texas. Major Mamaux has taught courses in business for Chapman College and was one of the Outstanding Young Men of America in 1981. Major Mamaux is a graduate of Squadron Officer School and has completed Air Command and Staff College by correspondence. He is presently attending ACSC in residence.

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REPORT NUMBER 84-1655

AUTHOR(S) MAJOR HARRY O. MAMAUX, III, USAF

TITLE THE ENLISTED PILOT PROGRAM IN THE USAAF 1941-1942:
WAS IT SUCCESSFUL?

I. Purpose: To review a little known and unique pilot accession program of the U.S. Army Air Forces. This program provided a new source of pilots during a period of critical shortage in the pilot expansion program of early WWII. The controversy over the need for pilots and the need for college educated officers created factions within the Army and Congress. The implementation of the program reveals its success and inherent problems. Taped interviews with four enlisted pilots gives additional information on this almost forgotten program.

II. Conclusions: The program was extremely successful in providing a new source of highly motivated pilots. Many of these individuals continued their military careers and were later commissioned. The need for a college education is mandatory for a commissioned officer but is of questionable value solely to be a pilot.

III. Recommendations: The lessons learned in the enlisted pilot program should not be forgotten. Increased college expenses, decreasing availability of manpower, and a continued need for qualified pilots may produce a future use for non-

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college educated limited duty officers or enlisted pilots. Knowledge of this program may aid in guiding Air Force personnel policies in the next century.

Chapter One

ORIGINS OF THE PROGRAM: THE FOUNDATION PRELUDE: 1912-1939

The training of enlisted men as pilots has always been a controversial subject. The controversy centers on the need for increased education necessary to be a successful pilot. One view feels that the physical aptitude of eye-hand co-ordination, balance, and instinctiveness are the only things required to be a good pilot. Proponents of this theory point to the fact that successful completion of ground school does not prevent disqualification in the hands on, actual flying phase. The other view feels that increased education and a higher mental ability permit an individual to comprehend the theory of flight and therefore easily adjust to flying. Similarly they feel that increased education guarantees a higher rate of success in pilot training. This is the controversy over the training of enlisted men to fly. The need for enlisted pilots became evident in the pilot shortage of 1940. The training of those enlisted men in periods of pilot shortages fueled the controversy. The actions that occurred within the U.S. Army and Congress concerning enlisted pilot training between 1912 and 1939 are depicted in the time phase chart in appendix 1. These events are critical to an understanding of the enlisted pilot program of 1941 to 1942.

The first enlisted pilot was Corporal Vernon L. Burge, who received his flight training in the Spring of 1912 at Fort McKinley in the Phillippines. Corporal Burge had been a maintenance man on aircraft for several years. Having served with his commander, Lt Lahm, both in the States and now overseas; his physical abilities and thorough knowledge of the aircraft were well known. When Lt Lahm could not find enough officers for pilot training, Corporal Burge volunteered and was accepted (4:12). Additional combat ready enlisted pilots would be key to the defense of Corregidor should additional airplanes become available.

The successful training of additional pilots was communicated to Signal Corps headquarters in Washington, D.C. On 21 June 1912 Lt Lahm received a strong reply concerning Corporal Burge, from Brigadier General James Allen, Commander, U.S. Army Signal Corps:

It is not the policy of the War Department to train enlisted men in flying aeroplanes. Their military

training is such that very few enlisted men are qualified to observe military operations and render accurate and intelligent reports of what they see from an aeroplane. Another objection is that very few enlisted men have sufficient knowledge of mechanics to appreciate the stresses to which an aeroplane is subjected during certain maneuvers (1:31).

General Allen struck a note that echoed until 1942. The controversy that Lt Lahm started has continued to this day.

A 1914 War Department staff study concluded that more enlisted men should be trained as pilots. As a result, War Department Bulletin 35 stated:

...that 12 enlisted men at a time shall, in the discretion of the officer in command of the aviation section, be instructed in the art of flying (15:2).

Although the War Department admitted that enlisted men could be trained as pilots, the numbers were severely limited. Other changes soon appeared.

The National Defense Act of 3 June 1916, (39 Statute 175) stated in section 13:

The Secretary of War shall have authority to cause as many enlisted men of the aviation section to be instructed in the art of flying as he may deem necessary (15:3).

This change, superseding the previous act of 18 July 1914, (War Department Bulletin 35), raised the ceiling on enlisted pilots and signaled a clear victory for the proponents of the program. However, it was far from final. The level of approval in the chain of command had been raised from the aviation section of the Signal Corps up to the Secretary of War. On 19 August 1916, 39 Statute 584 was published giving the Secretary of the Navy the same power to train enlisted pilots. Passage of these laws indicated Congressional support and approval for the training.

During WWI enlisted pilots continued to be a novelty (2:30). While the previous acts of 18 July 1914 and 3 June 1916 confirmed the training of enlisted men, only 16 were trained during the war years (2:30). These men performed a variety of duties including testing, courier and utility flights, and flight instruction (2:30). While some flew in place of other officer pilots who could not make the day's schedule, none were known to have flown in combat (2:30). Little more is known of enlisted pilots during WWI but their numbers continued to grow until there were some 40 enlisted pilots by 1920 (2:30).

On 4 June 1920 the Army Reorganization Bill, (41 Statute 768), created the Air Service as a separate branch of the Army and deleted all previous provisions for the training of enlisted men as pilots (15:8). No training of enlisted pilots was conducted in the Army from 1920 to 1923 (15:8,9).

The question of training enlisted men re-surfaced on 31 May 1923 in a letter from the Chief of the Air Service, Major General Mason M. Patrick, to the Adjutant General, Major General Robert C. Davis, recommending that authorization be granted to train, as pilots, certain Air Service Non-Commissioned Officers in the first three grades (15:10). The letter was sent to Operations and Training and approved on 7 June 1923.

During 1924 the training of enlisted pilots was again reviewed. A 6 May 1924 memorandum to the Chief of Operations and Training set the tone of what was later to become the Aviation Student Act. It stated:

...that all flying cadets who qualify as airplane pilots and are returned to an enlisted status should be placed on flying duty to materially supplement pilot strength of units in peace time and to assist in providing for the expansion of units to war strength in an emergency (15:12).

In 1925 the President of the United States appointed a commission to study Aircraft in National Defense. It was chaired by the Honorable Dwight W. Morrow. In page 105 of its report to the 1st session of the 69th Congress, 10 December 1925, the Morrow Board recommended:

...that a careful study be made of the desirability of increasing the use of enlisted men as pilots in the Air Corps (15:22).

While no such study was completed, the Morrow Board recommendations were applied. The act of 2 July 1926, (44 Statute 781) said:

On and after July 1, 1929, and in time of peace, not less than 20 per cent of the total number of pilots employed in tactical units of the Air Corps shall be enlisted men, except when the Secretary of War shall determine it is impractical to secure that number of enlisted pilots (15:22).

This was a victory for those favoring the training of enlisted pilots; however, the almost two year delay in the application of the law is questionable. Hence, this law was never strictly enforced. Training continued under this provision at the rate

of an average 50 enlisted pilots per year, peaking at 117 in 1934 and dropping to 27 in 1939 (15:I-3). But, events in Germany prompted an Air Corps Expansion Program in 1939. This expansion program called for increasing the number of pilots trained from 4,500 to 7,000 to 12,000, 30,000 and finally 50,000 per year (12:432).

DISCUSSION: 1939-1941

The controversy over enlisted pilots had clearly not been resolved as of 1939 and their training was minimal. The central question in this training concerned educational level. Since 1927 the educational requirement for a "Flying Cadet, Air Corps" was two years of college or equivalent (14:1). At the beginning of the expansion program, enlisted men were indeed eligible for pilot training but were required to possess the two years of college. They were accepted in training as "Flying Cadets" and graduated as commissioned officers. A serious conflict arose between meeting the goals of the pilot expansion program and finding college educated individuals. This is especially clear following the depression years when college enrollment had dropped drastically. It was the Army's position that with the higher educational requirements, graduates at the Air Corps Flying Schools increased from approximately 20 per cent to approximately 40 per cent (14:2). All were not convinced of the need for college education. By the end of 1939 less than 27 enlisted pilots remained, and their numbers were dropping rapidly (3:23).

On 9 October 1940 Senator Edwin C. Johnson of Colorado stated he recognized the Army's need for well trained aviators but he considered "absolutely asinine" the regulation requiring two years of college. No further action was taken on Senate Bill 4365, the basis for the Air Corps Expansion Program, until after the election recess ending 18 November 1940. Because of the need for more pilots, the Air Corps was already planning on the training of enlisted men in grade as pilots (12:60).

The need for training of enlisted men as pilots became gravely apparent in December 1940 as there was a growing critical shortage of pilot training applicants who could meet the two year educational requirements (12:63). A New York Times article of 15 December 1940 cited the War Department's announcement that the Air Corps was far short of pilot students and applicants. There were not enough pilots to fly the new airplanes. It further stated that it might be necessary to lower the educational standards in order to accelerate the personnel expansion program and keep step with pilot objectives (12:64). Interviews with enlisted pilots suggest that this feeling was widespread. Mr James Beck stated, "We had long felt the Army would do away with that requirement" (46:-). Many like Mr Beck joined the Air Corps as enlisted men solely in the hope of an opportunity to fly.

But as serious as the problem had become, many in the War Department didn't yield on the education requirement.

In January 1941, the Secretary of War, Henry L. Stimson, proposed that the United States Office of Education establish a cram course for high school students to prepare them for the Air Corps Flying Cadet Examination. He recommended a three month program given three times per year to conduct courses in history, geography, physics, algebra, trigonometry and other subjects to raise the educational level of high school graduates. The Federal Security Agency ruled out the proposal only due to lack of funds (12:65). The Chief of the Air Corps, General Arnold, also did not approve of this type of training. General Arnold stated:

There can be no permanent benefit to the individual or to the service from an expenditure of public money for this sort of training of combat personnel (12:65).

The statement added that an alternative proposal to remedy the shortage of pilot applicants would be to amend the existing educational standards (12:65).

On 27 December 1940 the Under Secretary of War Robert P. Patterson wrote in a memorandum to General H.H. Arnold:

I submit that the time has come when we should not require two years of college for the Air Corps. It seems to me that this requirement is barring a large number of capable and eligible young men from becoming pilots (12:67).

In reply General Arnold indicated that this had been under study for some time. He stated that the educational requirement was retained only because aviation cadets were being commissioned after graduation from pilot training. General Arnold further stated that if a grade of non-commissioned officer pilot was created, the Air Corps would be able to accept candidates with lower educational standards. This would be a "good thing for the Air Corps and a necessary step" (12:67). In a separate memo to the Chief of Staff of the Army, General George C. Marshall, General Arnold stated that while the use of enlisted pilots would upset traditional Army Air Corps practice, it would undoubtedly increase the number of pilot candidates. With the expansion program so large and, since the Navy also used enlisted pilots, General Arnold felt that the War Department should adopt a similar plan for using enlisted pilots. They would train up to about 20 per cent of the total number of pilots in tactical units (12:67). The movement toward a formal enlisted pilot training program was underway.

General Arnold was a moving force behind the enlisted pilot

program and the eventual implementation of the Aviation Student Act. Mr J.H. MacWilliam, former enlisted pilot, stated that the enlisted pilots considered General Arnold their mentor. However, General Arnold expressed caution about the program when he said, "It would upset the traditional Army Air Corps practice". This traditionalism seems similar to the "guidance" and rebuke given Lt Lahm in 1912. The reference to 20 per cent of the total number of pilots is a direct excerpt from the act of 2 July 1926. Thus the enlisted pilot program was adapted as a stop gap measure to obtain extra pilots. The Air Corps Expansion Program of 1939 projected increasing pilot training from 4,500 per year to 30,000, and the eventual goal of 50,000 pilots per year (12:432). In staff communication to the Chief of Staff Army, General Marshall, on 25 January 1941, the Assistant Chief of Staff, for Operations and Training, Brigadier General Harry L. Twaddle recommended that the Secretary of War prepare legislation to permit the training of enlisted pilots (12:68). The "cautious" push for enlisted pilots had begun in earnest.

In early February 1941 Under Secretary of War Patterson wrote to the Special Assistant to the Secretary of War, Mr Robert A. Lovett:

If the Air Corps has not already done so, it seems to me that it should, without further delay, abolish the requirement of two years of college for flying cadets. I should be glad to have your views (12:69).

Mr Lovett requested the Air Corps to make every effort to push enlisted pilot training (12:69).

Army tradition and the desire to retain an officer pilot corps now was pitted against the desire of the civilian leaders to get more pilots. In a reply to the Under Secretary of War Patterson, Major General George H. Brett stated in a 28 February 1941 memorandum that the current educational requirement was not two years of college but two years or equivalent and that educational requirements could not be lowered for "flying cadets" since this group was commissioned as officers in the Air Corps Reserve and would make up the pool of officers for Regular Air Corps commissions. He stated that action had been taken to secure legislation needed to train enlisted pilots with only a high school education. If this was approved the training would begin about 1 July 1941 (12:70). The education controversy and General Arnold's desires are summed up in a 4 April 1941 memorandum from Major General Brett to Colonel Robert C. Candee, Chief of the Intelligence Division:

In conversation with General Arnold yesterday he stated he considered it absolutely essential that the proposed bill for the enrollment of enlisted men to take the flight training course should be given considerable attention.

At present there is a lot of criticism over the fact that we retain a two year college requirement for flight training as a pilot. He believed that publicity pertaining to the training of enlisted men as pilots will offset action to reduce the qualifications for pilot training as a Reserve Officer (12:69).

Strangely enough, a "leak" occurred soon after General Brett's memorandum. On 6 April 1941 the New York Times reported that the Army Air Corps and the Navy were preparing to let down the barriers to enlisted men as pilots to produce an adequate number of pilots for the new aircraft being produced. The article further stated:

Some officials believe that only by following the example of Germany and Great Britain in making pilots of enlisted men can the Army attain its objectives of 30,000 fliers a year. The prospective change in policy by the Army Air Corps may be put into effect in the summer (12:70).

The groundwork had been laid for the Enlisted Pilot Program; only the formalities of the democratic process stood in the way.

On 22 April 1941 Senator Robert R. Reynolds of North Carolina introduced Senate Bill S. 1371 to authorize the training of Army enlisted men as aviation students (12:71). The bill was passed by the Senate on 15 May; referred to the House Committee on Military Affairs on 19 May; passed by the House without amendment or discussion on 21 May; and signed into law by the President on 4 June 1941. The bill became Public Law 99, the Aviation Student Act. It provided for training in grade, as pilots, enlisted men of the Regular Army on active duty status. They were to be known as aviation students rather than aviation cadets (11:72). On 1 August 1941 AR 615-150 was published stating the requirements for training "young men who are physically and temperamentally qualified as combat pilots but lack the basic educational level deemed essential to a commissioned officer" and that graduates would become "Staff Sergeant Pilots" (12:74). The way was now open for the training of enlisted pilots.

CONCLUSIONS

Controversy over enlisted pilots remained essentially unchanged even after the passage of the Aviation Student Act. The educational requirement remained critical to the Army. Education served as a discriminator and separated the better qualified individuals to enter pilot training. Also education provided more versatile individuals who could perform other duties when their ability to fly was lost. This theory ran contrary to that for enlisted personnel, who were trained in a

specialty and retained in that area throughout a career. Thus the critical need for pilots drove the Army to implement the Enlisted Pilot Program in addition to the regular Flying Cadet Program. Since enlisted pilots were to be less than 20 per cent of the pilots in tactical commands total commitment to the program was questionable even before it began. Staff Sergeant Pilots took the same training and performed the same duties as officer pilots. The disparity of rank for the same duties was evidenced by former enlisted pilot Ed Armogast when he said:

The only difference between us was that on graduation day the commander said to them "stand up gentlemen" and they became Second Lieutenants and to us "stand up men" and we became Staff Sergeant Pilots (18:-).

But for the enlisted men it was the once-in-a-lifetime opportunity to become a pilot. These men were not concerned with the Army's goals of creating more pilots or the problems of tradition. They were concerned with flying!

Chapter Two

THE PROGRAM

INFORMATION

The Army had been planning for the program even before the passage of the Aviation Student Act. The Air Corps Newsletter of 15 June 1941 reported on the recent passage of the legislation. It encouraged all enlisted men to apply for pilot training as soon as final plans were made (7:2). In the 1 July issue of the Air Corps Newsletter, specific information on the program was published. Applicants were being accepted from all branches of the Army and from all military occupational specialties. It stated that men who had been turned down for appointment as aviation cadets would receive letters concerning the Enlisted Pilot Program. Mr Ed Armogast verified the notification procedure. He had taken the test for the flying cadet program but had failed and lacked adequate college experience. In a letter notifying him of his failure he was informed of the Enlisted Pilot Program and how to apply. He was accepted in Class 42-D. Knowledge of the program quickly spread and enlisted men heard of the program in various ways. Mr Bernard Makowski, enlisted pilot Class 42-J, recalled that he asked his commander, Captain Alcar, how he could become a pilot and was told of the "new Enlisted Pilot Program" (21:-). Mr Walter Mayer, enlisted pilot Class 42-J, said that he had read about the program on a bulletin or flier that had come through the office where he was a clerk (49:-). Mr James Beck, Class 42-J, said that he "just heard about the program around the squadron" (19:-). It appears that both officers and enlisted men were generally aware of the program's existence. The War Department however did not feel there was adequate knowledge of the program. In a 26 November 1941 letter, Secretary of War Stimson stated:

The present law authorizes the training of enlisted men as airplane pilots. War Department plans contemplate that 20 per cent of the number of pilots in tactical units of the Army Air Corps shall be enlisted men. In the last three pilot classes the number of enlisted men entered in each class was:

42-D September 182 or 10.3 per cent of the total

42-E October	188 or 6.3 per cent of the total
42-F November	325 or 10.0 per cent of the total

These numbers are inadequate to meet requirements and indicate that qualified enlisted men are either not aware of or are being denied the opportunity to apply for detail as aviation students (13:422).

USES

On 19 June 1941 General Arnold informed the Central Flying Training Command that the Enlisted Pilot Program would officially begin on 23 August 1941. A group of 200 students was planned to begin Class 42-C; 137 were to be sent to the Spartan School of Aeronautics, Tulsa, Oklahoma, and 63 to the Lou Forte Flying Service in Stamford, Texas (13:420). On 22 July 1941 the quotas and locations were changed. Class 42-C began with 125 trainees at the Spartan School of Aeronautics and 63 at Brayton Flying Service at Cuero, Texas (13:421). Of these 188 men 93 graduated as Staff Sergeant Pilots on 7 March 1942 from Kelly and Ellington Fields, Texas (8:3).

The Air Corps Newsletter stated that the primary use of the pilots would be in ferrying new aircraft from factories to their units. This non-combatant use was consistent with prevailing and past Army policies on the use of enlisted pilots. The 1940 study by Captain Aubrey Moore had seriously questioned the ability of enlisted pilots in combat units and as co-pilots on transport aircraft (14:5). Similarly the 20 per cent limitation seemed to remain a part of Army thinking. Thus initial use of the enlisted pilots was to be as a back-up force to free officer pilots for combat. However the events of 7 December 1941 drastically changed the uses of enlisted pilots and in particular those men of Class 42-C.

In contrast to the prior thoughts of the Army the entire 42-C enlisted class became fighter pilots in P-38's of the 82nd Fighter Group and were sent immediately to North Africa (18:-). On 2 December 1941 the decision was made to train enlisted pilots on single and twin-engine planes in the same proportion as cadets (13:422). Subsequent classes were assigned to P-40's, B-17's, C-47's, C-54's and B-24's. The enlisted pilots were integrated directly into combat units with the majority of each class being assigned to the same weapon system. These men became front-line combat pilots and their use within the continental United States in training, ferry duties, or Service Command was the exception not the rule.

WHY DID THEY VOLUNTEER?

The Enlisted Pilot Program offered a new group of individuals an opportunity to fly. It was an opportunity of a lifetime, and to many, a dream come true. Many had enlisted in the Air Corps with the hope of someday flying. Mr Armogast recalled a boyhood memory of watching two Army pilots land their bi-planes in a nearby field and walk into town in their fancy military uniforms. Mr Beck had flown and even owned airplanes before entering the Air Corps. He stated "I knew they had to drop that college requirement because they needed pilots. I was just waiting". Mr Makowski had been a crew chief on T-6's at Langley Field for about a year before he entered the program. One day he had performed some maintenance checks on a T-6. When a lieutenant came out to take a training flight, then Corporal Makowski said "Lieutenant Swanson, don't prime the engine because its hot and might catch on fire. I just finished checking it out". The Lieutenant replied "I know how to fly, corporal. I've been through pilot training". Lt Swanson proceeded to prime the plane, caught it on fire, and almost destroyed it. It was at that point that Mr Makowski, who had always longed to fly but had never the opportunity said to himself "If that dumb son of a gun can fly, so can I". Others, like Mr Mayer, merely liked airplanes and wanted to give it a try.

This desire was real and not always financially motivated. All pilots and student pilots received flight pay which at this time amounted to \$1 per day or \$30 per month in addition to their base pay. Thus the training period was lucrative. Graduation brought with it the rating of Staff Sergeant Pilot and pay of \$108 per month. For many in the grade of PFC or Corporal this was a promotion, but for many of the MSgts and Tech Sgts it would be a drastic reduction in rank. All enlisted pilots interviewed recalled higher ranking NCO's in their training classes.

Thus these men were motivated. They wanted to fly and the Army had given them a chance. They were entered in the most rigorous training program the Army had.

TRAINING

Training for the enlisted pilots was no different than training for the flying cadets. Critics of the program felt that standards were lowered to admit more pilot candidates and to insure sufficient numbers were graduated.

The training was divided into four phases, Pre-Flight, Primary, Basic and Advanced. Pre-Flight training was conducted at civilian contract fields and flying schools. Here the enlisted pilots were together and usually the only students being

instructed. It was here that most elimination from the program occurred. Discussions with former enlisted pilots revealed that eliminations were low and were just individuals who would never be able to fly a plane regardless of prior education or other training. Eliminations in Pre-Flight were around the average of 35 per cent to 50 per cent, but those that passed Pre-Flight usually finished the entire program. In Class 42-D, of the 111 students that finished Pre-Flight training only one is known to have been eliminated (18:-).

It was in the second phase, or Primary, where the enlisted pilots first came into contact with the flying cadets. It was in this integration that the Army did not have a fixed policy, and this is where the major differences began. Those enlisted pilots training at Maxwell Field, Alabama, lived off base in a building called the Old Mill on Bell Street. They lived, ate, and studied here, and mixed with cadet students only in class and flying. Since the enlisted pilots were regular Army they were not subjected to bed checks, inspections, or a basic training type atmosphere. For the cadet students Primary Flight Training was an extension of basic military training.

Mr Makowski vividly recalled the problems encountered with their status as enlisted pilots. He recalled that immediately upon arrival at Maxwell the inspection, bed checks, "sir, yes sir", "sir, no sir" treatment began. This lasted for several days until the enlisted pilots got together and confronted the commander stating that they were enlisted men in the regular Army, had been on active duty for several years, and didn't feel this type of treatment was proper or necessary. It was changed (21:-). Others like Mr Mayer said it was just accepted that whatever the flying cadets did the flying sergeants did. They were all treated the same (49:-). Still another recalled that the base commander made them sign a waiver, waiving their rights as enlisted men in the regular Army so they could be treated as flying cadets (19:-).

But regardless of off duty treatment, all agreed that the training was rough and long for both the flying sergeants and the flying cadets. There appeared to be no competition between cadets and sergeants nor was there any animosity. They worked and trained side by side and all had the desire to fly. Mr Makowski said he felt he might have had an easier time in some phases of training since he had been a mechanic and crew chief but that when it came to flying everyone was fairly equal (21:-). Mr Beck stated that even though he had flown before entering the Army that it wasn't easy (19:-). All agreed that the training was hard but sufficient, that the hours in the air were adequate, and that they were well qualified when finished (18:-). After all, as Mr Makowski and Mr Armogast both pointed out, "We were young, were doing what we wanted to do, and were having fun". "We weren't concerned with rank or the

war. We just wanted to fly" (18:-, 21:-).

Their high morale and desire to become pilots gave them a motivation others did not have and contributed to their success. A 17 July 1943 HQ AAF Training Command Psychological Statistical report clearly showed that they had the "right stuff". It concluded that the strength of the desire to become a pilot was very significant in successful completion. It further pointed out the largest percentage of men graduated was among younger men, men who wanted to be pilots, and oddly enough, men with less education. Individuals with 8th grade or lower education had the highest percentage of graduates of those entering (9:7). This may indicate a higher level of co-ordination and physical ability which was key to the operation of these basic, unsophisticated aircraft. It also pointed out that the training itself had adequate discrimination or elimination and that two years of college education was not needed as an eliminating factor from pilot training. Other factors were in their favor.

The fact that these enlisted pilots had been in the Army and had adjusted to military life put them at ease in the military environment. They were also better disciplined, which contributed to their successful completion of pilot training. In a 30 October 1942 letter from Major General Ralph Royce, Commander, Southeast Army Air Forces Training Center, Maxwell Field, Alabama, subject: Deficiency of Graduates, he stated:

Enlisted pilots are much better disciplined than commissioned officers. It is a mistake to mingle the two groups at Operational Training Units (OTU's) and fighter units.

CONCLUSIONS

The Enlisted Pilot Training Program appeared to be well administered by the Army. It provided a new source of qualified candidates highly motivated in their desire to fly. It was successful with the low elimination rate and provided the Army with new combat pilots. It had provided the additional pilots the Army needed at the beginning of WWII.

Chapter Three

THE PROBLEMS

The formal Enlisted Pilot Program was not without problems. Some existed within the Army before the program began, some were inherent in the training of enlisted men as pilots, and some were created as a result of the program. The aggregation of these problem areas resulted in the ultimate demise of the program.

The training of enlisted men as pilots had always been controversial. From the outset of enlisted pilot training in 1912 Army thinking had been generally negative on the subject. Even with Congressional approval and implementation in 1941 the program remained limited in scope. As a result, both officer and enlisted men knew the program existed but few knew or had ever seen an enlisted pilot or "flying sergeant". Enlisted pilots were oddities.

During cross country flights most enlisted pilots recalled some odd situations. Mr Makowski recalls taking a T-6 on a cross country flight from Valdosta, Ga. After landing at another base he was met by the field officer, a flying officer, who demanded to know what he was doing flying that plane. He explained that he was an enlisted pilot in training. Later, since he had been a crew chief on the same aircraft, he re-fueled his plane. This met with questions from the maintenance men because since he was a pilot he wasn't supposed to fuel his own plane. But he replied he was also a sergeant so he was going to do it and be off (21:-). Mr Armogast recalled landing a B-34 on a cross country flight with an entire enlisted crew. The base operations officer demanded to know what they were doing and where they had stolen the plane (45:-). The inconsistency of rank and duties was constantly a problem as people could not equate officer type duties with the enlisted rank.

Enlisted rank with pilot duty inconsistency grew as the Army system tried to decide whether the enlisted pilots should be dealt with as officers or enlisted men. As previously noted the inconsistency first occurred in Pre-Flight training when the enlisted pilots did not want to repeat basic training. Following pilot training these Staff Sergeant Pilots were assigned to flying squadrons. As in all units the additional duties of bay orderly, latrine duty, base clean-up and others were given to enlisted men. The Staff Sergeant Pilots were not given menial

or physical jobs but rather more officer type duties in the unit such as NCO of the day. Other differences with officer pilots were obvious.

The most obvious was the disparity of pay for the same work. Many Staff Sergeant Pilots flew fighter formations along with 2nd Lieutenants or more senior officers. In the case of the 62nd Troop Carrier Squadron, Staff Sergeant Pilots were co-pilots to officers. In some cases the reverse was true. Even in fighter units Staff Sergeant Pilots frequently flew lead over officers. The Army had the most difficulty in dealing with this, but for the pilots themselves, this posed no problem. It seemed that professionalism as a pilot transcended the rank structure. When asked if rank was ever a problem all enlisted pilots interviewed unanimously agreed it was not. To them it was simple: the best pilot or the one with the most experience took the left seat or flew lead. Rank didn't matter, the mission mattered.

Promotion opportunities also differed. Most Staff Sergeant Pilots were not promoted in NCO grades while officer progression in war time was rather rapid.

The fact that the enlisted pilot stagnated in rank was compounded by the Army's unequal view of retraining officers and enlisted men. If an enlisted pilot was taken off flying status it was felt he was out of his military specialty and money had been wasted, while an officer was seen as capable of a multitude of tasks and various command opportunities. The fact that an officer had been a pilot was seen as a benefit.

The use of the enlisted pilots was never clear and changed with the outbreak of war. The Air Corps Newsletter of 1 July 1941 stated: "Exactly how the enlisted pilots will be used after they graduate from the flying schools has not been determined" (6:5). The article further stated that use of enlisted pilots would change as their aptitudes were evaluated. The training would also change, as it was pointed out:

Members of the first class will undergo the same course of instruction as that given cadets but this is an experiment and is not likely to be repeated (6:5).

The major use of the pilots was felt to be in ferry duty transporting aircraft from the manufacturing plants to the units (7:5). Essentially the program was viewed as a peacetime effort fulfilling the less glamorous tasks out of combat and freeing other officer pilots for war time roles. The use of other enlisted personnel as glider pilots and liaison pilots emphasizes this point.

SUMMARY

The Enlisted Pilot Program faced several major obstacles. Attitudes within the Army had never fully favored such a program. From its beginning in 1941 it seemed as though the Army's goal was to create a second class or utility pilot program. The entry of the U.S. into WWII drastically altered the direction of the program. With this change came problems of command either with enlisted fighter pilots and their position in formation or with others as pilot or co-pilot in a crew that outranked them. Clearly this problem was more perceived than actual as the professionalism of being a pilot transcended the traditional rank structure. But throughout the program the enlisted pilot remained an oddity, equal but different. The problems were clearly noted by Brigadier General Gerald C. Brant, Commander of the Gulf Coast Air Corps Training Center. In his 9 July 1941 letter to General Arnold he strongly protested the training of enlisted pilots by saying:

It is believed and urgently recommended by this Headquarters that the training of enlisted pilots should be deferred until the available stock of college graduate applicants for flying training is exhausted and the need for lower standards becomes apparent.

We have at present a number of enlisted pilots in the Air Corps. They are neither fish nor fowl - no commanding officer at any Air Corps station has ever been able to fit them properly into the pattern of life of the Air Corps. Until the formation of transport squadrons for freight carrying, there was little use for them and they were an unhappy lot.

Rank and pay usually go with responsibilities. There seems to be no difference in responsibilities between the proposed enlisted pilot and his brother pilot who is an officer with more pay and allowances. This is bound to cause friction and loss of morale (13:421).

These problems drove the program to a rapid end.

Chapter Four

OTHER ENLISTED PILOTS

The Enlisted Pilot Program during the period 1941-1942 is specifically directed to those individuals who became regular, universal pilots flying the major types of fighter, bomber, and cargo aircraft in the same duties as officers, and who wore the same pilot wings as officers. There were other enlisted personnel who flew during the period; however, they differed from the enlisted pilots in two respects. First, these other enlisted men did not complete as extensive or rigorous a training program and thus were limited in the aircraft they could fly. Enlisted pilot training was six months with additional time for transition training into the specific fighter or bomber aircraft. The "other" enlisted pilots were in less rigorous training of from only six to sixteen weeks. Secondly, the pilot wings were different. The enlisted pilots wore the same wings as an officer with the basic pilot shield in the center. These other enlisted pilots' wings differentiated the aircraft they flew. For example the Glider Pilots' wings had the letter "G" on the shield, and the Liaison Pilot had the letter "L". To clarify any confusion between these other pilots and enlisted pilots a brief review of Glider and Liaison pilots is necessary. It must be re-emphasized that while both were enlisted, there was no other similarity between regular enlisted pilots and these "other" pilots. Any equation of the two is a disservice to the true enlisted pilots.

GLIDER PILOTS

As early as 1939 recommendations were made for the establishment of a glider pilot training program (11:116). However the newness of this area and the lack of an adequate number of glider aircraft and a sufficient number of training schools put an end to these suggestions.

In July 1940 a New York Times editorial urged the adoption of glider training as a basis for primary military pilot training (11:117). This thinking continued, and in 1941 various House and Senate bills were proposed to establish a glider program (12:118).

The Army was also thinking along these lines. On 25 February

1941 General Arnold directed that a study be made of troop carrying and cargo gliders. The results, presented on 28 May 1941, stated that glider training would be of little value to powered pilot training and that only an experimental view should be taken.

It was the successful invasion of Crete by Glider borne German forces in May 1941 that spurred the Army to establish and enter a formal glider program which began on 19 February 1942. The course was to be sixteen weeks and 130 hours of instruction with all students graduating as Staff Sergeant Glider Pilots. In 1943 with an excess of glider pilots these personnel were encouraged to apply for aviation cadet training and become pilots. The glider program officially ended on 15 January 1945.

LIAISON PILOTS

Possibly the best known of all enlisted pilots were the Liaison Pilots. These individuals completed a six week school with 40 hours of flying time and 194 hours of ground school. They were graduated as Staff Sergeant Liaison Pilots.

These individuals were limited to the L aircraft of the L-4 or L-5 type. These aircraft were 60 horse power single engine, four passenger, high wing planes similar to small private planes like the CESSNA. The duties of Liaison Pilots were in photo reconnaissance, courier duty, air rescue, and artillery observation. In addition to flying, these individuals possessed one or more other military specialties such as mechanics or photography. The majority of these candidates were eliminees from other training with up to 60 hours of flying time.

The Liaison Pilots operated in all theaters of combat and continued to be trained and fly until September 1945. The Army trained 4333 "L" pilots during the period September 1942 - September 1945.

SUMMARY

These pilot areas utilized enlisted personnel in distinct and separate missions from other pilots. In this respect some of the morale problems faced by the regular enlisted pilots who trained and flew with officers were erased. Additionally the "L" and "G" pilots were distinctly different. This "segregation" seemed to more fit the needs of the Army as these programs continued well past the end of the Enlisted Pilot Program.

Chapter Five

THE END - DISCONTINUANCE THE FLIGHT OFFICER ACT

The controversy over the training of enlisted pilots and the Army's inability to fully accept a pilot who was not an officer remained alive. Even while actions were being taken to implement the Aviation Student Program and pass the Aviation Student Act, simultaneous actions were underway to find a more palatable solution.

At 1000 hours on 10 December 1941 a conference had been held in the office of General Arnold to provide a plan for the procurement, career, and efficiency of all air crew personnel (16:1). Minutes of the meeting stated that the nine officers present were completely in accord that a rating of Flight Officer should be established for graduates of pilot training schools and other air crew members (16:1). This rank would be below a 2nd Lieutenant but still an officer. This discussion was tied closely with the Aviation Cadet Act and seemed to be temporarily set aside with the passage of the Aviation Student Act. Even while General Arnold was urging the passage of the Aviation Student Act for enlisted pilots he was simultaneously considering the Flight Officer Act which would provide a "way out" of the Enlisted Pilot Program. The Army continued to admit the need for additional pilots and the need to eliminate the two year college education requirement; however, it maintained that a pilot who was a commissioned officer must have the educational background and the mental ability to command (12:105). It was General Arnold's personal interest and sponsorship of the Flight Officer proposal which provided the key to its passage. Passage of the Flight Officer Act emphasized the Army's need for qualified combat pilots but proposed a more equitable pay and rank structure. The controversy continued even as the first classes entered the Enlisted Pilot Program.

A review of the Enlisted Pilot Program and the Aviation Cadet Program noted:

On the one hand, the aviation cadets, procured originally from civilian volunteers and qualified enlisted men of the regular Army, upon completion of their course, did not always measure up to the personality and leadership standards set for a

commissioned officer, although their technical ability qualified them for flying duty. On the other hand, among the enlisted men training as aviation students, personnel fully qualified to assume a commissioned status, or at least a status higher than an enlisted grade, were frequently found (17:55).

As a result a memorandum from the Assistant Chief of the Air Staff was forwarded to the Chief of Staff, Army, General Marshall, on 16 January 1942. It proposed legislation that would eliminate the category aviation student, designate all personnel aviation cadets, and upon graduation appoint them either 2nd Lieutenants or Flight Officers (17:55). The first class of enlisted pilots, 42-C, was not due to graduate until 7 March 1942. The cards were stacked against them!

Discussion and planning continued as the proposal was staffed through the Air Corps. In a 13 March 1942 memorandum for General Arnold, Lt Colonels C.P. Cabell and Lauris Norstad pointed out several disadvantages to the Flight Officer proposal, among them:

The mechanical requirements for piloting an airplane did not necessarily call for the qualifications or status of an officer. The need for pilots was of greater consideration than the need for officers and the lack of officer qualifications should not result in the elimination of able pilots (12:92).

The study, however, reached the conclusion that all pilots should be commissioned on graduation and that the proposed legislation be dropped. General Arnold however did not concur and a proposed Flight Officer Act was drafted and sent to the Chief of Staff on 1 April 1942.

On 25 May 1942 the Flight Officer Act was introduced by Senator Reynolds as Senate Bill 2553, and in the House by Representative May as House Resolution 7129 (17:56). The Senate Committee on Military Affairs heard testimony. Colonel Luther S. Smith, Director of Individual Training, represented General Arnold at the hearing. He stated:

This is a matter of particular concern to General Arnold and one in which he has taken a vigorous and personal interest because of his conviction that it will materially contribute to the fighting effectiveness of the Army Air Forces. There will be no more flying sergeants which will eliminate the difficulties which arise in intimate contact required between members of an organization who are flying together as pilots (16:57).

As the hearings continued other key testimony presented the Army's feelings toward the Flight Officer Plan and its position concerning the Enlisted Pilot Program. Lieutenant Colonel G.R. Perera, the Director of Legislative Planning for the Army Air Forces, said:

The Air Forces are obliged to dip down into the pool of available material and to call upon individuals who, physically and mentally, are able to perform certain functions in connection with flight but who are not, through lack of experience or educational qualifications or other qualifications, entirely qualified to be commissioned officers and leaders of men (17:59).

Colonel F. Trubee Davison, Assistant Chief of the Air Staff, told the committee of the necessity for a feeling of comradeship among the members of a squadron (17:59). He felt that comradeship among pilots would be fostered by the elimination of the Staff Sergeant Pilots. He added that the new grade would enable flight and commissioned officers "to so mix with each other that they will have that teamwork feeling" (17:60).

Others emphasized the Army's feelings. Lieutenant Colonel John C. Flanagan, Chief of the Psychological Division, Office of the Air Surgeon stated:

The officer, to command, has to be able to read reports and digest that sort of material and prepare reports; he has to make decisions of greater importance; and finds, in general, more need for superior reasoning, logical judgement, and comprehension, than does the flight officer. The people who can become satisfactory fliers are at a slightly lower level than the ones who can become successful leaders and commissioned officers, from the point of view of being colonels and having command responsibilities (17:61).

Colonel L.S. Smith summed up General Arnold's position by saying:

Men who had a powerful urge to fly and the ability to do it should not be excluded because of lack of educational qualifications (17:62).

Thus the committee passed Senate Bill 2553 on 1 June 1942 without amendment. It was passed by the Senate on 15 June and by the House on 2 July. The President signed the bill on 8 July 1942 and it became Public Law Number 658, the Flight Officer Act.

The Army had once again addressed the controversy of the enlisted pilot and with the establishment of the Flight Officer Act had seemed to appeal to both sides. The Flight Officer was between the enlisted ranks and a 2nd Lieutenant. It was sometimes called a "third lieutenant". It was an interim officer rank that could not hold command. The Flight Officer Act brought to an end the era of the enlisted pilot.

THE LAST CLASS 42-J - WHAT RANK WERE THEY?

With passage of the Flight Officer Act the Enlisted Pilot Program drew to an end. Class 42-J graduated on 10 November 1942. The intent of the act was not clear to all concerned, nor was it uniformly implemented. Some of the graduates of 42-J were graduated as Flight Officers, while some were graduated as Staff Sergeant Pilots and later promoted to Flight Officers. There appeared to be considerable confusion.

Mr Walter Mayer was graduated as a Flight Officer. He recalls that his class graduated 10 November 1942 from Spence Field in Moultrie, Georgia, and did not know what rank they were to assume. On graduation day they were lined up and ordered to take off their chevrons. Since there was no Flight Officer rank they bought 2nd Lieutenant bars and painted blue squares on them.

Mr Bernard Makowski was graduated 10 November 1942 from Valdosta, Georgia, as a Staff Sergeant Pilot. He was a Staff Sergeant Pilot for about three days before being made a Flight Officer. He returned from leave and was told to take off his rank and to get a new officer's uniform. But they were not to be officers. They were to be Flight Officers. They wore officer's uniforms with no rank. Following bomber training he was enroute with his new crew and plane to England. When they landed in Newfoundland to refuel, the base commander discovered that Makowski's co-pilot was a 2nd Lieutenant. Mr Makowski was then promoted to 2nd Lieutenant to solve the problem of rank. He also recalled that most unit commanders seemed to have the authority to promote Flight Officers to Lieutenants. Many Flight Officers graduated from bomber transition training as Lieutenants.

Mr James Beck graduated as a Staff Sergeant Pilot on 10 November 1942 and was promoted to Flight Officer several months later. He took his P-40 to North Africa and combat. After six missions he was shot down over Italy and taken prisoner for approximately eight months. Following his escape and return to his unit he learned that other members of his class had been promoted to 2nd Lieutenants. He continued to fly and was returned for duty in the States. He remained a Flight Officer several months longer.

All recalled that there was no Flight Officer rank available. Some painted blue squares on 2nd Lieutenant bars, others repainted warrant officer bars. Others who could not find rank were reprimanded for trying to impersonate an officer by wearing officer's uniforms with no rank. Still others recalled that they moved freely to either the enlisted or the officer's club and no one knew for sure where they should be.

Passage of the Flight Officer Act ended the Enlisted Pilot Program and created another unknown but more manageable situation. Enlisted men were still being accepted for pilot training but no longer trained in grade. They were changed to "cadet" status. The Army had been unable to incorporate enlisted pilots into the system. While the input remained the same, the output was not enlisted, nor was it an officer. The problem had been given a temporary solution. The Enlisted Pilot Program had been a successful interim step.

Chapter Six

SUCCESS OF THE PROGRAM

The Enlisted Pilot Program was a success because it provided additional pilots at a critical point in Army history. It disproved the linkage between educational level and flying ability, and it provided the means to achieve a personal goal for the men involved. Two major flaws proved fatal to the program and its short duration emphasized these problems. The program provided a successful test, although only an interim solution.

The program achieved its major goal of additional pilots. During the period August 1941 - November 1942 over 2580 enlisted pilots were graduated. Although this was only about one per cent of the total pilot accession it was a group that could not have been otherwise found. Enlisted pilots were better adapted to military life and more disciplined. They were also more physically qualified than their civilian counterparts. In fiscal year 1941, 50.3 per cent of civilian applicants were physically disqualified from flying training compared to 37.1 per cent of enlisted applicants. Similarly fiscal year 1942 showed 38.9 per cent of civilians physically disqualified as compared to 28.5 per cent of the enlisted personnel (11:20). The morale of the enlisted pilots was also higher and as a result success increased because of their motivation. Thus the Enlisted Pilot Program succeeded in providing an additional source of pilot candidates and a greater percentage of successful graduates. It contributed to the needs of the Army in expanding the pilot force. As the force was expanding the requirements of the pilots were also tested.

The number of pilot applicants that possessed the two year college education or equivalent was severely limited. Initiation of the Enlisted Pilot Program tested this requirement. It showed that the need for college education while a reasonable discriminator for successful completion of pilot training (11:58) was little value in measuring the ability to fly. As early as 1940 a New York Times newspaper article questioned what bearing knowledge of battles of the Persians in 490 BC had on preparation for war. Mr Ed Armogast remembers he did not know the answer to the question "What is the location of Gibraltar?" (18:-). He later used this point for navigation in flight planning of bombing missions. The educational standards that had long been Army contention were successfully discarded. Mr Makowski who later

flew the F-86 and F-104 stated he felt education had little bearing on flying, even jets. He said it rested on ability. He was quick to point out however, that education was needed to perform officer duties (48:-). The actions of the Army in establishing the Flight Officer rank confirmed the success of deleting the educational requirement in training of pilots.

The duties the enlisted pilots performed also pointed to the success of the program. It was felt that the program was initially planned as a peacetime program (20:-) or at best one that would free officer pilots for combat duties. The Air Corps Newsletter of 1 July 1941 stated that only "selected enlisted pilots" would be assigned to combat units and that plans were indefinite (6:5). The first class went immediately to the 82nd Fighter group in P-38's and the second class went to P-40's. These enlisted pilots were placed directly into combat. Mr Makowski recalls that upon arrival in England his first mission was a minor target over France with no enemy air or ground fire. His second mission was Schweinfurt, one of the most heavily defended areas in Germany. Thus the combat roles assigned to enlisted pilots emphasized the Army's confidence in their training and their ability to perform.

Other, more personal statistics, can measure the success of the program. Fourteen enlisted pilots became Aces in WWII (11:4). Many continued their military careers following the war. Seven retired as General officers, 69 as Colonels, 114 as Lieutenant Colonels, and 54 as Majors (8:5). Many later flew jet fighters and multi-engined jet bombers and tankers. However, successes are difficult to follow due to the dispersion of enlisted pilots to other units, the rapid promotion of many to Flight Officer or Second Lieutenant, and the small number as compared to other pilots. From the point of flying ability the program was successful.

For the enlisted pilots themselves the program was an unquestionable success. It gave them the opportunity of a lifetime; to learn to fly. Many had joined the Army solely to become a pilot but had lacked the required education. The enlisted pilots were unanimous in praising the success of the program. Unfortunately two flaws in the program proved fatal.

The major problem was one of equal work for equal pay. The morale of the enlisted pilots was damaged when they saw officers performing the same duties. Similarly officers felt slighted when they worked with enlisted men in the same task. The rank and pay structure of the Army could not handle an enlisted pilot system. As rank and pay were a problem so too became the problem of command.

The pilots viewed flying hours or expertise as the most important factor but an enlisted pilot did not fit the Army's

structure. Many became permanent co-pilots on multi-engined cargo planes or bombers. Others were not made flight leaders in fighter groups due to rank. Thus the problem of command was to become the fatal blow to the program.

These problems were remedied by the Flight Officer Act which provided a neutral solution. It eliminated the educational requirement thus providing more pilots, while creating a type of "officer" rank to eliminate the problems seen in the Enlisted Pilot Program. Thus although the program was short in duration it showed that a bunch of GI pilots with only a high school education were as good as any (8:5).

Chapter Seven

FUTURE USE

Georg Wilhelm Hegel once said, "one thing that we learn from history is that we learn nothing from history". The Enlisted Pilot Program holds some important lessons applicable to the future of U.S. air power. Changing demographics, education expenses, and new uses of air power will make new sources of pilots necessary. The problems in the Enlisted Pilot Program however, may also eliminate the use of enlisted pilots in the future.

Decreasing population growth in the United States has brought a significant change in age distribution. The actual number of Americans reaching age 18 is decreasing drastically (10:21):

1979	2.14 million
1980	2.13 "
1985	1.80 "
1990	1.70 "
1995	1.60 "

This declining pool of potential military candidates will severely limit the military recruiting program. Where a recruiter now must recruit one out of every six high school graduates to maintain force levels, they will have to enlist one out of every three by the 1990's (10:21). Similarly the increasing technology of our weapons systems will place a premium on high school graduates. Increasing skill level requirements inside the military will mean increases in the civilian sector. The military may be incapable of competing with corporations for the dwindling resource pool. Finally, the numbers of recruits available are raw numbers and do not consider those not fit for military service due to physical, mental, or moral disqualifications. A Congressional Research Service study of April 1977 concluded:

There is a general consensus that given present manpower procurement and utilization policies, the services will not be able to maintain current military strength in the 1980's (10:21).

Thus as the resource pool falls the availability of pilot

candidates will also be reduced especially when college education is considered.

While people with college education increased during the 60's and 70's the costs of education, the levels of unemployment, and the critical need for skilled labor in the U.S. has caused a recent drop in the number of people attending colleges and universities. As with the basic manpower pool, the Air Force may find an inability to fill officer recruiting goals in the coming years. Linkage of college education to pilot training may become as critical as it was in 1941. The same controversy of the educational requirement that appeared in Army thinking between 1912 and 1941, and prevented earlier passage of the Aviation Student Act, may return.

Air Force policy remains that college education is a mandatory requirement for pilot training. This is based on increased probability of success in pilot training and that each pilot is an officer and each officer must have advanced education. Standard pilot progression tends to broaden these officers into non-rated duties in mid and later years of service. Experience in Vietnam showed the need to draw back to the cockpit thousands of pilots. Increasing aircraft technology and pilot need may limit the success of bringing pilots back to cockpit without extensive upgrade training. Similarly, loss of flying skills may be a significant problem. Some discussion continues in future planning on whether the AF should 1) try to maintain a large enough rated pool to allow all pilots to branch and broaden in other duties and still be available to fill cockpit duties on demand, or 2) limit substantial numbers of pilots to narrower rated careers throughout their active duty (5:13). Both alternatives create major cost problems.

The first alternative is an extension of the present system that pays a premium price (flight pay) for pilots who may only be minimally qualified in advanced weapons or tactics. The second alternative raises the question of high pay for "specialists" that may only fly. Such questions may be raised by an increasingly liberal and cost conscious Congress in its quest to reduce defense spending. A review of the Enlisted Pilot Program may be required to reduce training expenses.

Present Air Force policy has no plans to create a Limited Duty Officer (LDO) type specialist pilot. Such a program would parallel the Flight Officer Act and establish an "officer" type rank with duties limited only to flying. Such a rank or system would retain individuals in active flying increasing capability and maintaining proficiency without limiting or hurting career or pay progression. Pay might be based on years of service not grade and a limited retirement might be offered for those who left the service before normal retirement. But such individuals would not require a college education. Elimination of the

college requirement for pilots has proven successful.

The Israeli Air Force uses non-college pilot trainees (5:13). These individuals have good mental and physical aptitudes. Their combat successes with sophisticated equipment demonstrate that a college education may not be necessary. The Israelis, like the enlisted pilots of 1942, found that motivation and the ability to fly are keys to success.

The question of the possibility of an Enlisted Pilot Program in the Air Force today was discussed with the enlisted pilots interviewed. Mr Makowski said without hesitation that yes it would work. He said that the ability to fly was not related to a college education and once you knew how to fly, jets were not that different (19:-). Mr Beck said that flying was flying so he didn't see why not. The others had the same ideas. But each was concerned about the rank. They all felt that the problems of command and "equal work for equal pay" were the same problems that would hurt an Enlisted Pilot Program today. They felt that some type of Flight Officer rank might solve the problem.

Thus the experience learned in the Enlisted Pilot Program of 1941-1942 may have future applications. The need for pilots that drove the training of Corporal Burge in 1912 and the passage of the Aviation Student Act in 1941 may return if the United States wants to maintain current force levels into the twenty first century.

Chapter Eight

CONCLUSIONS

The Enlisted Pilot Program was a successful and important part of the Army Air Forces. It provided an untapped source of highly motivated pilot students. As a result, over 2580 men were graduated as Staff Sergeant Pilots between 23 August 1941 and 10 November 1942. This group of men, although only one per cent of the 193,440 pilots trained during WWII, tested the need for a college education to fly a plane.

The Aviation Student Act deleted the requirement for two years of college. The Army, however, would not commission officers without the formal education. This test proved that college education was not required to be a successful pilot. The success of the enlisted pilots who remained on active duty demonstrates this fact.

Of the enlisted pilots of 1941-1942 many rose to senior rank. Seven became General officers, of whom the best known is Brigadier General "Chuck" Yaeger.

Little is known of this program because of its limited scope and duration; however, its importance should be reviewed. This source of pilots for the future, as demographic changes reduce manpower availability, must be considered. It has been tested and proven and will work again.

The program's success was not a result of actions by the U.S. Army. The success lay with the motivation and spirit of the enlisted men it trained. These men made the program. They had been given an opportunity of a lifetime, to fly. They wanted to fulfill their dreams and be a success. They wouldn't - and didn't - fail.

Each enlisted pilot interviewed during this project was proud to have been a part of Air Force history.

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APPENDIX

CHRONOLOGY OF EVENTS IN THE
ENLISTED PILOT PROGRAM

1912	1914	1916	1920	1923	1924	1925	1926	1934	1940	1941	1941	1941	1942	1942
First enlisted pilot L. Burge trained Fort McKinley Philippines	WAR Dept Bulletin #35 12 enlisted men at a time shall be trained as pilots	National Defense Act of 3 June stated the Secretary of War shall train as many enlisted men to fly as necessary	June created the Air Service and deleted all provisions to train enlisted men	27 June approval given to again train enlisted men as pilots	6 May Memorandum to train enlisted pilots to supplement pilot strength in peace time	10 December Morrow Board recommends increasing number of enlisted pilots	2 December Board recommends increasing number of enlisted pilots	Record number of 117 enlisted pilots trained	Discussion of the need for college education for pilot training	22 April 1941 Senate Bill 1371 to authorize training of enlisted men as Aviation Students introduced	23 August first class 42-C starts	16 September 1942 Last Enlisted Pilot Class 42-J graduated	8 July 1942 Flight Officer Act signed	4 June 1941 Aviation Student Act PL 99 signed
	Army Re-organization Bill of 4 June created the Air Service and deleted all provisions to train enlisted men		2 July Act states not less than 20% of total pilots shall be enlisted men											