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David A. McCormack, THE MILITARY CAREER OF FRANK ARMSTRONG, 1928-1961. (Under the direction of Dr. William N. Still) Department of History, East Carolina University, January, 1977.

This study examines the service career of Lieutenant General Frank A. Armstrong, and his contributions to the air force in both war and peace, including his outspoken beliefs about national defense that ultimately resulted in the early 1960's in his forced retirement. During a career that spanned three crucial decades of American history, he witnessed the rise of air power from the simple single-seater aircraft of the twenties to the complexities of the B-52 bomber and guided missiles.

Beginning as a flying cadet in 1928, he became a skilled pilot by the time he participated in 1934 in the air corps' mail flying adventure under Ira Eaker and Henry Arnold, both future corps leaders. When the German air attack on Britain reached its height in 1940, Armstrong was sent to England by the War Department as an observer. This early exposure to future enemy fire aided in his later selection by Eaker as part of the command nucleus of the American bomber command in England.

Armstrong reached the high water mark of his military career in the early years of World War II. As a leader in the initial American bomber raids against occupied Europe and Germany, he received wide recognition by the air corps and the press. His fame proved costly in the end as the air corps decided he was too experienced to risk in combat. He

was ordered back, in August, 1943, to the United States for training duties with replacement crews for European theatre B-17's. He returned briefly to combat in the final months of the war against Japan, leading a special wing of B-29's that used radar in night bombing of enemy oil facilities.

After the war, he became senior air instructor at the Armed Forces Staff College, and in 1949 began the first of two tours of duty in Alaska. That year he participated in a nonstop polar flight from Alaska to Norway. Passed over for a combat assignment during the Korean War, Armstrong went through a succession of minor commands culminating in his appointment in 1952 as commanding general of the 2d Air Force at Barksdale AFB, giving him the distinction of commanding the first all B-47 jet bomber force in the Strategic Air Command.

In 1956, Armstrong was promoted to lieutenant general and Commander in Chief, Alaskan Command, a unified command comprised of navy, army, and air force units, directed from Elmendorf AFB near Anchorage. While commanding the Alaskan defenses, his views on national defense and offense brought him into conflict with his air force superiors.

Unfortunately for Armstrong, the political influences during the 1960 election year and the technological changes in modern weaponry forced strategic planning to undergo global revisions. Defense policy, static for years, had changed a great deal. Armstrong never accepted these alterations but sought to adapt modern means to the old

strategy. By so doing, he proved himself a liability to the new air force and hastened his own retirement.

THE MILITARY CAREER
OF FRANK ARMSTRONG
1928-1961

A Thesis

Presented to
the Faculty of the Department of History
East Carolina University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in History

by

David Allan McCormack

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CHAPTER 1

EARLY YEARS (1928-1942)

Frank Alton Armstrong, Jr., was born on May 24, 1902, in Hamilton, a small (population 600) town in eastern North Carolina situated on the Roanoke River. After attending public schools in nearby Hobgood, Armstrong entered Wake Forest College on a scholarship, supplementing his income by playing semi-professional baseball in the summer months. He received a Bachelor of Laws degree and a Bachelor of Science degree in 1925.

Following his graduation from Wake Forest, Armstrong joined a professional baseball team in Sarasota, Florida, earning three hundred dollars a month much to his pleasure. He met a young woman, however, who would not marry him unless he did "more with a college degree than play ball." Her name was Vernelle Hudson. For this reason Armstrong joined the army, enlisting in February, 1928, at Nashville, Tennessee, as a flying cadet in the Army Air Corps. Ordered to Brooks Field, Texas, for flight training, he began a career that would span thirty-two years, several continents, hundreds of assignments, and ultimate rank of lieutenant general.¹

Air corps flight training in 1928 and 1929 was primitive. The planes were mostly bi-planes with open cockpits and few

¹Raleigh News and Observer, August 22, 1969.

instruments. Flying cadets were expected to solo after only eight hours of dual flight instruction, and those who could not were "washed out" and given honorable discharges. The complicated intricacies of modern flight were not a part of flight training for some years to come. In 1928, one still had to depend on "seat of the pants" instrumentation and a definite feel of the airplane. Evidently Armstrong wanted to insure that he was making "suitable progress," as he asked to be checked out by a senior instructor after only six hours of dual instruction. After a short flight with Armstrong, the senior instructor told him to take the plane up by himself and then land it again. Armstrong's first attempt at landing was waved off by the instructor, but his second try, nearly perfect, entitled him to the honor of having soloed. Indicative of Armstrong's natural flying abilities, he had never been in an airplane before he reported to Brooks Field.²

In March, 1929, after thirty-three weeks of flight training, Armstrong received his air corps pilot wings and a commission as a second lieutenant in the regular army. He also married Miss Hudson that spring. His first assignment to the Second Bomb Group at Langley Field, Virginia, left him unhappy. Having learned to fly attack aircraft during the

²Frank A. Armstrong, "Wake the Sleeping Giant," Autobiography, East Carolina Manuscript Collection, Greenville, N. C., Frank A. Armstrong, Jr., Papers, ch. 1, p. 3, hereinafter cited as Armstrong, "Sleeping Giant."

second part of his training, Armstrong admired the casual and daring tactics associated with them. Now he was stuck with the monotonous and straight line flying of the bombers. However, his fortune held and within the year he was transferred back to Kelly Field where he had done his attack training and enrolled in the Flight Instructors School. Qualifying as an instructor, he was ordered to March Field, California.³

As a flight instructor at both March Field, California, and later at Randolph Field, Texas, Armstrong taught many of the future air force officers. Armstrong recalled in his unpublished autobiography the instance of a particular student being sent to Armstrong with a note from his instructor requesting that Armstrong give the student a twenty minute check ride and then wash him out. As a senior check pilot, Armstrong took the student up and immediately realized that the youth was a good pilot but needed work. Armstrong worked with the boy and he graduated. Later that student, Joe W. Kelly, achieved lieutenant general rank and commanded the Military Air Transport Service.⁴

³Armstrong, "Sleeping Giant," ch. 1, p. 5; Frank Alton Armstrong, III, was born the following spring of 1930.

⁴War Department, Office of the Chief, Air Corps, Personnel Order number 165, July, 1929, Armstrong Papers; Attack flying was that aspect which involved flying direct support for ground troops. Armstrong considered this as more in the line of precision flying than the bombers; Armstrong, "Sleeping Giant," ch. 1, p. 6.

As a flight instructor, Armstrong practiced a curious method of relaxing students who were overly tense; he would take the nervous novice on a "low level ride, including a few passes beneath high tension wires. The results were amazing. Subjected to a few minutes of this kind of flying, students automatically relaxed when taken back upstairs." These examples serve only to illustrate the seriousness and devotion to flying of which Armstrong was capable.⁵

During 1932 the craze over "blind" flying was at its height. Armstrong and other pilots practiced this new approach in their spare time. Two pilots would take a plane up; one would fly until they reached a proper altitude and then turn the controls over to the second pilot, whose line of vision was obstructed. The second pilot would fly the plane with the aid of an altimeter (to maintain level flight), a needle and ball turn indicator, and a magnetic compass to establish a heading. Any error in pilot or instrument could be corrected by the first pilot with the unobstructed view. As it turned out, the practice would be needed when Armstrong found out that the air corps was establishing a blind flying school at Rockwell Field in California. He applied and was accepted into the class.⁶

⁵Armstrong, "Sleeping Giant," ch. 1, p. 9.

⁶Armstrong, "Sleeping Giant," ch. 1, p. 8.

Roosevelt's presidential order of February 19, 1934, created a new role for the air corps; they were to fly domestic air mail for the government. Among the first ordered to report for mail duty was Lieutenant Frank Armstrong, to serve air mail route #4 stationed at March Field under the command of Captain Ira Baker. Conditions along route #4 ranged from good to bad; the planes were all LB-5-A light bombers and P-12 single seat pursuit craft. There were no government quarters, pay was late because of bureaucratic red tape, and civilian prices even during the depression were a little more than a lieutenant could afford.⁷

Armstrong had drawn a short run and would fly the P-12, although he had never flown the plane. Pilot instruction for new planes in those days consisted of the crew chief telling the pilot how to start and stop the engine; the rest was up to the pilot to work out for himself. Each mail pilot received a quick check out in his new plane, flying his assigned route in order to familiarize himself with it. Armstrong, on his test flight, found the P-12 fast and maneuverable. Since most of the mail routes started after dark, the severe winter, coupled with the open cockpit of the P-12, made for rugged and hazardous flying; this was compensated for partially by the crew changes that were to take

⁷Armstrong, "Sleeping Giant," ch. 1, p. 9.

place along the route much as the old pony express.⁸

By April, 1934, twelve pilots had been killed flying mail within the United States; air corps participation was temporarily withdrawn in March to implement some safety precautions that would cut down the odds against the mail pilots. As a result, on March 19, Eaker assigned each pilot to a specific route that he alone would fly; the idea being that the pilot would become so familiar with his route that he could fly it "blindfolded" or, in this case, fly it at night through bad weather. Air mail route #4, under Eaker's command, had the task of flying air mail from Salt Lake City to San Diego; route #4 was further integrated into the command system under Colonel Henry Arnold's Western Zone. Armstrong would rub elbows with both men later in the European theatre. Armstrong volunteered for the Milford-Las Vegas route via Bryce Canyon and became the chief pilot in that section. He made his last flight in that section on June 1 when mail contracts were returned to civilian carriers; he was then ordered back to Randolph Field as a flying instructor.⁹

The air corps participation in carrying mail in 1934 has been viewed as a "suicide" mission by some writers, but

⁸ Page Shamburger, Tracks Across the Sky (Philadelphia: J.B. Lippincott Company, 1964), p. 164, hereinafter cited as Shamburger, Tracks; Armstrong, "Sleeping Giant," ch. 1, p. 10.

⁹ Armstrong, "Sleeping Giant," ch. 1, p. 11.

the significance of the whole operation resulted when it was shown that the air corps was hardly capable of carrying out any mission, much less the mail. Appropriations necessary for air development were forthcoming, but the cost to prove the need had been 66 serious accidents out of 14,745 hours flying time. A much more agreeable assignment was in the near future for Lieutenant Armstrong.¹⁰

Armstrong was ordered to Panama in December, 1934, and assigned to a pursuit and observation squadron based at Albrook Field, Canal Zone. Training and routine at Albrook were very military; the pilots were drilled in close order drill and subjected to bivouac as infantrymen, and they were required to wear dress uniforms whenever they appeared for meals or were off duty. Evidently the pilots, while not flying specific missions, were required to earn their keep by towing targets for the army anti-aircraft gunners stationed in the Canal Zone. Judging from the near misses reported by Armstrong, the artillerymen were in dire need of not only practice but eyeglasses as well. When the pilots could get away from these chores, life was somewhat easier flying the routine missions of a peacetime air corps. The planes at Albrook Field were like those at most of the air corps fields during the 1930's: the basic P-12 pursuit

¹⁰Shamburger, Tracks, pp. 161-165; Not one pilot in the Western Zone was killed while actually flying mail; Armstrong, "Sleeping Giant," ch. 1, p. 12.

craft and the LB-5-A light bomber. Albrook, surrounded by water, had one Douglas OA-4 amphibian airplane; in it Armstrong earned his first distinguished flying cross in 1936.¹¹

The large, clumsy seaplane was nicknamed "Goo Goo, the Duck," and Armstrong became her pilot by virtue of his having checked out in OA-4's during his tenure at Rockwell Field. The last voyage of this ill-fated ship ended in a jungle clearing with only two of the crew still on board; the others had jumped or were ordered to jump when the "abandon ship" was given. "Goo Goo" had lost a propeller on one of her engines; the propeller had then sheared off most of the engine and the ship was disabled. Armstrong remained at the controls in order to maintain any trim at all. It became immediately obvious to Armstrong and his copilot that both could not bail out as whoever maintained trim while the other jumped could not jump himself. The copilot elected to take his chances with Armstrong, and they scanned the jungle for a clearing large enough to crash-land "Goo Goo." Although they landed with relative ease, their would-be rescuers smashed up a P-12 in the muddy clearing. Finally, an LB-5-A landed in the clearing and rescued all there; the remaining crew members were also picked up where they had landed and were returned to Albrook. The DFC was awarded

¹¹Shamburger, Tracks, p. 164.

for heroism and extraordinary achievement while in aerial flight.¹²

Armstrong was reassigned from the Canal Zone to Barksdale Field, Louisiana, in March, 1937, and there he eventually came to command the 13th Bomb Squadron (L). Armstrong asserted that he began to develop a sense of leadership while in command of the 13th at Barksdale, but his actions in the OA-4 amphibian incident earlier indicates that his leadership qualities were well beyond the novice stage. Training at Barksdale began a new phase of flying for Armstrong. He had flown many light and heavy bombers up to March, 1939, but always in an attack capacity. Ten years earlier Armstrong had lamented his assignment to a bomber squadron, hoping for one to an attack command instead. His attitude towards the bombers was changing, perhaps as a result of the tense European situation, but more than likely because the attitude of the Corps had altered with respect to the need to acquire a heavy bomber force. There had been no orders for B-17's in 1938, nor had any experimentation or development of four-engine heavy bombardment planes been authorized for fiscal year 1939 or 1940. Armstrong's individual flight records for this period show a significant switch from flying time logged as "Attack" to time logged as

¹²Armstrong, "Sleeping Giant," ch. 1, pp. 14-15; Raleigh News and Observer, August 22, 1969.

"Bombing," even though aircraft used were primarily the same.¹³

Two significant events occurred in April of that year: First Lieutenant Armstrong was rated a senior pilot, and Franklin D. Roosevelt signed an expansion bill that called for 300 million dollars and 6,000 new aircraft for the air corps. Hitler's subsequent invasion of Poland the following September created new meaning for air corps training; indeed, a sense of urgency developed during 1939 that brought about the establishment of the Air Corps Tactical School (ACTS) at the Air Corps Training Center, Maxwell Field, Alabama. Armstrong was interested in the "potential combat capabilities of the airplane," as well as the "worsening international scene," so he successfully submitted an application. ACTS embodied the basic Mitchell-Douhet view that "national morale and industry were more crucial objectives than enemy armies," and it became the center for air corps doctrine on the "nature of war, employment of air power, and tactical doctrine for branches of military aviation." What Armstrong and others learned would be put to use with devastating effects against Germany, Italy, and later Japan.¹⁴

¹³Armstrong, "Sleeping Giant," ch. 1, p. 16.

¹⁴Armstrong, "Sleeping Giant," ch. 1, p. 22; Frank Armstrong, Individual Flight Records, 1929-1945, Armstrong Papers, hereinafter cited as Armstrong, Flight Records.

Upon completion of ACTS, Armstrong returned to Barksdale Field in December, 1939. Flying from there on a cross-country flight to Langley Field in October, 1940, Armstrong was notified of his selection to go to England as a combat observer. In January, 1940, he had been rated a combat observer and promoted to captain, and in October, he was rated as a technical observer. He was to depart from New York on October 24, 1940, on the "Yankee Clipper" flying boat with eight other air corps observers. Their mission was to "proceed to England; inspect and learn everything possible about the operational war machinery of the RAF and the tactics employed by both the RAF and the Luftwaffe." They were to make their reports directly to Washington and were assigned to the American embassy in London.¹⁵

The "Yankee Clipper" flew by way of Bermuda, already a combat zone, to the Azores and on to Lisbon, a distance of 26 flying hours from New York. The exciting part of the trip was the Lisbon to Poole, England, leg of the journey. The pilot of the Imperial Airlines plane had to dart in and out of clouds in order to avoid German aircraft in the area. The landing at Poole was made without mishap even though it was "blitz time" there. Armstrong's first mission to England

¹⁵Armstrong, "Sleeping Giant," ch. 1, p. 23; Thomas H. Greer, Development of Air Doctrine in the Army Air Arm, 1917-1941 (USAF Historical Study, number 89, 1953), p. 67.

would last until January, 1941.¹⁶

Quarters for Armstrong and his roommate were in the Cumberland Hotel, London, and their first night there found the hotel rocked by bomb explosions and anti-aircraft fire from the street below. Several days later, Armstrong had his first discussion with Vice Air Marshall Arthur Coningham, the man responsible for the night bombing of Italy, Germany, and France. They talked of air tactics and operational procedures and later rode in a night bomber to observe how night bombers, returning from raids, were brought back to the blacked-out fields. This was an important procedure because most casualties at this time happened on or near fields after a mission.¹⁷

Armstrong quickly came to respect the British people as he witnessed their behavior during the blitz months. He admired their apparent lack of fear and the way they moved undisturbed throughout the blackouts. He noticed that

¹⁶ Armstrong was rated a combat, aircraft, and technical observer during these years. While combat and aircraft observer are self-explanatory terms, a technical observer was charged with "investigating the efficiency of foreign aircraft, their power plants, instruments, equipment, accessories or methods of operations; familiarizing himself with the operation of types of foreign aircraft, instruments or equipment with which he is inexperienced; investigating the operations of commercial and military airlines, and the performance of their aircraft and equipment"; War Department, Office of the Chief, Air Corps, Personnel Order number 19, January, 1940, and number 236, October, 1940, Armstrong Papers; Armstrong, "Sleeping Giant," ch. 1, p. 24.

¹⁷ Armstrong, "Sleeping Giant," ch. 1, p. 26.

people used restaurants by day as such, but at night they became shelters against the German bombs, much like the subways. The weather, Armstrong noted, was typical: cold, damp, and bleak. At blitz time, he could hear the German ME-110's high above the clouds at 30,000 feet, dropping bombs that whistled on the way down due to the altitude from which they were released.¹⁸

An incident of November 12, 1940, over the coast of Dover, caused Armstrong to comment on a curious phenomenon of the war. The attack that day included a detachment of Italians flying obsolete, wooden "1937 vintage" airplanes. The Italian formation was promptly scattered by RAF Hurricanes, many being shot down. Armstrong noted that the RAF pilots seemed to hate Italy more than they did Germany, as they took great pleasure in cutting up the Italian force. Many of the captured Italian bomber pilots carried wine, cheese, bayonets, and hand grenades with them as if they were prepared for a long stay; the long stay was either in a POW camp or in the English Channel where they were shot down.¹⁹

"One of the worst blows of the war" was the phrase that Armstrong used to describe the bombing of Coventry by the Germans on November 16, 1940: "500,000 pounds of high

¹⁸Armstrong, "Sleeping Giant," ch. 2, pp. 1-4.

¹⁹Armstrong, "Sleeping Giant," ch. 2, p. 8.

explosive and incendiary bombs were literally dumped out over Coventry in a let-it-fall-where-it-may style. What next?" Armstrong reacted to the suffering around him. He had seen enough, and he was "ready to change places with the Hun and do a little dealing from the sky." Although he found himself wanting vengeance for the suffering of the British people, he wondered how the German people were reacting to the British bombing their cities; "Probably about the same" was his answer.²⁰

An incendiary bombing raid against London on the night of December 8, 1940, caused Armstrong to comment on the increasing "air of nervousness" that beset Londoners after the massive air attacks. In his diary, his notes for that night start with "Hell is on the wing! The sky is dripping blood and screaming thunder." He later wrote that the attack lasted for seven and one-half hours and that bombers came over in continuous waves the whole time. The city blazed from so many incendiary bombs and fires burned everywhere.²¹

Two days before Christmas, 1940, Armstrong returned to Coventry. He had since learned from newspapers that there were 30,000 buildings damaged and destroyed and 3,500 people killed in that solitary German effort to hit the aircraft

²⁰ Armstrong, "Sleeping Giant," ch. 2, p. 9.

²¹ Armstrong, "Sleeping Giant," ch. 2, pp. 12-14.

plant there. He found that, despite the crippling damage, the citizens were bustling around and over wreckage and debris to make some small purchases for Christmas. He did not notice many British males shopping though and speculated that most, if not all, were away in the service.²²

By January 8, 1941, Armstrong had traveled some 900 miles of British highway and seen the entire RAF Maintenance Command in addition to numerous "secret" bases, gunnery practice ranges, and aerodromes. He had written more reports than he ever felt were necessary for a pilot, and he was ready for a change from the administrative side of military life. If it came to a choice between "paperwork" and fighting the Germans, he thought he would rather take the fighting: "Think, Hell! I know I would!"²³

Armstrong's individual flight record for the months of October, 1940, through January, 1941, divulge that during this time he was flying for flight time with British commercial and military flights. Some of the aircraft which he checked out in were: Fairly Battle, Boeing Clipper, Whitley Night Bomber, Wellington Night Bomber, British Airways Clipper. Although Armstrong's flying experience was extensive, there is nothing to indicate that he had flown a B-17 up to this time; he had flown the B-10 however and much

²²Armstrong, "Sleeping Giant," ch. 2, p. 19.

²³Armstrong, "Sleeping Giant," ch. 2, p. 23.

of his recent stateside flying had been done in the B-18A, both heavy bomber prototypes.²⁴

By January 15, Armstrong had been notified that he was to go home. He left with "mixed emotions," glad to be away from the death and destruction, but sorry to be leaving the action. The next year would be "eventful but frustrating"; he would receive two promotions and several transfers but remain tied up in "paperwork" until the U.S. entered the war.

While on observer duty in England, Armstrong had been assigned to Savannah Air Base and detached from there. He returned to that assignment, arriving in February, 1941, but was further attacked for flying to Tampa, Florida. In March, he was promoted to major and assigned to the 3rd Interceptor Command at Tampa, flying B-18A's and A-17's. By July, he was rated an aircraft observer and assigned to Bolling Field, Washington, D. C. with OCAC and flying with the 2nd Staff Squadron. December 7, 1941, found Major Armstrong in the office of the assistant chief of operations, Headquarters, Army Air Forces, Washington. He was officer of the day there when the news arrived of the attack on Pearl Harbor; he "almost choked on a Hamburger" when the news came over the radio. With war at last a cold reality, he

²⁴Armstrong, "Sleeping Giant," ch. 2, p. 28.

submitted endless fruitless requests for combat duty; he took to "buttonholing fellow officers" who might be able to help him get a combat assignment. His requests fell on deaf ears until the end of January, 1942, when Colonel Ira Eaker entered his office in the Munitions Building. Eaker announced that Armstrong was "going to England with me ... leave around the first of February." Armstrong was to be in the vanguard of the American Bomber Command; he was going to war at last.²⁵

Brigadier General Eaker carried a letter with him to England from Lieutenant General Arnold, the Chief of Army Air Forces. That letter made Eaker the Bomber Commander in England and directed that he "make the necessary preparations to insure competent and aggressive command and direction of our bomber units in England." The seven officers who made up the American bomber command advance guard were Armstrong, Eaker, Harris Hull, Fred Castle, William Cowert, Peter Beasely, and Bernie Lay. Lieutenant Colonel Armstrong, promoted on January 5, was designated the operations officer. For himself and the Army Air Forces, the war had begun in earnest.²⁶

New York Times, February 1, 1941; Armstrong, Flight Records.

Armstrong, "Sleeping Giant," ch. 3, p. 1; Armstrong, "Sleeping Giant," ch. 3, p. 4; Harris Hull, interview held at Office of Air Force History, Washington, D. C., July 13, 1976, hereinafter cited as Hull Interview.

CHAPTER II
WORLD WAR TWO - ENGLAND AND
THE FIRST MISSION (1942-1943)

The relatively short period of time that Armstrong spent in European combat during 1942-1943 resulted in his leading ten American bomber raids. These combat exploits later became the basis for the book Twelve O'clock High, written by Bernie Lay and Sy Bartlett, two Eighth Air Force officers. Armstrong served as technical advisor to the writers. The book became a popular movie in 1949, and more recently, a television series. While the main character was based on Armstrong, the background depicted a later period in the American bomber offensive against Germany as the day of the "thousand plane" raid had not materialized during Armstrong's combat missions.

The route that the advance element of the American Bomber Command followed had been used by Armstrong when he flew to England as a technical observer; the Pan American Clipper carried them into the combat zone by way of Bermuda and the Azores and eventually to Lisbon. While waiting for the last leg of the journey to continue, Armstrong took the opportunity to observe changes in Lisbon since his last stopover there in October, 1940. The fact that the seven Americans were dressed in civilian clothes, incognito as it were, may have added to the general air of suspicion among Portuguese government officials that Armstrong noted. He recorded that there were "eyes of hate" everywhere, "Nazi

eyes." It is not likely that Armstrong considered the plight of the Portugese in being virtually surrounded by Fascist dictators; indeed, the presence of both Axis and Allied personnel, either in disguise or not, must have proved a source of embarrassment and resentment to the Portugese. This paradox was strengthened by conditions at the Lisbon airdrome. Armstrong discovered that the field was shared by both British and German aircraft, each in their respective insignia. Two countries at war using the same airfield was untenable to Armstrong. Several hours later, his flight to England was attacked by a German fighter bomber that had been parked on that same airdrome at Lisbon. Fortunately, the German's engine failed in the attack and he dove away. Armstrong noted with some glee that the Germans first attempt to destroy the American Bomber Command had failed, and they did not even know it.¹

The mission of this group was complex. They sought to lay the groundwork for the superstructure that later became the American Bomber Command in England. They hoped to accomplish in months what it took the British three years to do, so work began on the second day. Colonel Armstrong, promoted in March, was assigned to operations. Along with

¹Frank A. Armstrong, "So Near Heaven and Surrounded by Hell," War Diary, East Carolina Manuscript Collection, Greenville, N. C., Frank A. Armstrong, Jr., Papers, p. 9, hereinafter cited as Armstrong, "So Near Heaven"; Armstrong, "So Near Heaven," p. 9; Hull Interview.

the other American officers, he was paired off with his opposite number from the Royal Air Force. In this manner, the American Bomber Command was organized in barely seven months. Without the knowledge and experience of the British, it would have been an impossible task.²

The arrival of some twenty-two additions to the staff and the procurement of their own site at Wycomb Abbey in April, caused some serious questions to be raised concerning the operational machinery that was being erected. Nothing was known of the product that the operational command would use. What were the fighting qualities of the American Army Air Forces? They were as yet untried. Also untried were American attitudes concerning daylight, high altitude bombing, which the British opposed. Was the machinery being erected right for the product, the American airman? These questions and others like them worried Armstrong until he got the answers, first hand, in the first missions. However, he still had some more "desk-flying" to do for General Eaker before he could even sit in a B-17.³

The nature of the "desk-flying" was revealed when Eaker called Armstrong to his office and told him his orders: he was to go on detached service to the new AAF reception center and set up headquarters designed to receive the first

²Armstrong, "So Near Heaven," p. 12; Hull Interview.

³Armstrong, "So Near Heaven," p. 12; Hull Interview.

incoming units and dispatch them to their proper stations. Apparently Armstrong was on trial, for Eaker warned that he would "make or break yourself as an operations officer on this mission." Receiving this assignment from Eaker caused Armstrong to believe that he would spend the war in a non-combat capacity, which was perhaps his greatest fear. Nevertheless, he undertook his new assignment with determination; he had known Eaker long enough to know that a desk assignment, carried out successfully, could lead to something better. Eaker had tested him before, and one gets the impression that since 1940 he had been grooming Armstrong for a high position within the American Bomber Command.⁴

By July, 1942, Armstrong had established his headquarters at the reception station; offices and personnel had been procured and were functioning, and radio ranges and blind approaches had been marked out for security reasons. During the several weeks he spent at the reception base, Armstrong wrote that a few U.S. pilots had been allowed to fly on a low level bombing mission with the RAF on July 4, but this was mainly a symbolic gesture to commemorate Independence Day, and little more. It was good for air corps morale, but better still was the fact that the first American heavy bombers, the B-17, had started to arrive.⁵

⁴Armstrong, "So Near Heaven," p. 13.

⁵Armstrong, "So Near Heaven," p. 15; Hull Interview.

Boeing Aircraft Company's original bid for the Air Corps "Project A," the development of a long-range heavy bomber, was superceded by plans in 1934 for the next production model, a multi-engined aircraft capable of carrying a ton of bombs at more than 200 miles per hour for two thousand miles. The result was Boeing's model 299, first flown July 29, 1935, and dubbed "Flying Fortress" by reporters on the scene. The 299 crashed several months later during testing at Wright Field, Ohio, but the cause of the accident was determined as pilot error, not aircraft failure.

The air corps general staff authorized production of only thirteen Y1 B-17's, and a dozen of these were delivered to the Second Bomb Group in August, 1937, for operational testing. Typically, these aircraft from the first 299 to the B-17D model were defensive rather than offensive in nature. The bombers carried far too few guns to afford them adequate protection from fighter attack. The poor results obtained by the first twenty given for use to the British in May, 1941, spurred the production of the B-17E model. Fifty calibre machine guns replaced thirty calibre, and more gun positions and power driven turrets were added. While this added firepower made the B-17E the first truly offensive heavy bomber, the British remained critical of the aircraft. They had lost nearly all of the twenty B-17D's because they had tried to use it in an offensive role, rather than for which it was designed. The B-17E model was used success-

fully in an offensive role by the AAF mainly because of the additional firepower and improvements in speed and weight. At any rate, the first B-17E's were delivered to the Eight Air Force in England in July, 1942.

Soon after the B-17's started arriving Eaker called Armstrong to Bomber Command headquarters. The new orders were brief, to the point, and music to Armstrong's ears: "You are going to complete the training of our new heavy bomb group and fight them within sixteen days." This was exactly what Armstrong wanted and had prayed for, but the new job had come to him by default. The officer who had originally been selected for the job lost it as a result of an indiscretion when he created an incident at a party. The end result was that Armstrong got command of the 97th Heavy Bomb Group, and it looked like his group would be the first to fly a combat mission.⁶

Training for the first raid began with low altitude tactics long advocated by Armstrong, but this was soon changed by Bomber Command for a variety of reasons. Mainly, the B-17 was rather large and unwieldy at three and five hundred feet. Unlike the A-20, which was more suitable for low level flying, the B-17 was best suited for carrying heavy bomb loads at twenty-five to thirty thousand feet. Also, the Fort could not fly through obstacles at low level.

⁶Armstrong, "So Near Heaven," pp. 11, 20; Armstrong, "Sleeping Giant," ch. 3, p. 7.

It had to fly over them. At low level, it was very clumsy. This fact would be born out, claimed the British, when the B-17 tried to break through the enemy coast. There the concentration of small calibre, fast action weapons would put up a wall of steel that would devastate any low level B-17 formation. So, it was decided that the Eighth Air Force would bomb from high altitude, where heavy bomb loads could be carried without affecting maneuverability. There were other factors to be considered in making the switch from low to high altitude flying.⁷

The fact that low level flying was done at an altitude of from three hundred to five hundred feet meant that it was being done in what could be called man's "element"; little equipment was necessary for life support or for temperature changes that would affect performance of either men or machine. Man cannot survive five miles up in the sky without heat and oxygen; therefore, oxygen masks and electric flying suits would be indispensable to B-17 missions. There were other problems. Armstrong remarked, "Things happen in the near stratosphere that cannot be explained." He was not referring to anything supernatural, but rather to those unexplainable factors of altitude and temperature changes and the manner in which they affected the aircraft and its parts. Fifty calibre machine guns would freeze up or jam in

⁷Armstrong, "So Near Heaven," p. 26; Armstrong, "Sleeping Giant," ch. 3, p. 14.

the sub-zero temperatures at thirty thousand feet. Propellers would simply "run away" for no apparent reason, and engines would suddenly rock on their mounts and tear away unless "feathered" promptly. But all this knowledge would only come with experience.⁸

The 97th began high altitude flying on August 12. They had four days to prepare for the first daylight raid over Axis-held territory. The target: the railroad marshalling yards at Rouen-Cotteville, France. There was far more at stake on this raid than the destruction of some Axis rail power; it would prove to be the "inauguration of an experimental campaign of daylight bombing which would culminate twelve months later in the Combined Bomber Offensive." The raid was postponed twice, but on August 17, 1942, twelve B-17's of the 97th took off. In the lead Fort was Colonel Armstrong and flying with the second squadron leader was General Eaker.⁹

The take-off was uneventful; Armstrong reported that there were some casualties on the ground, however, resulting when ground personnel strained to view the formation at

⁸ Armstrong, "So Near Heaven," pp. 27, 28; New York Times, February 9, 1943.

⁹ Wesley F. Craven and James L. Cate (eds.), The Army Air Forces in World War II, 7 vols. (Chicago: University of Chicago Press, 1950), II, 209, hereinafter cited as Craven and Cate, Army Air Forces; New York Times, August 18, 1942.

at twenty-five thousand feet by revolving in circles while keeping their eyes glued to the sky. Some "spun in," with the results being three sprained ankles and two wrenched necks. Evidently, the sound of the first heavy combat formation was too much to pass up, and those on the ground were well aware of its significance. But Armstrong and Eaker were not the only men aboard to make history; flying as Armstrong's copilot was Paul Tibbets, who would later achieve a degree of fame by piloting the B-29 "Enola Gay" to Hiroshima for the delivery of the first atomic bomb.¹⁰

The formation of twelve B-17's was four minutes early for the fighter rendezvous, but they finally met with their Spitfire escort over the coast of France. At about the same time, they encountered their first anti-aircraft fire. As the black puffs of smoke and steel greeted the inexperienced formation, Armstrong's ball turret gunner exclaimed, "The dirty bastards are shooting at us!" The response from Armstrong was simply to ask him if he had not expected that. Bombs were dropped on the target without fighter opposition, but as Armstrong's squadron prepared to make a turn, which would allow the second squadron to catch up, a curious thing happened. The second squadron commander was to give a pre-determined signal by radio for the turn to start, but his radio was out. The signal was not given, and Armstrong's

¹⁰Armstrong, "So Near Heaven," p. 42.

turn was late. The area where the turn should have been made was saturated with flak, indicating that the German ground batteries had figured the move and prepared for it. Without the radio's failure, the formation would have flown right through the saturated area with disastrous results. Consequently, the new course was used on the return trip.¹¹

But the return trip would not be that easy. Armstrong noted that invariably the winds at high altitudes blow from west to east, making for a fast flight coming from England but forcing a somewhat slower return trip. Fortunately for the formation, only one of the circling German fighters attacked them on their way back towards the French coast. While the others stayed out of range of the fortress guns, the solitary attacker was beaten off by a cross fire from three top turret gunners. Three hours after take-off, the formation finally approached its base at Polebrook in East Anglica with all aircraft and no casualties. The second squadron landed first with General Eaker and the rest followed.¹²

Even though they were swamped with reporters upon landing, Armstrong recorded that few of the participants were aware of what they had done. He noted that, although

¹¹Armstrong, "Sleeping Giant," ch. 4, p. 8; Armstrong, "So Near Heaven," p. 45.

¹²Armstrong, "So Near Heaven," p. 46; New York Times, August 20, 1942; New York Times, August 24, 1942.

"bomb damage was minor, the psychological damage to the enemy could never be repaired." He later recorded that since the first mission not a single heavy formation was turned back, nor was one forced to jettison its bombs before reaching the objective. Twelve green crews had successfully completed the first raid of the AAF heavy bombers on Axis-held territory; the American B-17 had proved able to take care of itself and would continue to do so. The resultant lift of morale affected every man in the Eighth Air Force; the first blow against the Axis had been struck, and it had been led by Armstrong. He was finally dealing death from the sky, just as he had promised the German aircraft over London during the blitz.¹³

The importance of this first mission cannot be minimized. Although twelve B-17's were not a large striking force, bombs fell within the target and was considered "fairly accurate for a first effort." Even the British were impressed. General Carl Spaatz reported that American bombing at Rouen had "far exceeded in accuracy any previous high-altitude bombing in the European theatre by German or Allied aircraft." The successful completion of this mission helped to clear the air over the feasibility of daylight bombing in Europe. The question had long been raised as to what extent and at what expense Germany was to be bombed. As in most cases when a

¹³ Armstrong, "Sleeping Giant," ch. 4, p. 11; Armstrong, "So Near Heaven," p. 47.

country is involved in a two-front war, one front must take a secondary priority over the other, at least for a time. Should priority be given and to which one and why? The Rouen mission showed that high-altitude bombing, with larger numbers of aircraft involved, would work. If VIII Bomber Command could continue to inflict sufficient damages on the Germans by bombing selected installations with a minimum of losses, the case for the combined bomber offensive would grow. Proponents of the combined bomber offensive felt that with the British bombing by night, and the Americans by day, the German industrial war machine would wither and die. However, the combined offensive from the air would not become policy until the Casablanca conference in January, 1943; until then, VIII Bomber Command would have to point the way.¹⁴

The VIII Bomber Command and the Eighth Air Force were in the phase of proving what the Army Air Forces could accomplish in Europe. The next test, somewhat different from the Rouen mission and involving twenty-four B-17's, was scheduled for August 19. In the following months, VIII Bomber Command would graduate from these early, relatively "easy" missions. Soon, the whole complexion of the European air war would change; there would be no more "raids," they would become air battles involving hundreds of aircraft and

¹⁴Craven and Cate, Army Air Forces, I, 664; Craven and Cate, Army Air Forces, I, 663.

covering miles of sky. But for now the American bomber command was learning, gathering the experience that would prevail in the coming death struggle with the German Air Force.

The second mission, as noted, involved twenty-four B-17's of the 97th, Armstrong's group. Their mission was to bomb the Abbeville-Drucat airdrome. What the 97th did not know until afterwards was that their mission had been staged in conjunction with the British-Canadian commando raid on Dieppe. Their mission was to cover the planned British withdrawal by bombing a radio station which was utilized to direct the German fighter planes in the vicinity. Also, the attack on the airdrome would destroy its effectiveness as a refueling point for German fighters.¹⁵

Divided into two groups of twelve B-17's, the first formation, led by Armstrong, struck at the ground radio. The second formation attacked the airfield itself. As the B-17's dropped their bomb loads onto the field, a flight of six German fighters attempted to take-off in formation. Armstrong reported that the fighters cleared the ground just as the bombs exploded in their path. Six entered the smoke cloud, but none emerged.¹⁶

Again, as with the first mission, the damage proved

¹⁵Armstrong, "So Near Heaven," p. 48; New York Times, August 20, 1942.

¹⁶Armstrong, "So Near Heaven," p. 48.

slight. Even though RAF pilots flying over the Abbeville airdrome the next day reported its dispersal area "completely destroyed," later reconnaissance showed that the damage was minimal. There were, however, no B-17's lost. The British credited the mission with harassing the German fighter effort at a very critical point in the operation; but they, after all, had planned it that way. Whatever effect the mission had on the Dieppe operation could not alter the fact that B-17's of VIII Bomber Command had gone out and returned a second time without losing an airplane.¹⁷

The daylight bombing experiment up to this time had been divided into two target objectives. The first category included general objectives which could be attacked anywhere in Europe with cumulative results, and the second was a series of precise targets to be attacked only under favorable conditions. The first category stressed the rail system as its objective, while the precision target priorities were fighter plane plants, Ruhr power plants, and submarine installations. On August 25, General Spaatz issued VIII Bomber Command a list of specific targets in France and the Low Countries. The new priorities were aircraft factories, repair depots, railroad marshalling yards, and submarine installations. These were the objectives that would guide

¹⁷Craven and Cate, Army Air Forces, II, 216.

operations of the Eighth Air Force until October 20.¹⁸

Operations of VIII Bomber Command between August 19 and September 5 were concerned with light missions as the six raids all involved fewer B-17's than the Abbeville raid. Twenty-four bombers had been the largest number to participate in a raid thus far. These light missions were carried out under conditions laid down by the first two; the B-17's flew under heavy fighter escorts and bombed their targets from altitudes of 22,000 to 26,000 feet in good visibility. The targets of these missions were the marshalling yards at Amiens, the Wilton shipyard at Rotterdam, the shipyard at Le Trait, the airplane factory at Meaulte, and the Luftwaffe airdrome at Courtaix-Wevelghem. Of these six raids, the mission of August 21 to Rotterdam was significant; for the first time the bombers had been drawn into a heavy aerial battle owing to lack of fighter support. The bombers were sixteen minutes late for the fighter rendezvous, and as a result, the fighters could only escort them halfway to the Dutch coast. The mission was not aborted, and the formation was attacked by twenty or so ME-109's and FW-190's. Prior to this attack, the formation had been further weakened by mechanical problems. Three of the twelve had turned back. VIII Bomber Command suffered its first combat fatality in

¹⁸Craven and Cate, Army Air Forces, II, 215-216.

the battle that followed. The bombing mission was unsuccessful, although all aircraft returned.¹⁹

There were, however, lessons learned from these initial operations. While it still remained clear that the B-17 could defend itself with little trouble, it was also clear that for the B-17 safety lay in numbers. The B-17E, as first utilized by VIII Bomber Command, had armament consisting of thirteen fifty calibre machine guns, two power driven turrets and a tail gun position. Obviously, each gun was designed and placed to protect a specific angle from possible attack. The more B-17's in a given area made it possible for each ship to give covering fire to the others depending on their position within the formation. As long as a crippled or damaged Fortress could keep up with the formation, it was protected. If one was forced out of this formation for any reason, it would become certain prey for the enemy fighters that waited for just such an occasion. Perhaps more than anything else, the mission to Rotterdam was indicative of what would happen when operational timing was off. The slightest miscalculation could alter the course of either formation, resulting in scrubbing the mission, or sending the bombers on without fighter protection. The latter was nearly

¹⁹Craven and Cate, Army Air Forces, II, 217; Eighth Air Force, Target: Germany (New York: Simon and Shuster, 1943), p. 32, hereinafter cited as Eighth Air Force, Target.

suicidal in many cases.²⁰

These six missions were not designed to deliver telling blows to the Germans. Their intention was more advanced training for the crews and their aircraft as well as the operational staff of VIII Bomber Command. Neither had more "mission" experience than was gained in non-combat training exercises in the United States. The bomber crews had trained in the United States for the most part, and flying conditions there were a great deal unlike those in the British Isles and the northern coast of Europe. The operational staff was placed under emotional strain that was not present under non-combat situations.

The targets of these early missions were confined mainly to areas of northern France and the Low Countries in order to give the bombers maximum fighter protection while they were being broken in. These missions were similar, in that they were all brief, lasting perhaps only three or four hours. This meant that the inexperienced crews would be spending as little time as possible over enemy territory with the German fighters and flak batteries harassing them.²¹

²⁰Eighth Air Force, Target, p. 24.

²¹Colonel Armstrong made few notes concerning these missions except to describe the plight of the stricken B-17 whose pilot and copilot were wounded, the latter dying of his wounds after the ship landed safely in England. The copilot was the first combat death suffered by VIII Bomber Command, the first of many.

Taken chronologically, this was the point in time where Armstrong began to determine that the air war had taken on a very different character. The raids began to look like air battles, as both sides stiffened up to meet the other. More and more German fighter planes were challenging the bombing missions, with the result being that all the RAF fighters would be engaged with German aircraft. The bombers were left to defend themselves as best they could against the fast German Focke-Wulfe and Messerschmitt. Tactics used against the bombers were new every raid, as the German pilots tried desperately to find the B-17's soft spot and the best methods of attacking and destroying the growing formations. What the Germans really needed most of all at this time was an intact B-17. With one in their possession, they could determine its specifications, its strengths and weaknesses, and its armaments and capacities. Developing tactics to use against the B-17 required capturing one with guns intact. To prevent this from happening prematurely, for it would happen sooner or later, VIII Bomber Command issued the order to all pilots that they were to destroy doomed aircraft on the ground or in the air, if it seemed likely that they would fall into Axis hands.²²

These light missions were followed up by a return engage-

²²Armstrong, "So Near Heaven," p. 50; Armstrong, "So Near Heaven," p. 51.

ment of the bombers to the Rouen marshalling yards on September 5. The number of bombers participating in raids increased to thirty-seven. Of those present, twenty-five were from the 97th and twelve were from the newly operational 301st on its first combat mission. Thirty-one of the bombers delivered their loads, while the other six met with mechanical problems that prevented them from doing so. German fighter opposition was weak and challenged mainly by RAF fighters flying support. All of the bombers returned to their bases, but this was the last mission in that unbroken chain of luck. The first B-17 of VIII Bomber Command was soon to be lost in combat over the continent.²³

The fateful mission was number ten, staged on September 6, 1942. Armstrong recorded that the first B-17 to be lost was on the seventh raid, while official records state that it was the tenth raid. This raid involved more heavy bombers than previous raids, and there were to be strikes against other targets in conjunction with the main objective. While forty-one B-17's of the 97th and the newly operational 92nd struck the aircraft factory at Meaulte, thirteen B-17's of the 301st attacked the German fighter airdrome at St. Omer-Longuenesse in a diversionary move. In addition, twelve DB-7 light bombers of the 15th Bombardment Squadron (L)

²³Craven and Cate, Army Air Forces, II, 218.

attacked the Abbeville airdrome.²⁴

The diversionary measures had little effect. The main striking force flying to Meaulte met with heavy and continued resistance from the French coast to the target and back. Armstrong estimated that his formation engaged as many as seventy-five German fighters, even though they had RAF fighter support. Official sources say there were perhaps forty-five to fifty encounters between the bombers and the Germans, and that the RAF fighters were also heavily engaged. Despite the fighter attacks, the bombing results were good and clearly more effective than the first raid on Meaulte. During the course of the battle, Armstrong claimed that his gunners shot down two enemy fighters. Since the whole formation was only credited with several "kills," this figure seems high although Armstrong's B-17 was in the thick of the fighting. The official version stated that two B-17's were lost that day; one was from the 97th and the other was from the inexperienced 92nd. The 97th's plane was Armstrong's left wingman, which took a burst of machine gun fire from a ME-109. The German had been attacking Armstrong's ship from the nose position. When Armstrong pulled his ship up to evade

²⁴This discrepancy is easily cleared up when one realizes that the tenth raid was a cumulative figure for VIII Bomber Command, while the seventh denoted the number of missions Armstrong had been on. Both numbers referred to the attack on the Avions Potez aircraft factory at Meaulte; Armstrong, "So Near Heaven," p. 57; Craven and Cate, Army Air Forces, II, 218-219.

the fire, the German raked the front of his wingman's bomber. The B-17 went down, but Armstrong saw it crash-land near the mouth of the Somme River. He later learned that the crew were all right but would spend the rest of the war in a German prison camp.²⁵

The loss of the first bomber was perhaps more of a blow to the 97th than to VIII Bomber Command or to the Eighth Air Force. While it certainly did not go unnoticed in the higher echelons of command, the loss was felt on a much more personal level within the Group. There the crew had been well known to the other Group members; at headquarters, the bomber became a statistic and the crew members lost in action. Both would have to be replaced from a logistical point of view. But at the Group, everyone knew whose bomber and crew had been lost. The aircraft and crew were replaced by another, but the memory remained. Armstrong was well aware of the loss and what it meant; his report after the mission simply ended with "One airplane and crew failed to return." The words were so foreign to him that he had to read it twice before signing it. However, his contemplation of the loss did not end there. For the first time, it occurred to Armstrong that there was much more involved than just planes and men. There was a certain meaning in it all, perhaps a

²⁵Armstrong, "Sleeping Giant," ch. 5, pp. 6, 8; Craven and Cate, Army Air Forces, II, 219.

glimmer of the relationship between men and machine that enabled the AAF to complete its mission in the face of death and the unknown. At times the odds were terrifying. In this light, Armstrong prepared a message to the men of the 97th Bomb Group to be delivered on the following day, September 7. He intended it to express his gratitude and pride in their achievements, and it ended with this toast: "Here's to the Hun - a splendid fighter, and here's to the 97th, his Master!- all because of you men and your untiring efforts. God Bless you."²⁶

Soon after this mission, Generals Spaatz and Eaker visited the 97th's airdrome. Ceremonies to decorate the first twenty-five officers and men who had distinguished themselves in combat were carried out on the field as friendly fighters flew cover to prevent any surprise visits from the Germans. A great majority of them had been wounded, but they cheered as Spaatz pinned a silver star on Armstrong for the Rouen mission. The 97th had already come a long way under Colonel Armstrong, but it would have to go further without him.²⁷

As we have seen, the Eighth Air Force had been activated in January, 1942; by April of that year, it had been

²⁶Armstrong, "Sleeping Giant," ch. 5, p. 10; Washington Star, November 3, 1942.

²⁷Armstrong, "So Near Heaven," p. 59; Washington News, September 3, 1942; New York Times, September 4, 1942.

committed to the BOLERO plan which called for a great build-up of forces in England by the AAF in preparation for an early cross-channel invasion by Allied ground forces.

Heavy bombers had been arriving since June to augment BOLERO and the proposed combined bomber offensive. Before the first mission to Rouen had been carried out, the decision had been made to postpone the cross-channel invasion and go, instead, with an early invasion of North Africa. What this meant to the Eighth Air Force was that all the men, aircraft and material being rushed to Britain for BOLERO were no longer required. They were designated instead for the proposed North African venture, code named TORCH, and would speed the buildup to combat strength of the new Twelfth Air Force. The Twelfth Air Force would be based in North Africa and have charge of air operations in that theatre.

The fact that TORCH was to have priority over the Eighth Air Force was not, however, the end of the matter. The nucleus of the newly organized Twelfth was to come from the experienced Eighth. In addition, each command of the Eighth was given responsibility for setting up corresponding agencies for the Twelfth. The drain on the Eighth was not to become apparent until October and November, 1942. In the meantime, bad weather, along with priority basis given the Twelfth Air Force, had made large inroads into the Eighth's ability to carry out combat operations. No missions were

flown between September 7 and October 1.²⁸

In addition to these problems, there was the question of American fighter support. Since the Twelfth now had the critical job, it was decided that they would get priority in this matter also. The VIII Fighter Command was given the job of dispatching designated units to Africa; it was also scheduled to lose four of its five fighter groups to the Twelfth. During the preceding months, fighter support for the Eighth had been provided primarily by RAF units. The attempt to buildup VIII Fighter Command to the point where it was capable of flying cover for American missions was not realized in 1942; indeed, the TORCH priority left VIII Fighter Command incapable of operations from the United Kingdom in support of the heavy bombers.²⁹

The Eighth Air Force was to lose its two most experienced bomb groups in October also scheduled for North Africa. The 97th and the 301st were the first to go, to be followed by two more in November. The loss of four heavy bomb and four fighter groups greatly reduced the Eighth in strength and experienced personnel. By the end of October, the Eighth had turned over to the Twelfth some 3,198 officers, 24,124 enlisted men, and 34 warrant officers. They were all trained personnel and almost one-third of them

²⁸Craven and Cate, Army Air Forces, II, 219.

²⁹Craven and Cate, Army Air Forces, II, 232.

came from VIII Bomber Command alone.³⁰

The 97th Bomb Group, ordered to Africa in early October, was to make the move without its familiar commander. Colonel Armstrong, the week after the 97th was ordered to Africa, was himself ordered to Bomber Command headquarters. There he received orders back to the United States on temporary duty. His mission was to tour selected training bases in the United States and report on first-hand information concerning flying combat missions over Europe.³¹

Armstrong, however, was back in England by Christmas, 1942. On New Year's day, he was called to Bomber Command headquarters where General Eaker informed him he had been recommended for promotion to brigadier general. However, Eaker quickly brought him back to reality with these words, "Army, I've got a small job for you." Once again, Eaker had tapped Armstrong for a very critical mission. He was given command of the 306th Heavy Bomb Group, a veteran group that had bombed many important enemy sites along the French and Dutch coasts. There were rumors that the first daylight raid against targets in Germany proper was in the offing,

³⁰Craven and Cate, Army Air Forces, II, 213.

³¹For an interesting account of a meeting between Armstrong and LeMay at Prestwick during this trip, see Curtis LeMay with Mackinlay Kantor, Mission With LeMay, My Story (Garden City, New York: Doubleday and Company, Inc., 1965), pp. 228-230, hereinafter cited as LeMay, Mission.

and Armstrong was certain that the 306th would be in this history making raid. He was right. In January, 1943, Armstrong took command of the 306th, and he was thankful to have a veteran outfit. The group, however, remained inactive for the greater part of January.³²

The war news at the beginning of 1943 was encouraging to the allied countries; not only was the British Eighth Army moving rapidly in pursuit of Rommel, but now they were in Tripoli. The allied armies were also advancing along the North African front. In the east the Russians were reporting certain victory after the long seige of the German Sixth Army at Stalingrad. To the officers and men of the Eighth Air Force, however, the most promising news concerned the meeting of Allied commanders at Casablanca. Roosevelt announced that unconditional surrender of the Axis would be the only surrender possible. In this light, a directive was circulated to units of the Eighth that they were to concentrate daylight bombing as far as practical on objectives in the Reich itself. This was exactly for what VIII Bomber Command had been pushing and hoping. The desire to strike at Germany, to carry the war to the German cities, had been uppermost in their minds. Moreover, the destruction that the bombers had brought to the occupied countries was

³²Armstrong, "Sleeping Giant," ch. 6, pp. 1, 2; Washington Star, December 6, 1942; New York Times, February 26, 1943; New York Times, February 9, 1943.

causing political repercussions. While everyone was glad to strike Axis power wherever it was found, the expense in lives and property to occupied countries where it was located caused little joy in VIII Bomber Command. The Casablanca directive was to bring the air war to Germany and soon.³³

At ten o'clock on the night of January 26, 1943, Armstrong was alerted by the 306th's operations officer that "something big was cooking. There was a unanimous feeling among the crews that they were Germany bound the day I arrived." The first daylight raid against Germany was to begin on the 27th, and the entire night was needed to make necessary preparations. The briefing of the crews began at four a.m. amidst a tense atmosphere of anticipation. Every crew was there, even those not scheduled to go, and all were excited. When Armstrong stepped onto the platform at the front of the briefing room, a hush fell over the men. In an effort to ease the tension, he said the one word capable of blowing the roof off the building, "Wilhelmshaven." Many had suspected it, but no one knew for sure that the target was in Germany. Their mission was to bomb the submarine pens at Wilhelmshaven.³⁴

³³B. H. Liddell Hart, History of the Second World War (New York: G. P. Putnam's Sons, 1970), p. 400; Craven and Cate, Army Air Forces, II, 323.

³⁴Armstrong, "So Near Heaven," p. 88; Armstrong, "Sleeping Giant," ch. 6, p. 7.

The flight procedures were also changed. On previous missions, the bomber formations had gained altitude over Britain before flying on to the Continent. The formations destined for Wilhelmshaven were, however, to fly at low altitude into the North Sea in a westerly direction, and then gain altitude as they made a turn to the south. This would bring them over Germany from the north. Simplistically, Armstrong described this as an end-around fake, with a cut-back across tackle.³⁵

The raid involved some ninety-one heavy bombers. Of these, there were B-17's from the First Bomb Wing and B-24 Liberators from the Second Bomb Wing. The take-off was uneventful, and the large formation started out over the Channel at a minimum altitude of five hundred feet. As the formation approached the coast of Germany, the bombers climbed to an altitude of twenty-five thousand feet. From that altitude, the terrain below looked as if it could have been any place in the United States, or any place else one could imagine. There was, Armstrong later wrote, "a feeling inside us that everything below was in another world- a strange land with strange people."³⁶

Armstrong later wrote that very few German fighters

³⁵ Armstrong, "Sleeping Giant," ch. 6, p. 7.

³⁶ Armstrong, "Sleeping Giant," ch. 6, p. 8; Stars and Stripes, January 28, 1943.

attacked the formation after one was shot down by the B-17's; he noted only two attacks on his own ship, despite the fact that official sources said that there were as many as one-hundred German fighters in the battle. As they approached the target itself, flak became the real problem. Although it was ineffective in the area surrounding the target, the point where the bomb run was to be made was saturated with it. Flak never helped bombing accuracy of any Air Force, and the Eighth was no exception. No planes were lost to flak on this mission. Although the bomber crews admitted that the enemy pilots pressed their attack far less than the enemy pilots in the occupied territory, three bombers were still shot down. The difference, it was believed, was that their best pilots and aircraft were stationed in the occupied coastal regions, and what was left over was used for defense of the Reich. According to German propaganda, Allied bombs were never supposed to fall on Germany. They obviously made every effort to enforce that idea by using their best pilots in the occupied regions to stop the bombers there. This was, after all, the first daylight raid on Germany, very few Germans believed it possible.³⁷

Approaching the target, the bomber formation found itself in a race with a cloud bank for position; the cloud

³⁷Armstrong, "So Near Heaven," p. 94; Washington Post, January 30, 1943; New York Times, January 31, 1943.

bank may have been a smokescreen induced by the enemy, but it was still a barrier to be reckoned with. The clouds had obscured the safe approach to the bomb run, and the formation was forced to circle and make another try. As they circled, a break in the clouds appeared on the approach that had been deemed as the most heavily defended route. Apparently the only opening, the formation turned in and dropped its bombs. This was the point where the flak was at its worst; the bursting metal and smoke caused Armstrong and the other pilots to each go into his own pet "flak dance." As we have seen, no bombers were lost to flak on this mission; however, the formation was forced to lose about three thousand feet just eluding it. The route homeward brought them out over the sea just above an enemy convoy escorted by gunboats. The Fortresses immediately climbed and turned just as the enemy convoy started to zig-zag. Neither wanted much to do with the other, as Armstrong noted, "I couldn't tell who was scared worse."³⁸

Of the ninety-one heavy bombers dispatched to Wilhelmshaven, only fifty-three succeeded in bombing the port. One B-17 from the First Bomb Wing and two B-24's from the Second were lost, all as a result of enemy fighters. The importance of this mission went beyond the obvious. Not only had the bombers penetrated the German homeland without

³⁸ Armstrong, "So Near Heaven," p. 96.

prohibitive loss, but they had done so "necessarily without benefit of escort." Although bomb results were judged only fair, they were considered adequate. The only disputed point from this raid was over who was to get credit for being the first over German territory. This honor went to the lead fortress piloted by Colonel Frank Armstrong. Along with leading the first American raid on Axis-held territory, this gave him a double first.³⁹

The raid on Wilhelmshaven also clinched a general's star for Armstrong. He was promoted to brigadier general soon after the raid. The promotion, however, caused him to reflect and realize two very important things. He wrote, "One, that I had been promoted to greater responsibility carrying with it unending hours of hard work, and that my government expected and would receive my every effort directed efficiently towards ending the war. Two, that I had been detached forever from my Combat Group as its commander." There was, he realized, at least one consoling factor in all this besides becoming a general officer. If he could not command them as a group, he would be able to lead them into combat as part of a larger unit.⁴⁰

Armstrong's first raid as a general was to Brest. He

³⁹Craven and Cate, Army Air Forces, II, 324; Eighth Air Force, Target, p. 63; New York Times, February 21, 1943.

⁴⁰Armstrong, "So Near Heaven," p. 97; Stars and Stripes, January 28, 1943; New York Times, February 21, 1943.

made no notes concerning this mission except to say that it had taken place. On February 27, seventy-eight bombers of the First Bomb Wing took-off to bomb the U-Boat base at Brest on the northwestern tip of France. Even though there were fewer bombers involved in this raid than that to Wilhelmshaven, more planes succeeded in bombing the target. Out of seventy-eight that took off, sixty planes attacked the sub base. The RAF fighter escort was given credit for the absence of losses. Of course, the route flown to Brest took the bombers over a small part of enemy territory, and the target was in range of the bomber's fighter escort. Evidently, Armstrong viewed this raid as routine, at least in comparison to earlier missions. To a man who carried his son's bronzed baby shoes for luck on each mission, the Brest raid must have seemed a good omen for the new general. It was, however, the last raid he would lead in the European war.⁴¹

As Armstrong himself realized, he had been promoted not only to higher rank, but also to higher responsibility. The life of a general officer was not to be risked over and over again on missions that could be led by subordinates. Twelve O'clock High notwithstanding, Armstrong's days in England from this time on were spent in waiting for his bombers to come home. This was perhaps what he regretted most about the

Craven and Cate, Army Air Forces, II, 329; New York Times, February 28, 1943; New York Times, March 1, 1943.

promotion. Yet, on the first raid over Axis territory, General Eaker rode as an observer in Armstrong's wing ship. Armstrong employed this method of "hitching" a ride as an observer on one more raid and came very close to ending his career.

The replacements and equipment promised the Eighth Air Force at Casablanca had started to arrive by April, 1943. As the Eighth assimilated the replacements that would bring it up to full strength, they continued to plan and carry out missions against the Axis. A raid was scheduled to take out the German aircraft and aero-engine repair works at Antwerp. General Armstrong went with the formation, ostensibly "to check the pilot and co-pilot as Wing Leaders." The raid departed April 5, and one hundred and four heavy bombers flew the mission. The bomber formation had RAF Spitfire escort only as far as Ghent, where the fighters withdrew owing to low fuel. As the Spitfires left, German fighters moved in. What happened next, and for the remainder of the mission, was logged by Armstrong during the flight.⁴²

Armstrong estimated that "approximately twenty-five head-on attacks were made on our Fortress." The number four

⁴²Eighth Air Force, Target, p. 74; New York Times, April 12, 1943; Armstrong, "So Near Heaven," pp. 99-102; It was later used as the basis for a delayed AP release and was included in the text of Target: Germany, the official story of VIII Bomber Command's first year over Europe which was published in 1943.

engine was hit; two twenty mm cannon shells ripped through both the nose and the cabin damaging the hydraulic and the oxygen systems. The main spar in each wing had been shot up and the navigator was wounded. General Armstrong, as the odd man aboard without a job, was left to meet these emergencies as they arose. He spent the raid spotting German fighters, checking the bombers position, putting out fires, giving first aid to the navigator, and assuming his duties. The only thing he regretted about the whole day was when, during a head-on attack by a German FW-190, he involuntarily reached over the pilot and pushed the ship down to avoid what he believed to be a head-on collision. (This incident did not appear in the published versions.)⁴³

The bombing results of the Antwerp raid were good; the target plant had been severely damaged by the eighty-two bombers that had succeeded in dropping their bombs. Four of the heavy bombers were lost. This was General Armstrong's last combat mission in the European theatre. After the raid, VIII Bomber Command ordered him to cease flying combat missions. This order to stop was probably due more to the factor of experience than to rank, even considering the effect on morale caused by the combat loss of a general officer. He confined the rest of his European flying to

⁴³Armstrong, "Sleeping Giant," ch. 6, p. 11; Stars and Stripes, August 12, 1943; New York Times, April 11, 1943.

logging flight time.⁴⁴

From his headquarters situated near the flight line, the general spent the next four months watching the bombers. Disappointed at not being permitted to fly combat missions, but true to his nickname "old Army," he would serve as ordered. He wrote:

Fortresses going out or returning from raids blew dust against the office windows. The familiar sound of squealing brakes seeped beneath the crack under the door. I could not convince my inner self that I was an 'old man'-- Too old for combat. That youngsters, with their courage and skill, had doomed me forever to watch from the sidelines as they flew on to victory. Deep down in my heart I was proud of them ⁷⁵ proud to be counted as a member of their clan.⁴⁵

At forty-one he did not feel too old to fly. He had become, however, a vast storehouse of combat experience and knowhow. His early efforts in training and operations of the heavies and their crews had been honed to a fine edge by the test of combat. His next assignment would reflect the value that the AAF placed on him.

Although Armstrong made no mention of participating in more combat operations after Antwerp, a combined operational missions list for the 101st Provisional Combat Wing shows that he accompanied the 379th Bomb Group to the Dutch Coast on May 18, 1943. Whatever the circumstances, this was

⁴⁴Eighth Air Force, Target, p. 74.

⁴⁵Armstrong, "So Near Heaven," p. 104.

Armstrong's last mission. He spent two more months at his Headquarters and then shipped home to the United States.⁴⁶

The eighteen months that he spent in England with VIII Bomber Command did more for his military career than the preceeding twelve years. He was now a general, something he perhaps never would have accomplished in the peacetime army. He was also, to a certain degree, famous. In a war that was notorious for creating heroes, he had achieved early recognition. He led the first raid on Axis territory and the first raid on Germany. For the Rouen mission he received the Silver Star in addition to an oak leaf cluster for his DFC. The British awarded him the first British Flying Cross presented to a United States officer.

The early months in England setting up VIII Bomber Command structure were crucial to his career. Eaker had not been exaggerating when he told Armstrong he would make or break himself in the job. He had performed well in the G-3 section of VIII Bomber Command, primarily involved with training. When the first crews revealed inadequate training

⁴⁶ However, a disposition form (DF) from the office of the operations officer, 379th Bomb Group, AAF (Station 117), dated May 22, stated that on the 18th Armstrong had spent three hours flying a B-17F for training purposes. The same DF stated that on May 19 Armstrong spent four hours in a B-17F on a diversion mission to the Dutch coast; Washington News, August 23, 1943; New York Times, August 20, 1943; Washington Post, August 10, 1943; New York Herald Tribune, August 10, 1943.

in high altitude flight, a rapid program of intensified high altitude training was undertaken in England. These deficiencies were corrected in a matter of weeks, in time for the first raid on Rouen, and Armstrong was responsible.

Through a unique series of jobs and combat experience, Armstrong was the most qualified flying general in the AAF. The AAF was planning to use this experience and knowledge where it would do the most good: training the bomber crew replacements in the United States. Armstrong received orders to depart for the States in August, 1943. He would not be in England to witness the culmination of dozens of raids, experimental or otherwise, in the combined bomber offensive. He had helped to make it possible through his skill and tenacity in the ten raids he led. As a prototype of the fighting American air man, there is little doubt that Frank Armstrong's exploits were the basis for General Savage in Twelve O'clock High.⁴⁷

⁴⁷New York Times, August 21, 1943; Raleigh News and Observer, August 29, 1943.

CHAPTER III
WORLD WAR TWO - GUAM AND
THE LAST MISSIONS (1943-1948)

Armstrong returned from the European theatre in August, 1943, assigned to the 2nd Air Force at Colorado Springs. He received command of the 46th Bomb Operational Training Wing at Dalhart, Texas, soon after. As commander of the 46th Wing, Armstrong was aware that its members were destined to become the replacement crews for the Eighth Air Force in Great Britain, that his combat knowledge placed great responsibility on him; and that he needed to insure that the training would be adequate for the men. He wrote, "Knowing all too well what they would experience upon assignment to Europe, I insisted upon a rigid training schedule." The memory of how ill-prepared the first crews were for combat back in August, 1942, stimulated Armstrong to train the crews as best as he could. Also the knowledge that the air war over Europe had increased in ferocity since that time demanded that training be complete and up-to-date.¹

The 46th Wing was transferred to a base at Ardmore, Oklahoma, in early 1944. Here, Armstrong reported that some "highly unusual, but effective, training aids were

¹Alaskan Air Command Unit History (incomplete), January to December, 1948, Records of USAF Commands, Record Group number 342, Roll P3-86, Washington National Records Center, Suitland, Maryland, hereinafter cited as Alaskan Command Unit History, R. C. 342; Armstrong, "Sleeping Giant," ch. 7, p. 1.

developed." The whole idea of the training aids was to simulate as closely as possible the ground and flight conditions present in bases in England. To achieve this effect, the flight line was laid out and adorned with signposts pointing the way to London and Player cigarette advertisements. Map overlays were developed for use with local maps which would simulate terrain and reference points of European flying. In this manner, the crews simulated as nearly as possible navigation over Europe while actually flying over Oklahoma. Armstrong claimed this method proved extremely effective, and he guided the 46th in its development and use of the new training procedures until April, 1944. His trainees carried out effectively the final phase of the bombing offensive against Germany.²

Since January, 1942, Armstrong had been involved primarily with combat operations and training procedures relative to the B-17 bomber. By November, 1943, he had been designated a principle pilot of the B-17F. The training scenario at Ardmore, however, was to be his last association with the B-17 aircraft. Soon he would be flying the latest air corps heavy bomber, the B-29 "Superfortress."

The B-29 had been on General Arnold's mind since November, 1939, when he asked the War Department for authority to initiate the heavy bomber studies. Even though this

²Armstrong, "Sleeping Giant," ch. 7, p. 1.

item had been scratched from fiscal year 1939 and 1940 programs, the recent Nazi victory over Poland was not lost on many air corps officers. Contracts were again awarded to Boeing for development of the XB-29 in September, 1940. The aircraft design eventually came to include such innovations as pressurized compartments, flush units and butt joints, and its four engines produced 2200 hp individually when supercharged. The air corps ordered some 1600 B-29's by February, 1942, and ideally the craft was to have a top speed of 382 miles per hour at 25,000 feet, with a range of 7,000 miles. It would carry 20,000 pounds of bombs. For defense it would have ten fifty calibre machine guns in five positions and a 20mm cannon in the tail.

Prototype testing began in September, 1942, but the plane did not achieve an altitude of 25,000 feet until December. Subsequent tests were plagued with engine problems resulting in nineteen B-29 accidents between February, 1943, and September, 1944. The 150 new very heavy bombers finally delivered to the air corps in April, 1944, had a top speed of 365 miles per hour at 25,000 feet with a range of 5,830 miles. Their delivery initiated a new assignment for Armstrong.

In April, 1944, Armstrong was ordered to command the 17th Bomb Operational Training Wing at Colorado Springs. He held this post until November when he became the commanding general of the 315th Bomb Wing stationed at Peterson

Field, Colorado. The 315th Wing was a special wing of B-29's being readied for a priority mission in the Pacific. The B-29's of the wing were stripped of all their defensive armament except the tail gun. The removal of all turrets and guns was to allow the aircraft to carry even heavier bomb loads at greater speeds and altitudes. The tail gun was left intact because it was believed that this would be the only angle of attack by enemy fighters when the bombers flew at 35,000 feet. The B-29's of the 315th were not destined, however, to operate in this manner.³

Soon after Armstrong took command of the 315th, the Air Force revealed that it was to be the first combat unit equipped with a new radar system, the APQ-7. The APQ-7 was an airborne radar system that allowed precision bombing of a target without a visual sighting. Under development at the radiation lab of Massachusetts Institute of Technology since 1942, the "Eagle" radar units, as they were called, presented a vast improvement over the older radar. While the older radar systems presented a 360 degree scan that made target definition uncertain, the 60 degree scan of the APQ-7 allowed for a far superior target image. The importance of APQ-7 was obvious. With it the bombers could bomb

³Alaskan Command Unit History, R. G. 342; XXI Bomber Command Tactical Mission Report, Missions 232, 238, 245, p. 1, Armstrong Papers, hereinafter cited as Tactical Missions 232, 238, 245.

targets they could not see. The old method of visually sighting a target, as Armstrong well knew, was both restrictive and inadequate. The operational use of APQ-7 was one more factor that set the 315th apart from other conventional bombardment wings. Then, too, the addition of APQ-7 made it possible for the wing to fly precision bombing missions at night.⁴

However, the addition of the APQ-7 changed the mission of the 315th. Many experts in the air force believed, including General Arnold, that the appearance of the B-29 in the Pacific would hasten the surrender of the Japanese and eliminate the necessity of an invasion of the islands. To accomplish this, the superfortress had been designed to carry a bomb load equal to that of five and a half B-17's and was already being deployed in the Pacific with varying results. The mission of the 315th was much more specific in nature. Not only was the unit to combat test the APQ-7 and ascertain its capabilities, but it was to do so by attacking targets specifically assigned to the squadron. The missions were to be flown at night, but from medium altitude in order to increase the bomb loads. Before the wing was ready for this mission according to Armstrong, it had to "endure one of the most intensive training programs

⁴Armstrong, "Sleeping Giant," ch. 7, p. 2.

ever undertaken by an air combat unit."⁵

The 315th, as it began to build up to authorized strength, became a haven for many veterans of the European air war. Armstrong noted the appearance of many familiar names on the roster of the expanding 315th. He wrote, "They were mostly volunteers who had expressed a desire to serve under my command for a second time." Future operations of the wing, with its modified aircraft, sophisticated radar equipment, and complicated bomb approach patterns, would demand a veteran and experienced group of flyers.⁶

The air war in the Pacific was quite different from that in the European theatre. Pacific operations intended to be primarily long, overwater flights, and the wing ran practice missions between New York and Puerto Rico as emphasis was placed on navigational technique and cruise-control fuel conservation. To develop proficiency in the use of APQ-7, the wing made dry-run bombing attacks against familiar cities in the United States. The 315th Bomb Wing became experts at target identification with the aid of the Eagle radar system.⁷

Furthermore, the 315th's training was indicative of the differences involved in flying combat missions in the

⁵Armstrong, "Sleeping Giant," ch. 7, pp. 2, 7.

⁶Armstrong, "Sleeping Giant," ch. 7, p. 3.

⁷Armstrong, "Sleeping Giant," ch. 7, p. 3.

European and Pacific theatres. Armstrong later noted that "actual flying operations against the Japanese empire bore little similarity to our missions against the Germans."

Over Europe the bombers had attacked in formation. In the Pacific the bombers would "approach, hit, and return" from targets in a single file. Each B-29 was assigned a specific altitude, course, and speed to fly. As the missions were to be flown at night without the aid of running lights, visual contact between the planes was impossible. If each aircraft did not adhere to its assigned position, it might chew up the tail of the plane ahead or get chewed up by the one behind it.⁸

Another area where few comparisons could be made was enemy resistance. The flak and fighters that had greeted European theatre crews over or after crossing the English Channel were not present in the Pacific. Where German flak had been deadly and accurate, the Japanese had much "less formidable anti-aircraft weapons." The Japanese also possessed far fewer fighters than the Germans. These factors, together with the fact the missions would be at night, made for very few, if any, similarities between German and Japanese resistance.⁹

Training with the 315th was a "secret" unit, the 509th

⁸Armstrong, "Sleeping Giant," ch. 7, p. 6.

⁹Armstrong, "Sleeping Giant," ch. 7, p. 7.

Composite Group and its combat element, the 393rd Squadron (VH). The 509th group had over-all responsibility for the atomic bomb; the 393rd was the squadron designated to deliver it to the Japanese homeland. Commanded by Paul Tibbets, Armstrong's copilot on the first raid to Rouen, the squadron too had stripped its B-29's of defensive armament and joined the 315th in its unique training. They practiced no formation flying and also retained the tail gun as their only means of defense.¹⁰

The 315th Bomb Wing had originally been assigned, along with the 316th, to the Philippines as XXII Bomber Command. It was, however, relieved of that assignment and finally directed to Northwest Field, Guam, in April, 1945. The wing itself was moved there in May but did not become available for combat duty until late June. On Guam, the 315th became part of XXI Bomber Command under the command of Major General Curtis LeMay.¹¹

For the 315th wing, the combat testing period consisted exclusively of oil targets. Armstrong believed this decision to have been based on what many high-ranking Germans had said after the surrender: that the greatest effect of

¹⁰ Craven and Cate, Army Air Forces, V, 706.

¹¹ Craven and Cate, Army Air Forces, V, 522; For background on conventional bombing of Japan by B-29s, see LeMay, Mission, ch. 5.

allied bombing had been the destruction of much of the Axis fuel supply. Indeed, many costly raids had been mounted and launched for this specific purpose in Europe. Now, the destruction of the Japanese war machine was to be accomplished by destroying key petroleum refineries and storage centers on the Japanese mainland. The huge bomb loads of the B-29's, together with the technological precision of the APQ-7, would make this objective attainable.¹²

Field orders number 90, 92, and 94, headquarters XXI Bomber Command (June 25 and 28 and July 2, 1945), directed the 315th to participate in medium altitude, night attacks against three oil refineries on Honshu. These were the first missions to be flown by the 315th when it finally was declared ready for combat near the end of June. They serve as fairly representative of the first five missions of the wing that were led by General Armstrong.¹³

The targets of these missions were: the Utsube River Oil Refinery on June 26, the Nippon Oil Company on June 29, and the Maruzen Oil Company. They were ideal targets for the special talents of the 315th. All were relatively large targets, increasing radar-visibility, and located on or near the coast. The coastal location was considered essential for aircraft attacking with APQ-7 due to its

¹²Craven and Cate, Army Air Forces, V, 658-660.

¹³Tactical Missions 232, 238, 245, p. 2.

limited capability for inland navigation.¹⁴

Tactical mission 232 was the Utsube River Oil Refinery, a target that ranked first as the center for aviation gas production in Japan. Containing facilities for synthetic oil refining it totaled more than a third of Japanese production, possessed facilities for natural oil refining and produced twenty-five percent tetra-ethyl lead of the Japanese total. In addition, the site housed extensive oil storage facilities. General Armstrong described only the first of these missions, perhaps viewing it and the two that followed as routine. He called the Utsube River Oil Refinery mission the first test of the wing and APQ-7. Thirty-six B-29's of the 315th, led by Armstrong, took off on the evening of June 26, 1945. They were, according to Armstrong, specifically after aviation gas storage facilities. He reported that two hundred and twenty-three tons of general purpose bombs were dropped, the crews using "synchronus radar bombing," or the use of radar in conjunction with a bombsight. He further noted that later reconnaissance photographs revealed that thirty percent of the roof area had been destroyed, as well as some small by-products tanks and a large crude oil tank. The wing was directed back to the Utsube River Refinery on July 9 to complete the job of destruction. However, this first

¹⁴Tactical Missions 232, 238, 245, p. 2.

mission remained a source of regret to Armstrong. Prior to reaching the Japanese mainland, Armstrong's B-29 malfunctioned and one engine burst into flames. With little hope of extinguishing the fire, Armstrong "elected to wipe out a town of seven or eight thousand before going down in the Pacific." The rationale is understandable, and perhaps he believed that, should they crash, it might be his last strike against the Japanese Empire. Nevertheless, after the bombs had been released they managed to put out the fire and land safely later on Iwo Jima. He worried, however, that perhaps his decision was made too hastily. Years later, he said that "even now, I sometimes wonder how many 'flames' were snuffed out by our exploding bombs. That incident remains my one regret."¹⁵

The objective of tactical mission 238, the Kudamatsu Plant of the Nippon Oil Company, was the fourth largest oil refinery in the Japanese inner zone. Considered to have an annual refining capacity of 2,500,000 barrels and a cracking capacity of 666,000 barrels, the plant's estimated storage capacity was 200,000 barrels.¹⁶

¹⁵Tactical Missions 232, 238, 245, pp. 2, 4, 25; Armstrong related this incident as occurring on the second mission. However, a check of the tactical mission reports for the first three missions, prepared by XXI Bomber Command, reveal that of the first two missions, only one B-29 made an emergency landing on Iwo Jima. This forced landing took place on the first mission, and it was Armstrong's ship.

¹⁶Tactical Missions 232, 238, 245, p. 25.

The last of the three, tactical mission 245, was the Shimotsu Maruzen Oil Refinery, an important refinery and oil storage center for the Japanese Navy, producing aviation gas, lube oil, gasoline, and fuel oil. It had facilities for both crude oil and refined products storage. The facility also contained a unit involved in the manufacture of steel drums. All three missions were flown from Northwest Field, Guam, to the targets in Honshu by way of Iwo Jima, with bomb loads of approximately 18,000 pounds, attacking in single file at between 15,000 and 16,000 feet. Japanese fighters and flak were negligible. There were no losses and no casualties on these missions. Of the thirty-six aircraft in the 315th wing that participated in the mission, no more than thirty-two bombed each target owing to operational losses. The 315th's performance was rated high. The operational summary by XXI Bomber Command found that navigation had been excellent. The bombing itself was found to have "no serious difficulty encountered." Only one B-29 suffered any damage at all, being hit by flak on the first mission.¹⁷

The fourth mission of the 315th was a return visit to the Maruzen Oil Refinery at Shimotsu on the night of July 6. This was perhaps the 315th's most successful mission up

¹⁷Tactical Missions 232, 238, 245, p. 25; Tactical Missions 232, 238, 245, p. 6; Tactical Missions 232, 238, 245, p. 8.

to that time in the Pacific theatre. Armstrong recalled that after this fourth mission, the 315th received a message from XXI Bomber Command commander, Curtis LeMay:

Successful strike is subject. I have just received the post-strike photography of your strike on Target 1764, the Maruzen Oil Refinery at Shimotsu, the night of 6-7 July. With a half wing effort you achieved 95% destruction, definitely establishing the ability of your crews with the APO-7 to hit and destroy precision targets, operating individually at night. This performance is the most successful radar bombing of this command to date. Congratulations to you and your men.

The fifth mission, led by Armstrong, was a return trip to the Utsube River Oil Refinery on the night of July 9. After this mission, he was forced to restrict his flying due to a severe case of dysentery. He would, however, recover sufficiently to lead several more missions against the Japanese homeland before the war ended.¹⁸

Why was Armstrong barred from combat flying in Europe and then later allowed to fly in the Pacific? First, the complexion of the war had changed a great deal since 1943. Germany had surrendered by the Spring of 1945; the end of the war approached and the Japanese were scrapping the bottom of the barrel for anti-aircraft defenses. Missions of the 315th faced minimum opposition, and suffered few combat losses owing to their unique operating style. Heroes, experienced bomber leaders, were no longer at a premium in

¹⁸ Armstrong, "Sleeping Giant," ch. 7, p. 8.

late 1945. Then, too, serving under LeMay probably helped as Armstrong wanted to fly combat missions, and LeMay believed most commanders expendable.

In any case, Armstrong had become an early casualty in the battle against the tropical environment. Even the younger crew members of the 315th were affected by the long and exhausting missions. At forty-three, Armstrong was the victim of what he "believed the most tenacious case of dysentery in medical history," and it plagued him for most of his tour on Guam. During each mission, he was forced to "sip from a small bottle of paregoric." On landings from these missions, the flight surgeon would drive out and meet Armstrong's B-29. After driving the general to his tent, the doctor prescribed a glass of whiskey and ordered him to bed. Armstrong "rarely complained" about this unorthodox medical treatment, and it appears to be the only treatment he received for dysentery.¹⁹

The first five missions are important to this study only because they were led by Armstrong. As far as the success of the 315th wing in general was concerned, Curtis LeMay, commanding general of XXI Bomber Command, estimated that

The 315th had trained especially for night missions. This added up to putting them on oil refineries, oil storage facilities, and even synthetic plants. They took care of these targets very nicely. By the end of the

¹⁹Armstrong, "Sleeping Giant," ch. 7, p. 8

war, the destruction was so severe as to render such targets mainly inoperable. Twelve hundred sorties flown; nine thousand tons of HE bombs dropped; and four airplanes lost. Quite a record.

The 315th wing intelligence officer, after completion of mission twelve, wrote: "Rather than detail the extensive damage inflicted, it can be said that these three targets were no longer of any use to the enemy." Concerning other missions, the intelligence officer continued: "Photo reconnaissance after Strike 14 disclosed that the target had ceased to exist." "The target was thoroughly saturated with bombs and obliterated ...beyond repair." In addition, the damage report that followed the 315th's mission to the Ube Coal Liquefaction Company was also impressive. The Ube liquefaction plant was one of Japan's leading producers of synthetic oil. "Dikes which had been built to hold back the sea from the low reclaimed land were breached by the bombs, permitting such a flooding of the area that photointerpreters were able to report- 'This target destroyed and sunk.'"²⁰

Armstrong returned to lead the 315th on its final bombing mission against Japan. Mission 328 was scheduled for the night of August 14-15, 1945, directed at the Nippon Oil Refinery at Tsuchisaki, located five miles northwest of Akita. A maximum effort had been ordered by XX Air Force,

²⁰LeMay, Mission, p. 377; Armstrong, "Sleeping Giant," ch. 7, pp. 9, 10.

and this meant that the 315th would place four bomb groups into the attack. The refinery was an important petroleum target, processing crude oil from the fields around Akita; it was also the largest natural petroleum producer in the Japanese homeland. Its 1944 annual capacity was estimated at 1,320,000 barrels. Armstrong recalled that the mission was scheduled, postponed, and rescheduled as peace negotiations were underway between the Japanese and the Allies. Evidently there was some doubt as to whether the aircraft could reach the target before the cease-fire order was issued. No order was, however, received to scrub the mission.²¹

On August 14 at 4:37 p.m., Armstrong took off in his B-29 named "Fluffy-Fuz III," leading a flight of one hundred and forty-one bombers of the 315th, each carrying a bomb load close to 20,500 pounds. Together they carried 1400 tons of bombs. They followed the route used on most missions to the Japanese mainland: base (Guam) to Iwo Jima to target. Iwo Jima was used as both an emergency field for B-29's unable to complete the mission or return to base, and as a checkpoint between base and landfall. The primary target was reached and bombed by 134 aircraft of the 315th using direct radar synchronous bombing. They dropped their

²¹XX Air Force Tactical Mission Report, Missions 325-330, Armstrong Papers, hereinafter cited as Tactical Missions 325-330.

loads from an altitude of between 10,000 and 15,200 feet. Four B-29's were damaged by anti-aircraft fire, and only four Japanese aircraft were sighted. No aircraft were lost from the 315th, but thirteen B-29's found the need to land on Iwo Jima for one reason or another.²²

A number of factors made this mission important. It was the last heavy bombing mission of the war, and also the longest non-stop combat flight ever made up to that time. The 315th had covered 3,740 miles in the round trip from Guam to Akita and back in sixteen hours and fifty minutes. Not only was the mission made with an extremely heavy bomb load, but also without using bomb bay tanks. After they had bombed the target, the crews returned to Guam listening to a broadcast from the United States describing the victory celebration going on in downtown San Francisco. Armstrong was awarded an oak leaf cluster for his distinguished flying cross (1936) as a result of the success of that last mission.²³

The 315th Bomb Wing had revolutionized heavy bombardment during its short but successful tour of service against the Japanese Empire. The wing had demonstrated that it was possible to destroy or knock out small and difficult targets

²²Tactical Missions 325-330, p. 10.

²³Tactical Missions 325-330, p. 11; Alaskan Command Unit History, R. G. 342.

through the use of airborne radar. Armstrong called the wing a "Pioneer organization, blazing a new path in aerial warfare, and accomplishing its job with the lowest combat losses on record." The wing had located and attacked the primary target on every mission, with a high percentage of the crews hitting assigned objectives accurately. In summation he wrote, "Blasting the nine refineries and storage areas seriously crippled Japan's oil production capacity."²⁴

Other sources rate the performance of the 315th much more objectively:

On the whole, the experiment was markedly successful. On most missions, General Armstrong sent a two-group force, and releasing at low or medium levels, bombardiers were able to get enough bombs into the target area to do substantial damage. In some cases it was necessary to return a second or even a third time, but by the end of the war most of the plants were completely or largely inoperable.

The 315th wing had flown fifteen missions against ten oil targets. It dispatched 1,200 planes of which 1,095 succeeded in bombing the primary targets. Bombardiers of the wing achieved a thirteen and five-tenths percent accuracy rate as compared with five and four-tenths percent achieved by bombardiers in Europe also using the "Eagle" radar. Total cost to the 315th for these fifteen missions were four aircraft lost and sixty-six damaged.²⁵

²⁴Armstrong, "Sleeping Giant," ch. 7, p. 12.

²⁵Craven and Cate, Army Air Forces, V, 660-661; Craven and Cate, Army Air Forces, V, 662.

The August 14 mission to Akita had been the last made by American B-29's in World War II. Even before the last B-29 of the 315th had set down on Guam, President Truman had announced the unconditional surrender of the Japanese. To the men who had lived the past four years in killing others, life came to a standstill. There were no more missions to fly. With regards to Armstrong, he never made it quite clear as to how the war's end affected him. He was more than ready to return to the United States, as were most military men. However, he remained in command of the 315th Bomb Wing until October, 1945, when he was summoned to XX Air Force headquarters on Guam.²⁶

XXI Bomber Command and VII Fighter Command had been combined and redesignated as XX Air Force on August 2. Lieutenant General Nate Twining, LeMay's replacement as commander of the new unit, requested that Armstrong report to him. After Armstrong arrived at headquarters and reported, the commanding general made this startling request, "Army, I want you to make the flight from Hokkaido to Washington that the other boys didn't complete." Twining was referring to an earlier attempt by LeMay and two other generals to successfully fly non-stop from Hokkaido to Washington. The purpose of the flight was to pioneer a new

²⁶The reorganization of XXI Bomber Command to XX Air Force is discussed in Craven and Cate, Army Air Forces, V, 700.

great circle route. They were forced, owing to adverse weather, to land in Chicago to take on sufficient fuel to fly on to Washington. Twining continued, "I want you to take three combat crews behind you."²⁷

Several days later, Armstrong and his four crews were waiting for a break in the weather at Mizutani, on Japan's northern island of Hokkaido, following LeMay's footsteps. Armstrong recalled that the runway there was made up of individual concrete blocks. The planes, improved model B-29S's, loaded to the maximum with fuel, were so heavy that "we could not let them stand in one place overnight." The B-29's weighed close to 140,000 pounds apiece. They had to be moved every few hours by ground crews to prevent them from pushing the concrete blocks into the earth. The formation was designated as Hyena. Hyena-One was Armstrong, Two was Colonel Ken Sanborn, Three was Major Chester Wells, and Four was Major John Cox.²⁸

It was actually November, 1945, before the Hyena flight finally took off from Mizutani. Armstrong wrote, "We used up nearly every foot of runway taking off, and

²⁷LeMay, Mission, pp. 393-395; Armstrong, "Sleeping Giant," ch. 7, p. 12; Eaker stated at the time: "I expected Armstrong would make it because he is one of the best combat pilots we have."; New York Times, November 2, 1945.

²⁸Armstrong, "Sleeping Giant," ch. 7, p. 13; New York Times, November 2, 1945.

Cox's aircraft actually picked up a small shrub as it became airborne." The ceiling around Hokkaido was about 900 feet, so Armstrong decided that they would fly under it as long as possible. Flying northeasterly, they approached Shemya, where the ceiling was at 400 feet. They were finally able to gain altitude over the Aleutian Chain and reached 14,000 feet near Adak. They continued climbing slowly, making constant checks with the other planes and relaying weather and wind information. None of the four planes had seen each other since lifting off from Hokkaido, there being about forty-five minutes between the first and last take-off. The B-29's were supposed to catch up to each other near the end of the journey. Then, any crew with enough fuel left to fly safely on to Puerto Rico was to do so. The Puerto Rican leg of the journey was a hopeful attempt to break the long distance record held since 1938 by the British (7,158 miles). The distance from Mizutani to Puerto Rico was about 8,088 miles. Armstrong wrote, however, that he wasn't sure if they could even make Washington until they were over Minneapolis. The Hyenas encountered a severe storm over the Great Lakes that blew all four planes approximately fifty miles off their course. By the time the flight reached Pittsburgh, there was not sufficient fuel left to make the Puerto Rican leg within prescribed safety limits, so Armstrong ordered all to land

at National Airport, Washington.²⁹

The wheels of Hyena flight touched down at National twenty-seven hours and twenty-nine minutes after leaving Hokkaido. The 6,544 miles in between had been traversed in bad weather, but the only mishap occurred as Cox's Hyena four landed. As he applied the brakes, three tires blew out. Fortunately, he was able to keep control of the aircraft even then. Later as the ground crews were replacing the blown tires, they discovered the small shrub that Cox had picked up on Hokkaido. For the successful completion of this mission, Armstrong was awarded another oak leaf cluster for his distinguished flying cross.³⁰

The Hokkaido to Washington flight and its conclusion provided Armstrong an opportunity for a brief visit with his family. Nevertheless, he spent Christmas, 1945, on Guam still in command of the 315th. In January, 1946, he was transferred to Headquarters, Pacific Air Command, United States Army located in the Philippines. The commanding general, Ennis Whitehead, had never met Armstrong, but he had requested "a general officer experienced in B-29's," for his chief of staff for operations. Soon after he joined Pacific Air Command, the headquarters moved to

²⁹Alaskan Command Unit History, R. G. 342; Armstrong, "Sleeping Giant," ch. 7, p. 15.

³⁰Alaskan Command Unit History, R. G. 342; New York Times, November 2, 1945.

Japan. Under the assumption that he would remain in Japan for an extended period, Armstrong decided to bring his family over. They were scheduled to arrive in September, 1946. About a month before they arrived, Armstrong was appointed senior air instructor at the Armed Forces Staff College in Norfolk, Virginia.³¹

Although the assignment at the Staff College was a source of great pride to Armstrong, he felt little regret when he was reassigned two years later. The same General Armstrong who had commanded wings and divisions in wartime was ill-at-ease in the social atmosphere which prevailed there. He learned almost immediately what a general officer could or could not say at parties. After repeating a marine story told him by a naval officer at a party, everyone seemed to have had a good laugh. Four months later, Armstrong wrote that he was still receiving mail concerning the story from irate mothers of marine sons and even congressmen. Since he attributed the circulation of the incident to the press, he resolved never again to underestimate the power of that media.³²

Relief came in January, 1948. Armstrong was ordered to the Alaskan Air Command as its chief of staff. He would be serving under an old friend, Major General Hamp

³¹Armstrong, "Sleeping Giant," ch. 8, pp. 1, 2.

³²Armstrong, "Sleeping Giant," ch. 8, p. 8.

Atkinson, and Armstrong looked forward to the assignment. He took a short leave, not being due to arrive in Alaska until February. His family was to accompany him. What was almost as good was the fact that he was returning to active command in the field where he felt and believed he belonged. As Armstrong started the long train journey to Seattle, he could not have had any idea of how closely related and intertwined his future would be with that of Alaska.³³

³³Alaskan Command Unit History, R. G. 342.

CHAPTER IV

ALASKA: DEFENSIVE MISSION (1949-1961)

Armstrong's first tour of duty with the Alaskan Command as its chief of staff, and then as commander, Alaskan Air Command, was standard peacetime duty. The commander, Alaskan Air Command (AAC), was under the office of Commander in Chief, Alaskan Command (CINCAL), a post which Armstrong would assume in 1956. Tied down to mundane command matters for nine months, he jumped at the chance to accompany Colonel Bernt Balchen on a trip to Norway in September, 1949. Balchen, commander of an AAC B-29 reconnaissance group, was planning the trip in order to attend an aviation show "shindig" being held on the 20th. The flight was to be a good will mission. Armstrong's boredom may have prompted the invitation, judging from the manner in which he jumped at the invitation. Armstrong grew skeptical when he realized that they could never fly from Fairbanks to Oslo by traditional air routes and make it in time for the festivities on the 20th. Balchen was undaunted and revealed his plans for making the flight in time. They were, he said, going to fly over the Pole utilizing a route as yet untried. Equally undaunted, Armstrong accepted the challenge.¹

¹Armstrong, "Sleeping Giant," ch. 9, p. 1; Duane Mesloh and E. Marie Salley, Highlights of History, Alaskan Air Command and its Predecessors, 1901-1970 (Alaskan Air Command Office of History, 1971), p. 21, hereinafter cited as Mesloh and Salley, Alaskan Air Command; New York Times, September 19, 28, 1949.

Armstrong and Balchen set off in a C-54 on September 19 headed for Norway via the North Pole. The trip was marred by wings consistently icing up, very poor weather, and the fact that they became lost more than once. They arrived in Oslo on the 20th as planned and completed the "first nonstop flight from Fairbanks to Oslo, a distance of 3,900 miles." They received a hero's welcome upon landing, in addition to the planned "shindig." Armstrong reasoned that he received the Gold Medal of the Aero Club of Norway, for having made the flight with Balchen. Balchen, a veteran polar explorer, already had one. They had, however, pioneered a new non-stop air route, perhaps somewhat unwittingly, from Alaska to Norway and Norway to New York.²

In December, 1949, Armstrong was summoned to Hollywood to view the premiere of the movie made from the book, Twelve O'clock High. Written by two former VIII Bomber Command members, Sy Bartlett and Bernie Lay, the movie version followed the book fairly closely. Both men had served with

²Armstrong, "Sleeping Giant," ch. 9, p. 2; Bernt Balchen, Come North With Me (New York: E. P. Dutton and Company, Inc., 1958), p. 310; Flint O. DuPre, USAF Biographical Dictionary (New York: Franklin Watts, Inc., 1965), p. 30, hereinafter cited as DuPre, USAF Dictionary; Oral History Interview R239.0512-808, Alaskan Command Oral History, 1947-1969, with Maj. Gen. Frederick R. Zierath, USA, September, 1973, and Brig. Gen. Morris O. Edwards, USA, October, 1973, in the Albert F. Simpson Historical Research Center, Maxwell AFB, Alabama, hereinafter cited as Alaskan Oral History; New York Times, September 23, 27, 28, 29, 1949; only the thirteenth such award to be presented.

Armstrong in England, and Bartlett had been shot down over Germany. Lay served as Armstrong's operations officer later on Guam with the 315th Bomb Wing. The book and the movie had been based on Armstrong, and he was asked to check the technical content for accuracy. He praised the movie for both its technical achievements and its striking realism. He gave it high marks among war movies in general and thought Gregory Peck an outstanding choice to portray the lead.³

The release of this movie based on him, however, caused many to believe that everything Peck underwent in the movie had actually happened to Armstrong, including the mental "crackup." He wrote, "Many people who did not serve with us in England asked me how long it took me to get over my mental breakdown." For that matter, this aspect of the movie was his only regret. People continually assumed that he had undergone the same strain and "crackup" as his "celluloid counterpart." Nothing was further from the truth.⁴

While in Hollywood, Armstrong received a call from Stuart Symington, then Secretary of the Air Force, to inform him that Symington, Bob Hope, and a troupe would be visiting Elmendorf Air Force Base near Anchorage on the 23rd of December. He returned to Alaska to make the necessary pre-

³Armstrong, "Sleeping Giant," ch. 9, p. 8.

⁴Armstrong, "Sleeping Giant," ch. 10, p. 10.

parations for the Christmas visit.

Armstrong was promoted to major general in January, 1950. His first tour in Alaska had been uneventful except for the above incidents. When the Korean conflict flared up in June, 1950, the new two-star general was once again looking for a combat assignment. He was, instead, ordered to New York as commanding general of the new Sampson Air Force Base around January 1, 1951.⁵

Designated an indoctrination center for the air force after the Korean conflict began, the base was an effort to provide relief from subsequent overcrowding that occurred at Lackland Air Force Base in Texas. Conditions at Lackland had become so overcrowded that the air force was compelled to suspend recruiting, an unthinkable situation even in peacetime. Much of Armstrong's expertise was directed at getting Sampson into shape in time to receive and process recruits. Acquired by the air force from the navy on November 1, 1950, the base was not expected to be ready for trainees until April 1, 1951, at the earliest. Yet, on February 1 when the first recruits arrived, it was ready. All that held up their training then was the lack of service shirts and shoes, both victims of the production and trans-

⁵Dupre, USAF Dictionary, p. 30; New York Times, January 29, December 28, 1950; Raleigh News and Observer, January 14, 1951.

portation bottlenecks arising from mobilization.⁶

In the following summer of 1951, Armstrong was ordered to command the 6th Air Division at McDill Air Force Base, Florida. Part of the 2nd Air Force, the 6th was the first unit in the Strategic Air Command (SAC) to receive the Boeing B-47 stratojets. He remained in command of the 6th for barely a year before he was elevated to command the 2nd Air Force with headquarters at Barksdale Air Force Base, Louisiana. He assumed this command in October, 1952, and gained the distinction of commanding the first all jet bomber force. He held this post until July, 1956, when he was again ordered to the Alaskan Air Command as its commander.⁷

Promoted to Lieutenant General in September, 1956, Armstrong was elevated to Commander in Chief Alaska Command (CINCAL), a "dual-hat" position he held in conjunction with being commander, Alaskan Air Command, until October, 1956. While he remained as CINCAL from September, 1956 to July, 1961, he was alternately designated as commander, AAC, from July, 1956 to October, 1956, and again from June, 1957 to August, 1957, ostensibly to fill that position as it became vacant.⁸

⁶New York Times, February 3, January 12, 1951.

⁷DuFre, USAF Dictionary, p. 31; Armstrong, "Sleeping Giant," ch. 10, p. 2.

⁸Armstrong, "Sleeping Giant," ch. 11, p. 12; Mesloh and Salley, Alaskan Air Command, p. 25; Alaskan Oral History, n. p.; New York Times, September 18, 1956.

Between September, 1956 and March, 1958, Armstrong developed some very strong ideas and opinions concerning the disposition of the Alaskan mission. Put down on paper in a "Memorandum For The Record" dated March 14, 1958, the general detailed Alaska's vulnerability to Soviet Russian attack by air and proposed definite measures to forestall such an event.

Obviously perplexed at the state of Alaska's defenses in the light of prevailing Cold War attitudes, the "Memorandum" proposed that Alaska was capable of not only a defensive mission but an offensive one as well. Armstrong called for the erection of three Intermediate Range Ballistic Missile (IRBM) sites in Alaska; one located on the mainland, one at Adak, and one at Attu. In addition, he wanted one Intercontinental Ballistic Missile (ICBM) site erected on the mainland. This, he asserted, would provide protection not only for Alaska but also the West Coast. The need for these missile sites was to eliminate the "close in" staging areas of the Russians across the Bering Sea on the outbreak of hostilities. The missiles, in conjunction with strategic B-47 bombers to be stationed at Eielson (near Fairbanks) and Elmendorf Air Force Bases, would do the job, he believed.⁹

Totally disagreeing with the idea that Alaska existed

⁹Armstrong, "Sleeping Giant," ch. 12, p. 5.

merely to serve the "lower 48" states with an advance warning of a Russian attack across the Bering Sea, Armstrong had decided that the region was capable of much more. Worsening relations with the U.S.S.R. and recent developments in satellite technology, rockets, and missiles had marked the middle 1950's. The launching of Sputnik I by the Russians in 1957 forced Americans concerned with defense to realize the need for faster development of the ICBM. The United States countered in 1958 with the launching of "Explorer," our first earth satellite. A "Vanguard" rocket was launched into orbit in March, followed six months later by the "Pioneer" rocket. As the first United States atomic subs crossed the North Pole underwater, the air force announced the formation of the first two squadrons to be armed with IRBM's. This was the background in which Armstrong's views of Alaska's mission were forged. He obviously expected an attack at any moment, and this view was shared by many, both in and out of Alaska.¹⁰

There is, however, no indication that Armstrong shared these views with anyone prior to 1959, rather he merely put them down on paper to satisfy his own conscious. Or perhaps he did not feel that he, as a military man, could speak out publicly on the matter. Whatever the case, a campaign was forming in his mind to bring the status of Alaskan defense

¹⁰ Alaskan Oral History, n. p.

before the nation; things for the moment remained calm as the proponents of Alaskan statehood rallied for their final effort to bring Alaska into the union.

Alaska became the forty-ninth state in January, 1959, as the result of a compromise which, in effect, set aside one-half of the state for future national defense reservations. The so-called Eisenhower line, which divided Alaska north of the Yukon and Porcupine Rivers, set aside over 225,000 square miles for defense purposes. The item, included in the statehood act as the price of Eisenhower's approval of the bill, would also surface later as a prime contradiction concerning the defense of Alaska and the nation.¹¹

The granting of statehood to Alaska in January, 1959, set in motion the drive to bring to the nation's attention the lack of preparedness that existed in Alaskan defense. Facing west from Alaska, one can see the "low headlands" of Siberia rising out of the bay, a sight not lost on the new state's elected representatives in Congress.

Senator Ernest Gruening of Alaska in April, 1959, rose in the Senate to take issue with a recent article written by Hanson Baldwin, the New York Times military expert. Baldwin's article summarized that the "strategic concept of

¹¹U.S., Senate, 86th Cong., 2d sess., Remarks of Senator Gruening, May 17, 1960, Congressional Record, 106:10409.

Alaskan defense is based upon the insular theory," or that the "islands" of Anchorage and Fairbanks were the most important military targets and that all available forces were concentrated there for its defense. Gruening understood this to mean that the rest of Alaska would be left undefended in the event of a shooting war. Gruening, E. L. Bartlett, and Ralph Rivers immediately sought confirmation from Secretary of Defense Neil McElroy that the United States intended to defend every inch of American soil, wherever it was located. The congressmen missed the main point of the article, however. Baldwin, in a reply to the congressmen's letter to the Times editor, both of which appeared in the April 26 edition, restated the point, "the fact remains that much of Alaska - given the present strength, composition and location of our forces there - is virtually indefensible militarily."¹²

When Baldwin, in the closing paragraph, likened the potential danger that "a small scale enemy attack somewhere on the periphery of Alaska might well create such a political and psychological uproar that it would create a costly and wasteful military diversion as did the Japanese on the Aleutians during W.W.II," Gruening, Bartlett, and Rivers got the point. Gruening stated, "I continue to feel

¹² New York Times, April 26, 1959; U.S., Senate, 86th Cong., 1st sess., Remarks of Senator Gruening, April 27, 1959, Congressional Record, 105:6819.

very strongly that the defenses of Alaska are as yet by no means what they should be." Strangely enough, Baldwin was in Alaska when he wrote the original article which was dated March 15, 1959. Although there is little evidence to support it, there is suspicion that collusion existed between Baldwin and Armstrong. Their views on Alaskan defense were remarkably similar; perhaps Armstrong prevailed on Baldwin to say what he felt he could not. At any rate, their friendship dates at least from this year, and the ill-prepared defenses of Alaska were brought out in the open.¹³

Once the ice had been broken on the issue, Armstrong used the occasion of addressing the Association of Local Transport Airlines in Anchorage on July 29 to spread the warning.

It would take only two enemy bombers to put Alaskan bases out of action and if the attack were followed up by paratroops, Alaska would be out of action. With Russians in the Fairbanks and Anchorage areas, President Eisenhower would have to decide quickly whether to bomb Alaska to save Chicago or leave the country open to close-range attack.

He again called for placement of IRBM's in Alaska to forestall such an event; unless the missiles were supplied to Alaska, "we are going to be in one hell of a fix."¹⁴

¹³New York Times, April 26, 1959; U.S., Senate, 86th Cong., 1st sess., Remarks of Senator Cruening, April 27, 1959, Congressional Record, 105:6819.

¹⁴New York Times, December 4, 1959.

Continuing, the general stated that the Strategic Air Command could only count on knocking out eight of the twenty-six Red bases in Siberia ringing Alaska. Furthermore, the susceptibility of Fairbanks and Anchorage to nuclear attack "would leave the rest of Alaska wide open to invasion." However, he qualified the need for missiles; Alaska did not need intercontinental missiles but rather intermediate missiles "that will allow us to nullify those twenty-six Red bases in Siberia." Armstrong believed, as had Billy Mitchell and "Hap" Arnold earlier, that Alaska was of the utmost strategic importance. He criticized the nation's thinking as being "northeast" orientated, when he believed that the obvious route of attack to the United States was through Alaska. For that matter, he believed that the security of the entire west coast was closely tied to Alaska. The mission of the air force in Alaska, without missiles, was merely to warn the United States of attack; he stated, however, that air force fighters then in Alaska would only be capable of destroying one of every four invading aircraft.¹⁵

The mainstream of Armstrong's address was reported in both the Anchorage and Fairbanks newspapers the following day. Senator Bartlett, spurred by Armstrong's revelation, immediately jumped on the wagon with his own warning, also

¹⁵New York Times, December 4, 1959.

to the ALTA, later broadcasted on television and covered by Fairbanks papers. Saying he was shocked to find out about Alaska's non-existent defenses, he planned to find out what was going on in the Pentagon and warn the nation of it.

It was shocking to learn that Alaska has what amounts to no defense at all after we have spent millions of dollars maintaining what we believed to be a reasonably adequate defense. It's enough to frighten anybody.

Making specific references to Armstrong's speech, he praised the general "for having the courage to tell the Nation about it." He continued:

If the commanding general of the Alaska Command tells us that across the way there are 26 Red bases and we can knock out only eight of them, and that there should be installed in Alaska IRBM's, then we had better believe him. I am glad General Armstrong spoke as he did. I intend to return to Congress and bring the attention of the entire Nation to this alarming situation from the floor of the U.S. Senate.¹⁶

Gruening, in the Senate, insisted the Armstrong article be inserted into the Congressional Record. Rivers did likewise in the House; however, Gruening did his own analysis, quoting the more dramatic aspects of the article. He did point out that Armstrong did not feel Alaska needed "inter-continental missiles to put his forces in range of Cairo and Australia, but intermediate missiles 'that will allow us to

¹⁶U.S., House, 86th Cong., 1st sess., July 28, 1959, Congressional Record, 105:A6703; U.S., House, 86th Cong., 1st sess., July 28, 1959, Congressional Record, 105:A6703.

nullify those 26 Red bases in Siberia.'" And, of course, he echoed Armstrong's final warning.

Alaska was built up through a series of crash programs and the next one will be when the Russians move up two squadrons of Badgers (propjet bombers) across the Bering Straits from Alaska.

Here was the point of departure between Gruening, Rivers, Bartlett, and Armstrong. The general was speaking purely as a military officer; the representatives used this angle to attack the defense policy of building bases overseas. Oversea base construction, they argued, was accomplished and maintained tenuously, at the whim of dictators, and may be lost at any moment. On the other hand, bases built in Alaska were built

on the solid rock of American soil, surrounded by a 100-percent militantly patriotic American Citizenry. It is utter folly for us not to make Alaska not only an impregnable bastion, which, in the view of the commanding officer of Alaska it is not, but to make it a great base both for defense and offense for the protection not merely of the U.S., but of the entire North American Continent, and indeed of the Western World.¹⁷

What were some of the factors by which Armstrong assessed the potential Russian threat to Alaska? Of course, the Cold War in general can be considered. But Brigadier

¹⁷U.S., House, 86th Cong., 1st sess., Article from the Fairbanks News-Miner, July 28, 1959, Congressional Record, 105:A6646; U.S., Senate, 86th Cong., 1st sess., Remarks of Senator Gruening, August 5, 1959, Congressional Record, 105:15136.

General Morris O. Edwards, chief of the Alaskan Command from June, 1958 to December, 1959, revealed the following which may have inspired the feeling of impending Russian aggression. In general, there was a "keen Soviet attention to the area including the development of nuclear ice breakers in the artic." More specifically, there was a continuous "Soviet challenge to the navy and air force aircraft over the Bering Sea," with planes constantly being scrambled to confront 'boogies.'" Concerning Alaskan defense, Edwards cited the "lack of realization by those in high places of the importance of the assets the U.S. possessed in Alaska." He felt that strategically, the emphasis should be placed "on the need to defend the important new oil base" there. He considered that "Alaska could very well be considered a part of the forward defense perimeter of the Pacific," a fact not lost on the Japanese in World War II. However, he felt the importance of Alaska, after oil, was the continuation of electronic warfare - "that is our eavesdropping mission." Also, he throws some light on the state of relations between Alaskan military personnel and civilians. It seems they were very close, "with almost constant or day-to-day communications with the Governor's office, with senators, legislators, and other key government (local) leaders." The ALTA meeting where Armstrong first spoke would tend to bear this out; Bartlett was there and called

it "one of the most dramatic situations in my life."¹⁸

As the year 1959 drew to a close, Alaskan representatives were concerned. The defenseless situation of Alaska in proximity to the Red Siberian bases had become their main concern. Armstrong, whose speech had started it all, seemed to sit back and let events carry on their logical course; after all, there was only so much he could do as a military man subject to orders. He was, however, keeping score. His original ALTA speech had been quoted in many articles, including the last time for 1959 in the December issue of Flying. In a letter to Baldwin, he commented on it indirectly.

This article came out in early December. You may or may not have seen it. I did not refer to "defense" but I did refer to "offense." Senator Bartlett brought out the "defense" part of the article. You have attempted to get the Alaskan picture across with as little success as I have. Everyone agrees that my evaluation as well as solution is correct. I predict a costly crash program for Alaska once the true facts are made known to the public.

That Armstrong and Baldwin were keeping in touch and sending each other every article that came out on Alaskan defense is evident from this letter and another dated the following month, January, 1960. In it, Armstrong was thanking Baldwin for a recent article and laments that "The comments were

¹⁸ Alaskan Oral History, n.p.; U.S., House, 86th Cong., 1st sess., Article from the Fairbanks News-Miner, July 28, 1959, Congressional Record, 105:A6703.

favorable however no results are expected." The conclusion from this is that where Armstrong could not press the defense point because he was a military commander, he depended on Baldwin to speak for him. This relationship continued throughout the debate.¹⁹

The early part of 1960 was relatively quiet concerning the Alaskan defense picture. Department of Defense appropriation hearings in the spring, however, revealed the posture of the air force with regards to Alaska. Testifying in April before the Senate subcommittee on Military Construction, Under Secretary Joseph Charyk of the air force named three necessary revisions in the air defense system. The first two concerned improved defense against air-breathing enemy weapons and acceleration of ballistic missile warning systems. The third was an "improved deterrent posture." In conjunction with the last, Charyk added that they also planned a "revised and improved fighter-interceptor force," an objective heralded by many as meaning more defense for Alaska.²⁰

¹⁹Frank Armstrong to Hanson Baldwin, December 14, 1959, Hanson Baldwin Papers, Yale University Library, New Haven, Connecticut, hereinafter cited as Baldwin Papers; Armstrong to Baldwin, January 25, 1960, Baldwin Papers; New York Times, December 14, 1959; David Lewis, "Is Alaska Expensible?" Flying, December, 1959, p. 30.

²⁰U.S., Senate, 86th Cong., 2d sess., Remarks of Senator Gruening, May 17, 1960, Congressional Record, 106:10410; U.S., Senate, Armed Services Committee, Department of Defense Appropriations, Hearings before the Senate Sub-

Less than a month later, word reached the Alaska delegation that the air force had changed its mind. In the face of its avowed intention to improve and revise the fighter-interceptor force came the announcement that the air force was planning the elimination of the "entire fighter force north of the Alaska Range," or nearly half of the total fighter force in Alaska. This move would leave the state with a force of thirty-three fighters, located in the south of the state at Elmendorf Field, Armstrong's headquarters base.

Gruening, Bartlett, and Rivers hurried to the Pentagon on May 10, 1960, to meet with air force officials and find out what was going on. The officials they were to meet were Charyk and General Curtis LeMay, vice chief of staff. At a joint press conference the following day, they revealed the outcome of this meeting. They had been told by the air force that the twenty-five fighter-interceptors of the 449th Squadron based at Ladd Air Force Base would be removed from Alaska by January 1, 1961, and that the army might take over the base, although no manpower increases would be forthcoming. Furthermore, the Defense Department had no plan to build either defensive or offensive missile bases in the state as had been recommended by Armstrong. Although LeMay,

committee on Military Construction, 86th Cong., 2d sess., 1960, p. 319.

speaking for the air force as deputy chief of staff, insisted these developments only reduced Alaskan defenses by twenty-five percent, Bartlett contended it was closer to fifty percent as the state was losing twenty-five of its fifty-eight fighters.²¹

Finding themselves up against an immovable object in the form of LeMay, the Alaskans resorted to their "ace in the hole." Rivers pointed out Armstrong's fear of the threat of the twenty-six Russian missile bases in Siberia. LeMay reportedly answered that he did not think the Russians were doing much there. Bartlett brought up Armstrong's repeated pleas for missiles and increased defenses for Alaska. Bartlett said, "LeMay brushed it off as just the desires of a theater commander who had been overruled." Indeed, to the question as to whether Armstrong had been consulted concerning the elimination of the twenty-five fighters, Bartlett quoted LeMay as replying "probably not."²²

The question as to how the mission of the 449th Squadron would be accomplished after its removal drew a response from LeMay that was indicative of the trend in air force thinking that Armstrong and Baldwin often referred to as the

²¹U.S., Senate, 86th Cong., 2d sess., Article from the Anchorage Daily Times, May 17, 1960, Congressional Record, 106:10411.

²²U.S., Senate, 86th Cong., 2d sess., Article from the Anchorage Daily Times, May 17, 1960, Congressional Record, 106:10411.

"fortress America" concept. LeMay responded that "We can operate from the U.S. west coast with long-range airplanes just as well as from Alaska." He went on to negate the strategic importance of Alaska, saying that the Russians would never use it as an invasion route because of the early warning networks completed there in 1957 and 1959.²³

What was so important to Alaskans about the 449th Squadron? First of all, there were only two fighter-interceptor squadrons stationed in Alaska. The 449th, located in Fairbanks, constituted America's and Alaska's northernmost defense post, the fighter base closest to Russia. The closing of Ladd Air Force Base and the elimination of the 449th would move Alaska's first line of air defense 300 miles to the south to Elmendorf Air Force Base, where the remaining thirty-three fighters were stationed. Political and economic motivations by Alaskans aside, the hard fact remained that American defenses were retreating southward several hundred miles at a time when Soviet Premier Khrushchev was making the most of the U-2 spy plane incident and insulting President Eisenhower. The move would leave Fairbanks and Ladd in a "no man's land" with Soviet strength concentrated several miles north and west, and

²³U.S., Senate, 86th Cong., 2d sess., Article from the Anchorage Daily Times, May 17, 1960, Congressional Record, 106:10411; Alaskan Oral History, n.p.

American strength concentrated some 300 miles to the south. Few in Alaska could understand the wisdom of this move in the light of prevailing circumstances.²⁴

The contradictions in air force thinking confused and baffled the Alaskans. The "too little - too late" attitude that had allowed the Japanese to occupy Alaskan territory during World War II had not faded from Alaskan memories. Since that time, the U.S. had spent some two billion dollars in constructing and maintaining the area's defenses. The territory's strategic importance had been recognized and expounded by such notables as Billy Mitchell and "Nap" Arnold. Indeed, its strategic importance had been almost institutionalized by the statehood provision which set aside almost half the state for national defense purposes. The decision to inactivate the 449th was made even more unbelievable coming on the heels of the air force's objective to modernize the 449th's F-89's with the new F-101's. The big question was: Why?²⁵

The air force answer contained in a memorandum prepared

²⁴U.S., Senate, 86th Cong., 2d sess., Article from the Fairbanks News-Miner, May 17, 1960, Congressional Record, 106:10412; U.S., Senate, 86th Cong., 2d sess., Letter from Governor Egan to Secretary of Defense Gates, May 17, 1960, Congressional Record, 106:10412-13.

²⁵U.S., Senate, 86th Cong., 2d sess., Article from the Anchorage Daily Times, June 10, 1960, Congressional Record, 106:A4948.

by Major General Howell Estes, assistant deputy chief of staff operations, shed light on the revised plans for air force units in Alaska. The changes revolved mainly on a reorientation of plans "related to defense of the North American Continent against manned bomber attacks." Calculating that the immediate and long-range threat from the Soviet Union was in their strategic bomber force and their developing ICBM force respectively, the air force proposed an accelerated completion of a semi-automatic defense system against the manned bomber and concentration on systems designed to counter the ballistic missile threat. This meant reduction and elimination in quantity of certain components of the planned manned bomber defense system which could not be made operational before the end of the 1960's. Concentration would instead fall on modernization of the intercept fighters, acceleration of ballistic missile warning systems, and improved deterrent posture.²⁶

While some reductions in strength would be offset by the fighter-interceptor modernization, the overall decrease in total weapons available would necessitate the repositioning of fighter-interceptor forces to fill the gaps. Guidelines for the redeployment of the fighter-interceptor were to insure maximum defense along the most probable

²⁶U.S., Senate, 86th Cong., 2d sess., Memorandum from Air Force assistant chief of staff operations, June 16, 1960, Congressional Record, 106:12813.

routes that an enemy would use to attack national strategic targets and to do so in a ratio in accordance with "weapons available, strategic targets to be defended, and enemy attack capabilities." This meant that fighter defenses in some areas would have to be reduced in favor of more strategic spots. Alaska, despite Armstrong's warnings, was one where reductions were made. Air force analysis of the Soviet strategic air base structure and long-range air force capabilities proved that the full force of the Soviet bomber command could be sent against the "lower 48" without overflying Alaska. Therefore, all air defense weapons located in the state could be either by-passed or attacked by medium range missiles at any time.²⁷

The air force air defense weapons in the state were for defense of Alaskan strategic targets. While the 449th was still to be inactivated, the number of F-102 fighter-interceptors were to be increased and augmented in the near future by equipping them with the GAR-11, an air-to-air missile with a guided nuclear warhead. The air force promised that this improvement would give Alaska "a greater total air defense capability ... than that which exists today." Additionally, these interceptors would maintain a continuous air alert in several strategic locations, including

²⁷U.S., Senate, 86th Cong., 2d sess., Memorandum from Air Force assistant chief of staff operations, June 16, 1960, Congressional Record, 106:12813.

Fairbanks, which was losing the 449th. So much for the defensive potential of Alaska, but what of the offensive potential Armstrong had so often asked for?²⁸

The Estes memorandum continued dealing with this aspect. First, the air force reasoned any consideration of Alaska's offensive capabilities would have to take into account the many changes that had taken place in the area of weapons technology in the preceding years. Until recently, all offensive weapons were severely limited in range, thus necessitating that they be positioned as far forward as possible, (this referred to B-47 bombers and their tanker forces, before the advent of missiles), if they were to be effective in retaliation strikes. By 1960 however, the long range of the B-52 and its attendant jet tanker force had reduced the need for forward basing of the strategic bombers. The ICBM, with ranges of about 9,000 miles, were also helping to alter the strategic situation. "Technology has thus made it possible to base strategic offensive power where force survivability and economy can be maximized while still retaining full target coverage."²⁹

Air force studies were cited comparing IRBM's based in

²⁸U.S., Senate, 86th Cong., 2d sess., Memorandum from Air Force assistant chief of staff operations, June 16, 1960, Congressional Record, 106:12813.

²⁹U.S., Senate, 86th Cong., 2d sess., Memorandum from Air Force assistant chief of staff operations, June 16, 1960, Congressional Record, 106:12813.

Alaska with Minuteman ICBM's located on the mainland of the United States. The air force's summation of these studies was that "in approximately the same time period, over four Minuteman ICBM's could be deployed in areas of the United States other than Alaska for the same cost as one IRBM deployed in Alaska." With regards to the twenty-six Red bases in Siberia that Armstrong considered so threatening, the study proved that four ICBM's could be targeted there from the continental United States for the same cost as one IRBM from Alaska. The same reasons were used to explain why the short-range tactical fighter bombers could not be used in an offensive role from Alaskan bases. Only the B-47, said the air force, maintained on alert status and given early warning by radar or Ballistic Early Warning System (BMEWS) against bomber or missile attack, "can adequately and economically carry out an offensive role from Alaska."³⁰

In light of all this, "Alaska serves as a vitally important base in a defensive role for early warning of manned bomber attack through Alaskan radar and Distant Early Warning (DEW) line extensions and of ballistic missile attack through BMEWS. Its importance in an offensive role is chiefly related to forward basing capability for the medium bomber force of the Strategic Air Command." This was the air

³⁰U.S., Senate, 86th Cong., 2d sess., Memorandum from Air Force assistant chief of staff operations, June 16, 1960, Congressional Record, 106:12813.

force's explanation of the changes that were taking place in American and Alaskan defense.³¹

General Armstrong in a June 6, 1960, letter to Hanson Baldwin underscored his primary concern.

Your concern over the announced pull-out of the 449th Fighter Interceptor Squadron at Ladd Air Force Base, deactivation of the 71st Air Rescue Squadron, and other evidences that our military capability in Alaska is being weakened at this crucial time is shared by many public-spirited citizens, both in and out of Alaska. As Commander in Chief of the forces in Alaska, I am responsible directly to the Joint Chiefs of Staff and have made and reaffirmed my recommendations to them on what I consider the minimum defensive-offensive capability the nation should have in this vast American state contiguous to Soviet Russia.

He goes on to state his particular position as a military officer bound to obey his orders without questioning superiors or their motives, but "This, of course, does not apply to the civil population of Alaska or to their elected representatives." Remarking on the impending visit to Alaska by President Eisenhower on June 12, the general indicated that he would be most happy to see Baldwin if he was planning on accompanying the president.³²

There is no evidence that Baldwin visited Alaska at that time, but his article on June 15 sounded as if he had

³¹U.S., Senate, 86th Cong., 2d sess., Memorandum from Air Force assistant chief of staff operations, June 16, 1960, Congressional Record, 106:12813.

³²Armstrong to Baldwin, June 6, 1960, Baldwin Papers.

conferred on the matter with Armstrong. Entitled "A Weak Link In Defenses," he lambasted the policies that led to the weakening of defenses of Alaska. He laid responsibility for the move on the "President's own defense policies, particularly the level budget concept, and the increasing tendency of the air force toward a 'Fortress America' concept," or the withdrawal of the main installations of the air force within the continental United States.³³

Commenting on the fact that the deactivation of the 449th's twenty-five F-89 fighters, equipped with nuclear warhead missiles, would leave the state defended by only thirty-three F-102's based at Elmendorf, whose fighter-interceptor mission was primarily for identification of enemy and unknown aircraft. Baldwin concluded that "There is no substitute for this visual identification and it is idle to assert that thirty-three aircraft can do the job as well as fifty-eight." Of the thirty-three remaining aircraft, only six would be able to be kept on a constant ground alert. He placed little faith in the air force assertion that the squadron at Elmendorf would be able to rotate some of its few remaining aircraft to the Fairbanks area, or that Alaska could be ably defended from the continental United States. "Any such arrangements obviously reduce the effectiveness

³³New York Times, June 15, 1960.

of the defense."³⁴

Recalling that the strength reduction was initially to be a modernization, Baldwin felt that replacing the F-89's with planes or missiles, with an offensive capacity, would have made better sense. "Not a single fighter in Alaska has the range to reach and return from Soviet bases -- just across the Bering Strait and in Kamchatka Peninsular." The placement of some Thor or Jupiter missiles in Alaska would, he wrote, not only neutralize the Soviet bases far more than "a multiplication of our purely defensive strength," but also serve as a strategic diversion by acting as an "atomic lighting rod" attracting some of the Soviet atomic lighting away from the continental United States. Baldwin's conclusion must have pleased Armstrong. It certainly did Gruening and the others. "The impending reduction in the 49th State's fighter-interceptor strength will leave both Alaska and the rest of the States weaker, not stronger."³⁵

Even though President Eisenhower's overnight stop in Anchorage on June 12 should have provided some opportunity for Armstrong and others to "impress upon the Commander in Chief the virtual defenselessness of the area," this seems to not have been the case. Armstrong quoted the president as asking, "Why are there no missiles?" This remark indi-

³⁴New York Times, June 15, 1960.

³⁵New York Times, June 15, 1960.

cated to Armstrong that perhaps the contradictions lay not between the executive and the air force, but entirely within the air force hierarchy.³⁶

A June 14 editorial entitled "Cloudy Defense Picture" appeared in the Fairbanks Daily News-Miner outlining the air force's changing policy regarding Alaskan defense. In March, 1960, the air force announced that the 449th Squadron would be replacing its old F-89's for the new, superior F-101B, providing the unit with "greater defensive punch." Two months later came the announcement that no F-101B's would be forthcoming for the state, and that the 449th would be "scrapped" in keeping with the new air force policy of redeployment and increased emphasis on missile defense, "which could be based more conveniently and more economically in the United States." Then, around June 13 the air force announced that the number of F-102 fighter-interceptors in the state would be increased in order to maintain "a continuous air defense alert in the Fairbanks area and in other areas of Alaska." It is not hard to understand why Alaskans were confused over this vacillating policy. One month they are strategically important enough to be promised F-101B's, the next month half of their fighter-interceptor strength is slashed, and the following month they are important enough

³⁶ New York Times, June 15, 1960; Armstrong, "Sleeping Giant," ch. 13, p. 1; New York Times, June 14, 1960.

to have their F-102's strengthened and maintained in continuous alert. But the 449th was still to be deactivated, and there would be no missiles for the state, not even for defense of the \$300 million BMEWS being erected at Clear.³⁷

By July, 1960, the air force's decision had clearly been accepted as policy. Gruening, sensing the inevitable, had written to the president on May 26 requesting a review of air force policy with regards to Alaska. If, after his review of the situation, Eisenhower did not agree with Gruening on the necessity of maintaining a strong Alaskan defense:

I hope you will ask the Interior Department to draft legislation which would undo a feature of the Alaska Statehood Act which, you will probably recall, segregated almost half of Alaska north and west of a so-called Eisenhower line, within which the President has authority to create one or more national defense reservations. If we are to write off Alaska militarily, there would seem to be no reason remaining to perpetuate this division of my State.

By July, however, Gruening, Bartlett, Rivers, and Governor Egan seem to have become more concerned with the "net loss to the 49th State of 2,420 trained military personnel and 455 trained civilians" that the closing of Ladd Air Force Base entailed. But perhaps the real reason that the whole affair was being allowed to fade into the background was the rapidly approaching national political conventions. They

U.S., Senate, 86th Cong., 2d sess., June 20, 1960, Congressional Record, 106:A5272.

were striving to keep the matter from becoming a political issue, or as Egan put it, "I didn't want to be placed in a position--just prior to the national political conventions--that might be construed to cause the military not to consider our situation in Alaska."³⁸

Armstrong, quoted in an article in the June 30th issue of the Anchorage Daily Times, had this to say, "My feelings and recommendations on this subject remain unchanged. However, the decision having been made, I am confident that it is recognized that it is my duty as commander in chief of Alaska to accomplish the mission of the Alaskan command with the forces made available to me." And there the matter would have to rest, at least until after the national elections in November, 1960.³⁹

This most crucial year in Armstrong's career passed without the general speaking on the matter in public. It is certain he did so in private. However, no evidence could be found to indicate that he ever spoke out in public again after his address to the ALTA. But he consistently funneled

³⁸U.S., Senate, 86th Cong., 2d sess., Letter from Senator Gruening to President Eisenhower, June 16, 1960, Congressional Record, 106:12812; U.S., Senate, 86th Cong., 2d sess., Article from the Anchorage Daily Times, June 16, 1960, Congressional Record, 106:A5851.

³⁹U.S., Senate, 86th Cong., 2d sess., Article from the Anchorage Daily Times, June 16, 1960, Congressional Record, 106:A5851.

timely and pertinent information to Hanson Baldwin with regards to their mutual interest: the defense of Alaska. Two weeks before Baldwin's "Weak Link In Defense" article, Armstrong dashed off a quick letter to him, "Have just returned from Colorado Springs and found your letter waiting. My letter with requested information follows." In the following week, he is again writing to Baldwin suggesting that Baldwin's inquiry might best be served by scanning "recent testimony before the Senate Subcommittee on DOD Appropriations for 1961." Their collusion is further indicated by an undated letter which centers on a very noticeable verbal exchange in progress over one of Baldwin's articles, "Some one should brief me if your article is not correct."⁴⁰

Major General Frederick Zierath (USA), chief of staff to the Alaskan Command from January, 1960 to April, 1961, throws more light on the subject of Armstrong's tactical views than did Armstrong himself. Zierath says that the general "placed considerable emphasis on fighter bomber reinforcements" to augment the tactical air potential. "He made repeated requests and appeals to the Joint Chiefs of Staff (JCS) for this capability and desired the permanent stationing of the F-105 squadrons in Alaska. He believed

⁴⁰ Armstrong to Baldwin, June 1, 1960, Baldwin Papers; Armstrong to Baldwin, January 25, 1960, Baldwin Papers; Armstrong to Baldwin, n.d., Baldwin Papers.

that this was the best aircraft for the purpose in the inventory at that time." What obstacles did Armstrong feel kept him from completing the Alaskan mission? Zierath said that "General Armstrong often referred to the 'outpost complex' and believed that ALCOM by force of circumstance and worldwide commitments occupied a low position on the totem pole in the strategic planning." And what efforts did Armstrong make in attempting to get offensive weapons based in Alaska? Zierath said that this was "corollary to General Armstrong's efforts to have fighter bombers based in Alaska. He also tried to enlist SAC's interest in using the Whittier tunnel as a ready-made silo or provide and utilize the track system for a flatbed mobile firing platform for missiles. This never got beyond the concept state, however."⁴¹

The controversy concerning Alaskan defense never really had the opportunity to surface again. The national elections in November came and went. A Democratic administration under John Kennedy was installed in January, 1961, and with it came new secretaries of defense and the air force, Robert McNamara and Eugene Zuckert respectively. Also in January the air force turned over Ladd Air Force Base to the army, which promptly renamed it Fort Jonathan Wainwright.

The Alaskan defense controversy reopened to a certain

⁴¹Alaskan Oral history, n.p.; New York Times, December 4, 1959.

extent when Colonel Willard Pearson, operations and training officer for U.S. army forces in Alaska, called for the emplacement of missiles in Alaska. Brought to the attention of the House of Representatives by Ralph Rivers, Pearson's speech sought to renew the strategic importance of Alaska in future conflicts with the Soviets. This was strictly from a ground war point of view as he called for missiles, Polaris missile carrying submarines, and increased training of troops for offensive and defensive arctic operations. For all practical purposes, the debate with the air force was over, and the air force policy decisions would stand. The indication is that Alaskans hoped that the army, in the form of Pearson, would spearhead the move much in the manner that Armstrong had. More importantly, though, was the fact that it was a dead issue as far as the air force was concerned.⁴²

In the summer of 1961, Senator Stuart Symington sought to bring to the Senate's attention the retirement of four high-ranking military men. He asked that a New York Times editorial "praising the successes of these four great Americans" be inserted into the Record. Entitled "The Captains Depart," it was a brief tribute to the accomplishments of Naval Admiral Arleigh Burke (CNO), Air Force chief

U.S., House, 87th Cong., 1st sess., Article from the Anchorage Daily Times, January 16, 1961, Congressional Record, 107:A791.

of staff General Thomas White, Tactical Air Command General Frank Everest, and CINCAL Lieutenant General Frank Armstrong, Jr. It praised Everest and Armstrong as 'pilots' pilots, beau ideals of fighting airmen."

All these men, and others of high rank who have retired recently or will shortly do so, deserve well of the Nation. The best of the military qualities--selfless service, loyalty up and down, leadership and duty--were never more needed than they are today. These men set a high mark for those who follow in their train.⁴³

Retirement? That was the last thing on earth that Armstrong expected when he was summoned to Washington on Armed Forces Day, 1961. Evidently the lack of controversy during the first six months of the year had lulled him into a false sense of security. He knew that White, then Air Force chief of staff, was retiring in the summer. He also knew that LeMay, then vice chief of staff, was going to become the chief of staff. Indeed, he knew that there would be command changes within the air force, and he naively believed that the meeting in Washington would bring good news. He was ready for a change from CINCAL, and had lamented in a letter to Baldwin in January, 1960, that "It seems I will be in this command for another year." On another occasion, he complained to Baldwin that "I still remain in a 'sea of tundra'." He was not, however, ready for any change as

⁴³New York Times, July 28, 1961.

drastic as retirement.⁴⁴

Armstrong hurried to Washington for his May Armed Forces Day meeting with the Air Force vice chief of staff, General Curtis LeMay. Upon arrival, he was motioned to a seat, and LeMay immediately got to the point. "Frank There are four high ranking officials who want you out of the service." Armstrong was stunned. His first response was to ask who the officials were, but LeMay replied that he was not at liberty to disclose that information. Continuing, LeMay told Armstrong that if he would return to Alaska and submit his retirement request no one except the four officials, Armstrong, and LeMay would know that he was actually being forced to retire. Later, after the meeting, he pondered the reason behind his forced retirement. His service in war and in peace had been exemplary, his record flawless, save for one small item: his frequent dissertations on the need for Alaska-based offensive missiles, in direct opposition to air force policy as envisioned by LeMay and White.⁴⁵

A letter several weeks later to Baldwin illustrates the general's thoughts.

As you have probably read from Washington news releases, I am retiring from the Air Force on 31 July after nearly thirty-three years of

⁴⁴Armstrong to Baldwin, January 25, 1960, Baldwin Papers; Armstrong to Baldwin, n.d., Baldwin Papers.

⁴⁵Armstrong, "Sleeping Giant," ch. 13, p. 15.

active duty. My entire career is filled with many wonderful memories and friendships. I sincerely feel I can stand my retirement ceremony without a backward look. In retrospect, I do not intend to be nostalgic but I leave the service feeling that there still remains a lot to be done militarily for Alaska. I leave these problems with such friends as you and others who have visited with us and share my feelings.

Although his retirement under pressure went against the grain, the general resolved not to attempt to reverse the inevitable. He only had two or three years left before he would have to retire anyway; the best he could have gotten from the air force under these circumstances was not worth it.⁴⁶

The ceremony honoring the retirement of General Armstrong was held at Elmendorf Air Force Base on July 29, 1961. It was quite an event for Anchorage, and featured virtually the full gamut of Alaska's dignitaries. Governor Egan was there, as well as Senators Bartlett and Gruening, assistant secretary of the Interior John Carver; also, from the military came General Nathan Twining, Generals Everest and J. W. Kelly, and Major General Benjamin D. Foulis. Twining made the presentation of Armstrong's second oak leaf cluster to his Distinguished Service Medal, and Carver presented the general with the Interior Department Award for his efforts in conservation on behalf of Alaska. For reasons Armstrong refused to name, he decided not to deliver

⁴⁶Armstrong to Baldwin, June 9, 1961, Baldwin Papers.

his farewell speech, and instead Governor Egan read it. The final tribute came when Alaskan Command aircraft flew over Elmendorf field in a giant "A". Two days later, Armstrong and his family left Alaska for good.

What actually had happened to the career of one of the air force's ranking lieutenant generals? For the past several years, he had been a "burr under the saddle" to the air force hierarchy, for while he only spoke out publicly once, he had in fact been using every opportunity that involved his office (CINCAL) to push his point: missiles for Alaska. Whether it was a meeting with the JCS, the secretary of defense, the president, or the other six unified air force commanders, his message was primarily the same. When it became apparent that there would not be any missiles forthcoming for the Alaskan command area, the general's efforts were redirected towards getting F-105 supersonic fighter-bombers stationed in Alaska to provide the defensive-offensive capability that he believed necessary. Whatever he advocated for his command was rejected and he came to believe, as others did, that Alaska was conveniently forgotten by the air force in strategic planning. Of course, what Armstrong advocated for Alaska was contrary to what White and LeMay wanted for the air force.

Armstrong's private and official efforts to win recognition of the status of Alaska's defenses were in vain. He decided, in the summer of 1959, to brief the Alaskan

Senatorial delegation in the person of Senator Bartlett. Although Bartlett could not make the meeting, the two agreed to talk of the matter at a local function they were both attending. Bartlett, according to Armstrong, gave a nice little talk on the wonderful state of Alaskan preparedness. Armstrong, when asked if he would address the gathering informally, rose to the occasion and shot holes in everything Bartlett had just said about Alaska's defenses. Bartlett was so impressed on hearing this from the commander of all U.S. forces in Alaska that he became an immediate believer; for that matter, Bartlett spread the word on the following day.

Once Bartlett and other Alaskans created headlines over the matter, Armstrong was told by the air force to issue a statement clarifying his position. The clarification meant that the defense of the state of Alaska was adequate, it was just that General Armstrong's words were misinterpreted. Bartlett never noticed this distinction, and, as Armstrong switched his focus to gaining offensive missiles for his command, Bartlett and others continued to undermine the issue by their insistence on the defenseless of the State. Probably Armstrong had alerted the Alaskans and set them on a path of opposition to the air force at the very time that White and LeMay were trying to adjust policy. The process of redeployment and increased emphasis on missile strike and defense systems had left some areas, namely Alaska, appear-

ing as if they had less than adequate defenses. Once brought under scrutiny by Alaskans in Congress, the air force was forced to make revisions in its strategic planning to meet these charges. The rapid changes in policy that the air force experienced between March and May, 1961, reflects a divisiveness in strategic doctrine that could only have been aggravated by the defection of a high ranking commander to the "anti-Air Force" line. Even though LeMay was an advocate of "speaking one's mind" when he felt himself right and others wrong, this seems to have only applied to LeMay. For that matter, LeMay's autobiography acknowledged no controversy with subordinate commanders during these years.

While there was some agreement between LeMay and Armstrong on the need for a mixed deterrent force, that is, one composed of a healthy blend of both ballistic missiles and manned bombers, LeMay did not envision the deployment of these forces anywhere but within the continental U.S. Armstrong's desire to have missiles in Alaska did not fit this scheme. The Strategic Air Command, LeMay's pet, was capable of responding to any threat to the U.S. from its bases in the U.S. because of the range of the B-52, augmented by the jet tanker. To LeMay, SAC was the main deterrent force of the air force. Any reliance on missile defense systems alone meant elimination of the human factor, something that LeMay placed high value on; as sophisticated as SAC was, it was still controlled by humans in the long run.

Then, too, missiles in Alaska would nominally be beyond the control of centralized air force authority in time of hostilities. LeMay's attitude was aptly summed up by Armstrong later when he wrote to Hanson Baldwin, "The unfortunate aspect is the fact that LeMay is definitely against what might get beyond the control of S.A.C...."⁴⁷

LeMay, however, did not become Air Force chief of staff until July, 1961. While the decision to retire Armstrong had been made beforehand, LeMay "was merely a willing mouth-piece," or the hatchet man for the four officials who wanted Armstrong out. Only one of these four men can be identified with certainty. Armstrong wrote in 1962 to Baldwin,

As you may or may not know, Tommy White was the gentleman who fought against any type of missile for Alaska. Actually, he is the one who tied the pop cracker to my tail as his parting gift.

Another of the four officials' identities can only be speculated on from the same letter. Eugene Zuckert, Secretary of the Air Force since January, 1961, was grouped with White when Armstrong wrote that "neither had the courtesy to say 'farewell'." The identity of the other two officials remains a mystery, although it is certain that Armstrong found out who they were after his retirement.⁴⁸

How untimely was Armstrong's retirement? According to

⁴⁷ New York Times, December 4, 1959.

⁴⁸ Armstrong to Baldwin, April 3, 1962, Baldwin Papers.

prevailing air force retirement policy, it was legitimate. Major generals, the highest permanent rank authorized, were doomed to retirement after thirty-five years in service or five years in grade. Armstrong, a lieutenant general since 1956, had five years in grade although he did not as yet have thirty-five years in service; he had about thirty-three years. This would seem to indicate that his retirement was legitimate in view of prevailing policy. At the most, he only could have remained in the air force for another two years, which was hardly worth the fight he would have had to wage in order to stay in. To LeMay and White, however, his retirement was quite timely. Secretary of Defense McNamara, installed in January, 1961, and LeMay were already squaring off on the issue of missile defense versus manned bomber defense. In this upcoming confrontation, Armstrong would be more of a liability to LeMay and air force policy than an asset. Division within the air force would hardly make LeMay's position more tenable. Thus Armstrong had to go; the fact that he was retired the same day as White was just a convenient coincidence. It should be noted, however, that any man with over thirty years service to the air force could have been given more than two months notice.⁴⁹

⁴⁹Armstrong to Baldwin, April 3, 1962, Baldwin Papers.

CHAPTER V

CONCLUSIONS

Frank Armstrong's military career spanned three of the most crucial decades of United States history. From the start of his career in 1928 as a flying cadet, he had witnessed the development of flight technology and the growth of American air power from its ill-advised air mail adventure to the complexities of the Strategic Air Command. His many assignments had taken him to the Panama Canal Zone, to Guam, and to Alaska, to name just a few. He had amassed a number of decorations both foreign and domestic, and had commanded squadrons, wings, groups, air divisions, air forces, and finally, an entire unified armed forces command in Alaska.

It is certain that Armstrong's participation in the air corps mail operations in 1934 brought him recognition from the men who ran the service in World War II. During these operations he became acquainted with Eaker and Arnold. Later, in January, 1942, when the nucleus of VIII Bomber Command was being formed to go to England, Eaker was only allowed to choose one regular air corps officer for his group. The rest would have to come from either reserve status or from the civilian world. Armstrong was the officer thus chosen by Eaker for this mission, and he became the A-3 (operations).

As the A-3 officer for VIII Bomber Command, Armstrong was in an excellent position to be picked to lead the first

bomber raid. Armstrong's desire to fight can best be explained by examining a number of factors. First, as a veteran pilot he had survived two crash-landings, in addition to the rigors of mail flying, and had gained a reputation of sorts as a daring but excellent flyer. His preference for fighter aircraft tactics over the monotonous straight-line flying bombers helps to illustrate his flare for the daring. Like most air corps officers of the era, he was frustrated by the slow promotions of peacetime service. He realized that the sluggish trip up the promotion ladder could only be helped by war. Both his personality and his career ambitions deemed it necessary that he fight.

The late 1930's produced an aura of feeling in the service that war was becoming imminent. This feeling was rampant by the time that Armstrong flew to England on observer duty in 1940. These months under enemy bombs exposed him to suffering not yet experienced, and probably injected some morality into his desire to inflict the same on the Germans. By the time he left, he had great respect for the British but was sorry to be leaving the "action."

After the attack on Pearl Harbor, Armstrong was seeking a combat role and fighting anxieties over the thought of being left out of the war. When Eaker picked him for the advance element of VIII Bomber Command, it was a dream come true. Of course, the fact that Eaker and Armstrong were the only regular army members of the group may have predeter-

mined the matter of who would lead the first raid.

At any rate, Armstrong wanted to fight. Revenge, patriotism, career ambitions, personality, and the desire to insure that he did his best for the air corps are all important reasons to consider. The most important point to remember, however, is the fact that he always volunteered for or requested combat assignments. It was in his nature to pursue the hazardous and the unknown.

While Armstrong believed that the first mission came to him by chance, this may not have been so. General Harris Hull, then VIII Bomber Command A-2 (intelligence) stated that chance had nothing to do with it. Eaker knew that he would need the best possible leadership for the first mission to avoid costly mistakes and losses. The commander of the 97th was not up to the task, Hull said, so Eaker replaced him with Armstrong. The same holds true for the selection of Armstrong to lead the 306th over Germany in January, 1943. He was simply felt by Eaker to be the best man possible to insure success of the missions. Hull called Armstrong a "natural military leader," particularly when it came to special missions.¹

Command of the 315th was yet another special mission. When Armstrong left England in August, 1943, he was one of the most combat experienced general officers that the air

¹Hull Interview.

corps had up to that time. The training and eventual deployment of the 315th against Japanese oil targets called again for combat experience and leadership that Armstrong was well known for by this time. We have already documented the success of the 315th against the Japanese in the last two months of the war.

Armstrong's list of awards and decorations from World War II make impressive reading. For his leading of the August 17, 1942, raid on Rouen, he had been awarded the Silver Star, the British Distinguished Flying Cross, and the Belgium Croix de Guerre. For the raids he led between August 17 and September 6, 1942, he received his first and second oak leaf clusters to the DFC originally awarded in 1936, and the Air Medal. He was awarded a distinguished service medal for the mission flown on April 5, 1943, against Antwerp. For his services against the Japanese, he received an oak leaf cluster to his Air Medal, and for the last and heaviest August 14, 1945, raid on the Nippon Oil Refinery at Tsuchizaki, he was awarded a third oak leaf cluster to the DFC. A fourth oak leaf cluster to the DFC was awarded as a result of the historic non-stop flight made from Hokkaido, Japan, to Washington, D. C.

After the war, Armstrong was awarded the Gold Medal of the Aero Club of Norway for his participation in the pioneering of a new Polar route, from Alaska to Norway and from Norway to New York. His last two assignments, com-

mander of the 2d Air Force and then the Alaskan Command, were both rewarded with distinguished service medals, a situation that Armstrong referred to as "ironic," as the last presentation was made at his retirement ceremony. He came very close to refusing to accept the last DSM and would not have "had it not been for my wife."²

As we have seen, Armstrong's military career had revolved around a series of special assignments. The first was in November, 1940, when he was sent to England as a military observer, and experienced the Battle of Britain. It was during this time that he realized the nature of the coming struggle between the Axis and the Free World; when he later had the opportunity to lead bombing missions against the Axis, he did so with the memory of the Battle of Britain fresh in his mind. Of course, his experiences during the Battle of Britain made his selection as a member of Eaker's VIII Bomber Command nucleus a foregone conclusion. The assignments to lead the 97th and the 306th in their initial raids were a simple matter of putting the right man in command for the job. The break in these two assignments gave the air corps an opportunity to send their most combat experienced officer back to the United States to report on conditions and to bolster war bond sales. Most importantly, Armstrong was already a bonafide hero and air

²Armstrong to Baldwin, April 3, 1962, Baldwin Papers.

combat veteran in December, 1942, a fact not lost on an air corps seeking positive publicity and increased recognition in strategic planning.

After leaving England in August, 1943, Armstrong went through a succession of training commands that were pumping out replacements for the Air Corps' Combined Bomber Offensive against the Germans. In April, 1944, he was given command of the 315th Bomb Wing, a special night precision radar bombing unit of B-29's. Trained intensively for over a year, the 315th arrived in the Pacific only two months before the war ended but still managed to make a mark for itself. Most of the wing's long, over water missions were led by Armstrong. Following the war, Armstrong became operations officer for the Pacific Air Command in Manila and Tokyo, mainly due to his rank and experience with the B-29.

Successive assignments to the Armed Forces War College as senior air instructor, the Alaskan Command as chief of staff, and command of the 2d Air Division were all relatively short term commands, culminating in his assignment as commanding general of SAC's 2d Air Force in 1952. Operational command in the field was what Armstrong loved best about the air force; he was frustrated by staff assignments no matter what they entailed. The transition from 2d Air Force to CINCAL involved this very point: he had gone from operational command of SAC's first all-jet bomber force to

head a unified command which, in fact, left very little room for him to exercise operational control. As CINCAL, he was merely responsible for coordinating the elements that made up the command. Composed of navy, army, and air force units with predesignated assignments, they required little coordination, if any.

The operational set-up of the Alaskan Command was not his only source of frustration. The assigned mission of the command was not to his liking either. Stated simply, the mission of the command was the defense of Alaska to include the detection and destruction of hostile aircraft, provide early warning of attack on the United States and Canada, and support of the other unified and specified commands. Armstrong favored expanding the Alaskan mission to include offensive operations. In so doing, he moved directly against prevailing air force policy. Why did he persist? By his own statements, he believed the situation so critical that not to speak out would have been negligent on his part. He believed that in so doing he was merely putting his allegiance beyond the service, giving it to his country. There are, however, other factors to consider.³

During his tenure as CINCAL, Armstrong labored under an increasing feeling of impending nuclear doom. He carried

³U.S., Senate, 91st Cong., 1st sess., Remarks of Senator Gravel, August 25, 1969, Congressional Record, 115:25770.

this to the extreme, in his autobiography, by creating an imaginary scenario in which the population of Alaska was subjected to atomic attack. More specifically, the scenario chronicled the last days of his fantasy family, stranded in the Alaskan wilds by the blast and left to watch each other die of radiation poisoning and starvation, their bodies dragged off by ravaging wolves, until only he met his fate alone. It is quite gruesome but illustrates the state of mind prevailing during his years in Alaska. This was one reason why he wanted offensive missiles in Alaska, to forestall such an attack by attacking the red Siberian bases across the Bering Sea.

Another factor, of which Armstrong was accused many times, was wanting to augment and supplement his own forces in Alaska. Tying this to the restrictive nature of the Alaskan mission, there was very little that Armstrong would have been able to do on the outbreak of hostilities with the Soviets. This was what frustrated him most, for he fully believed that an attack would come, sooner or later. Therefore, he pressed for offensive weapons for his command. But to say that he wanted to augment his own command is misleading; more than that, he wanted the mission of his command expanded to include offensive operational capabilities, for he believed that Alaska held the key to the defense of

the United States from Soviet attack.⁴

Both the fear of nuclear attack and the command's evident inability to react to it troubled the general. Considering the troubled international situation and the proliferation of nuclear weapons and their attendant delivery systems during these years, these fears are not hard to understand. The year 1960 saw the shooting down by the Soviets of two U.S. spy planes over their territory; the Cuban problem, which would lead to the Bay of Pigs fiasco and finally culminate in the "missile crisis" of 1963, was well under way. The first part of 1961 would also witness the start of the Berlin Wall, the first manned orbital flight by the U.S.S.R., and the United States' first sub-orbital space flight. These were indeed troubled times. To a commander who felt he commanded the area offering the prime attack route to the U.S., this situation was incomprehensible. Armstrong's views, however, concerning the strategic importance of Alaska were not shared by those in the air force whose support he would need in turning the state into an offensive bastion against the Soviet Union. Indeed, his views and arguments reached a point where he became a liability to the air force under the administration of Kennedy and the new secretary of defense, McNamara.

⁴U.S., Senate, 91st Cong., 1st sess., Remarks of Senator Gravel, August 25, 1969, Congressional Record, 115:25770.

After Armstrong's retirement, the proponents of increased defense and offense for Alaska lost their most quotable backer. As CINCAL, his word was taken as truth simply because he was in a position to know. With his retirement, the coalition for Alaskan defense was forced to regroup behind the army, which was developing its own plans for increased defense of the state with emphasis on missiles and ground troops. Hanson Baldwin continued to write articles on the subject, but Armstrong's retirement cost Baldwin his inside source on Alaska. While they continued to keep in touch on the issue at least until 1962, it was over. LeMay had secured his rear and was already immeshed in his showdown with McNamara on missiles versus manned bombers. Alaska was all but forgotten.

Armstrong realized that his retirement took him out of the Alaskan picture. When he left, he was "unsuccessfully trying to convince myself that Alaskan problems were no longer my concern. But I knew until the proper weapons were based there and the strategic values were exploited, I would always be concerned." Writing in 1962 to Baldwin, the general commented on a recent Baldwin article sent him by Senator Gruening, "I thought it excellent. Our mutual friends in Anchorage were most enthusiastic." He wrote to Baldwin later that year requesting permission to include Baldwin's June 15, 1960, Alaskan article in "a number of articles on Alaska which I hope to consolidate and publish

at a later date." This objective was never accomplished, however, for his personal papers do not contain anything concerning the Alaskan defense picture except for a copy of Gruening's remarks in the Senate for March 5, 1962. In it, Gruening rehashes the efforts made on behalf of Alaskan defense and includes a timely epitaph on the general.

Lt. Gen. Frank A. Armstrong, Jr., a great soldier with an almost unequaled record for conspicuous bravery, who served in Alaska for a number of years, first as chief of the Alaskan Air Command and then, on a subsequent tour of duty, as the supreme commander from 1957 to 1961, felt so strongly on this subject that he spoke about it publicly 3 years ago, urging the installation of missile bases in Alaska. His forthright and courageous stand, in the tradition of Billy Mitchell, led to his highly regrettable retirement last June, when he was summoned to Washington and curtly told by Gen. Curt LeMay, shortly after LeMay's promotion to Chief of Staff, that he, Armstrong, must retire as of August 1, although this gallent soldier and able commander had over 2 years to serve before his normal anticipated retirement. It was a great shock to all Alaskans, who admired General Armstrong and appreciated his realistic appraisal of Alaska's and the Nation's military needs.

The rest of the article is devoted to the point that nothing as yet has been done by the air force to rectify the situation, that Alaska still has no "offensive capabilities whatsoever and no reconnaissance capability," and that "its defensive capabilities are badly in need of modernization."⁵

⁵Armstrong, "Sleeping Giant," ch. 14, pp. 19-20; Armstrong to Baldwin, April 3, 1962, Baldwin Papers; Armstrong to Baldwin, November 2, 1962, Baldwin Papers; U.S., Senate, 87th Cong., 2d sess., Remarks of Senator Gruening, March 5, 1962, Congressional Record, 108:3051-3052.

In spite of all the effort put forth by Armstrong, Baldwin, and the Alaskans, very little had changed concerning the Alaskan defense situation. Armstrong had wagered much more than the others, and he lost much more. And it had all been in vain. But he was not as bitter about it as some may have been. He realized all along how much of his personal career was placed on the line. He believed to the end that he had done his duty without regard to personal ends, that he had acted as a responsible commander concerned for the security of his country, and he believed to the end that he was right.⁶

Armstrong retired to Tampa, Florida, with his wife and granddaughter. They spent several happy years there until his wife died, followed shortly after by the death of his son, shot down and killed over Vietnam in 1967 while flying tactical support for U.S. ground troops. The general died August 20, 1969, in Tampa. He was buried in Arlington cemetery with full military honors.⁷

⁶U.S., Senate, 91st Cong., 1st sess., Remarks of Senator Gravel, August 25, 1969, Congressional Record, 115:25770.

⁷His son, Frank Armstrong, III, had married but his wife died after giving birth. Unable to raise the child as an air force pilot, the senior Armstrong had taken over in 1959; New York Times, August 22, 1969.

ESSAY ON SOURCES

This study was designed to examine the military career of Frank Armstrong. Its preparation was, however, hampered by two problems. First, there is the problem of overclassification of military records and studies of a contemporary nature. In this case, official information pertinent to the study was available only for the years up to 1948. Beyond this was a wall of security classifications that required either declassification or a secret clearance for the researcher. Air Force studies and information concerning the AAC during the 1950's is classified material. Access to secret clearance acquired as an intern in the Office of Air Force History enabled this researcher to peruse all pertinent data on Armstrong and the AAC. The value of this secret information remains in doubt and leads into the second aspect of this problem.

Air Force history publications and studies suffer from a lack of many things, but most notably they lack purpose. Most are merely chronologies, which list inane and obscure information relating to unit transfers. Others are concerned with historical highlights which do little to place things in their proper perspective. Clearly, records such as these are difficult to use. This oversight extends to the Air Force's attempts at oral history, where the end result is lukewarm at best. Considering past great works, such as History of the Army Air Forces in World War II, begun under Air Force aegis after the war, or the unit histories done

during the same period, this latter state seems intolerable.

The second problem concerns the Armstrong Papers. The papers contained everything necessary to write a very favorable study. His personal papers and reminiscences had been sanitized of all items concerning the Alaskan years except for his own version. While this was also true to a degree in his memories of the war years, here it was readily backed up by contemporary newspapers and found surprisingly honest. Noticeably lacking from the papers, however, are his personal letters and correspondence, which remain unlocated and are probably destroyed. The chapter here concerning Alaska was written with little help from either the Armstrong Papers or the Air Force, and represents an accurate as possible account from attainable sources.

BIBLIOGRAPHY

1. PRIMARY SOURCES

A. Manuscripts

Air Material Command, Aircraft accident reports, June, 1916 to October, 1944, File number 200.3912-1, Albert F. Simpson Historical Research Center, Maxwell Air Force Base, Alabama.

Alaskan Air Command Unit History, 1948, microfilm roll P3-86, Record Group 342, Records of United States Air Force Commands, Washington National Records Center, Suitland, Maryland.

History of the Alaskan Air Command, 1956, Vol. 1, File number K484-01 (S), Albert F. Simpson Historical Research Center, Maxwell Air Force Base, Alabama.

Alaskan Command Oral History, 1947-1969, File number K239.0512-808, Albert F. Simpson Historical Research Center, Maxwell Air Force Base, Alabama.

Frank A. Armstrong, Jr., Papers, East Carolina Manuscript Collection, Greenville, North Carolina.

Hanson W. Baldwin Papers, Yale University Library, New Haven, Connecticut.

Military Personnel Division, Frank Armstrong File, File number K-141.2421, Albert F. Simpson Historical Research Center, Maxwell Air Force Base, Alabama.

History of the 97th Bomb Group, Microfilm number B0217, Albert F. Simpson Historical Research Center, Maxwell Air Force Base, Alabama.

History of the 306th Bomb Group, Microfilm number B0194, Albert F. Simpson Historical Research Center, Maxwell Air Force Base, Alabama.

B. United States Government Documents

Congressional Record, 105, 106, 107, 108, 115, 1959-1962, 1969.

U.S., Congress, Senate, Armed Services Committee. Department of Defense Appropriations. Hearings before the Senate Subcommittee on Military Construction, 86th Cong., 2d Sess., 1960.

C. Newspapers

New York Herald Tribune, 1943.

New York Times, 1941, 1942, 1943, 1945, 1949, 1950, 1951, 1956, 1959, 1960, 1961, 1969.

Raleigh News and Observer, 1943, 1951, 1969.

Stars and Stripes, 1943.

Washington News, 1942, 1943.

Washington Post, 1943.

Washington Star, 1942.

D. Interview

Hull, Harris. Intelligence officer for Eighth Air Force.
Interview, July 13, 1970.

II. SECONDARY SOURCES

A. General

Craven, Wesley F., Cate, James L., eds. The Army Air Forces in World War II. 7 vols. Chicago: University of Chicago Press, 1950.

Hart, B.L.H. History of the Second World War. New York: G. P. Putnam's Sons, 1970.

B. Monographs and Biographies

Balchen, Bernt. Come North With Me. New York: E.P. Dutton & Company, Inc., 1958.

Brophy, Arnold. The Air Force. New York: Gilbert Press, Inc., 1956.

Burger, Carl. B-29: The Superfortress. New York: Random House, 1970.

- Compere, Tom, ed. The Air Force Blue Book. Vol. 1. New York: Military Publishing Institute, Inc., 1959.
- DuPre, Flint. USAF Biographical Dictionary. New York: Franklin Watts, Inc., 1965.
- Emme, Eugene. The Impact of Air Power. Princeton, New Jersey: D. Van Nostrand Company, Inc., 1959.
- Glines, Carroll. The Compact History of the United States Air Force. New York: Hawthorn Books, Inc., 1973.
- Grierson, John. Challenge to the Poles. Hamden, Connecticut: Archon Books, 1964.
- Jablonski, Edward. Flying Fortress. New York: Doubleday & Company, Inc., 1965.
- _____. Airwar. 4 vols. New York: Doubleday & Company, Inc., 1971.
- LeMay, Curtis, with Mackinley Kantor. Mission With LeMay: My Story. New York: Doubleday & Company, Inc., 1965.
- Loosebrock, John, Skinner, Richard, eds. The Wild Blue: Story of American Airpower. New York: G. P. Putnam's Sons, 1961.
- Payne, Lionel. Air Dates. New York: Frederick A. Praeger Inc., 1957.
- Peaslee, Budd. Heritage of Valor: The Eighth Air Force in World War II. New York: J. B. Lippincott Company, 1964.
- Shamburger, Page. Tracks Across the Sky. Philadelphia: J. B. Lippincott Company, 1964.
- Sunderman, James, ed. World War II in the Air. New York: Franklin Watts, Inc., 1963.

C. Articles

- Lewis, David. "Is Alaska Expendable?" Flying. December, 1959, p. 30.

D. Air Force Publications

- Eighth Air Force. Target: Germany. New York: Simon & Shuster, 1943.

Finney, Robert. History of the Air Corps Tactical School, 1920-1940. USAF Historical Study no. 100, 1955.

Greer, Thomas. Development of Air Doctrine in the Army Air Arm, 1917-1941. USAF Historical Study no. 89, 1953.

Mesloh, Duane and Salley, E. Marie. Highlights of History, Alaskan Air Command and its Predecessors, 1901-1970. Alaskan Air Command Office of History, 1971.