



Make them the biggest, gun them the
heaviest, and fly them the farthest!
General H. H. Arnold

The B-29, struck by the intense flak, suddenly burst into flames and plummeted out of control toward the ground. The Japanese searchlights had found the B-29 hidden in the night sky, and the anti-aircraft batteries quickly inflicted their mortal wound on the American heavy bomber. Captain Kenneth Dougherty, an aircraft commander in another B-29 that night, gave his account of the incident.

At landfall there were four or five planes together. One stayed right with us all the way in. He was slightly ahead at 1 o'clock. We closed in to within a stone's throw as we approached the target. In [the] area of [the] IP, searchlights, about 12 of 'em, coned him. Several guns were firing at him and after about 25 bursts, one hit 'em. Bursts were small, black ones. Just as he started to turn left in a steep bank (couldn't tell whether he was hit or taking evasive action) he burst into a sheet of flames in his midsection and he cut across us and went vertically down. We were at 16,000 feet, time 251340Z, three minutes before bombs away. He was out of control, but we did not see him explode. I don't think the ship would have held together in that much fire for very long. Those in back might have gotten out; those in front very doubtful.

Fortunately, it was the squadron's only combat loss for the mission, but Capt Dougherty could only watch as ten comrades-in-arms fell toward earth in their flaming aircraft.

This incident occurred on 25 July 1945 over Tokyo, and the crewmen of the stricken B-29 were members of the 402nd Bomb Squadron, Very Heavy (VH), 502nd Bomb Group (VH), 315th Bomb Wing (VH). Captain Henry G. Dillingham was the aircraft commander of the ill-fated B-29 that night, and his crew's experience vividly portrays two realities of war. First, their fate is a tragic reminder of the high human costs of armed conflict. Secondly, their actions are a sobering reminder of the dedication and courage of men who have put their lives on the line in the defense of their country. The many brave men, living and dead, like Capt Dillingham and his crew must not be forgotten. To this end, this report provides a written record of the accomplishments of the 315th Bomb Wing.

This study chronicles the history of the 315th Bomb Wing during World War II. Chapter Two covers the unit's

activation, training, and deployment to the Pacific Theater of Operation (PTO). Chapter Three emphasizes the combat operations of the 315th during the months it was based in the PTO. Finally, Chapter Four summarizes the significance of the strategic air campaign against Japan and the 315th's contribution to that effort. The history of the 315th Bomb Wing is closely linked to the story of the B-29 aircraft flown by the unit and to the mission of the Twentieth Air Force, the parent unit of the 315th in the PTO. A brief discussion follows to highlight these relationships.

THE AIRCRAFT

General Henry H. Arnold spearheaded the development of the B-29 aircraft. As early as 1939, Gen Arnold pursued the development of a very long-range, very heavy bomber in anticipation of future air power requirements.

Our B-29 idea came to birth in those days when it appeared that England would go down to defeat, and there'd be no place where we might base our planes for future sorties against the Axis powers. Thus a much longer ranged bomber than any we then possessed would be essential to our waging a victorious war.

Gen. Arnold directed the engineering staff at Wright Field, Dayton, Ohio, to design a superbomber and to "make them the biggest, gun them the heaviest, and fly them the farthest!" Several aircraft companies submitted proposals based on the specifications developed by the Wright Field engineers, but Boeing's model 345 was chosen superior. The Army Air Corps gave it the designation XB-29, and Boeing was awarded 3.6 million dollars to start prototype development.

Unfortunately, a long series of failures during the development of the XB-29 threatened to stop plans for full-scale production. The experimental B-29 was plagued by "engine trouble, jammed gears, dead power plants, and fires lurking in the nacelles." Despite the numerous problems and loud outcries from critics of the XB-29 program, Gen Arnold remained steadfast about continued development and full-scale production. In fact, "the bold decision to order mass production of B-29s had been made by Gen Arnold some 16 months before the first test flight, and when that flight was made, 1664 B-29s were already on order." Gen Arnold's persistence paid off on 27 June 1943 when Colonel Leonard "Jake" Harmon successfully flew the second experimental B-29 at Boeing's plant in Wichita, Kansas. Attention then turned to the overwhelming problems of full-scale production.

The Army Air Force and America's aircraft compa-

*The ranks given are those held by the individual at the time of the event being described.



The B-29 left little room for the pilot and bombardier.



Co-Pilot

nies cooperated to mass produce the most advanced bomber of World War II. Gen Arnold's challenge to mass produce the B-29 was spurred by President Roosevelt at the Quebec Conference in the fall of 1943. At that conference President Roosevelt pledged 200 B-29s for combat use in Asia by 1 March 1944. It was a staggering promise, but America's aircraft companies worked around-the-clock and met the deadline. Gen Arnold's and the Army Air Force's \$3 billion gamble on the B-29 had paid off.

"It was the most complex plane ever conceived -- 60 tons of fighting fury...four 2,200-horsepower engines...20,000-pound bomb capacity...137,000-pound maximum overall weight with bombs and gasoline...an instrument panel like a mad-man's dream...50,000 separate parts...one million rivets...thousands of miles of complex wiring...141 feet wing span...99 feet long...27 feet high...capable of flying a 16-hour mission...dwarfing the B-17 Flying Fortress--all in all, the biggest, fastest, most powerful bomber in the world."

The aircraft that many had written off as a lost cause was finally rolling off the assembly line.

More than the biggest and fastest, the awesome B-29 incorporated many of the latest technological improvements. It was equipped with the newest radar, the APQ-13, and a system of remotely controlled automatic gun turrets known as the central fire-control system (CFC). The CFC had five sighting stations throughout the aircraft which controlled five gun turrets. Four turrets had twin 50-caliber guns while the upper forward turret had four 50-caliber guns. A high-efficiency wing and wing flap system developed by Boeing were also installed, thereby keeping B-29 takeoff and landing ground runs comparable to those for B-17s and B-24s. Its four powerful "2,200 hp, 18 cylinder Wright Cyclone engines with dual sets of turbo-superchargers had four-bladed propellers so large they must be slowed down by 35/100 reduction gears to keep the tip speed under the speed of sound." Finally, the B-29 had a cabin pressurization system designed to maintain a cabin pressure of 8,000 feet for the crew while flying at 30,000 feet. America's first very heavy bomber, the B-29 Superfortress, was ready for aircrews to test it in training and in the special mission that awaited it.

THE MISSION

The creation of the B-29 forced changes in the American military command and control structure in 1944. Many military leaders, including Gen Arnold, recognized the potential power of the B-29 in a concentrated strategic bombardment campaign against Japan. They also realized the B-29 strategic air forces would require a continuity of employment if they were to accomplish their strategic mission. However, "under prevailing doctrines of unity of command, air units were assigned to a theater commander working under broad directives from the Joint or Combined Chiefs of Staff." This meant strategic forces could be diverted to support theater operations at the discretion of the theater commander.

On 10 April 1944, the Joint Chiefs of Staff (JCS) addressed this conflict by adopting a radical new plan to ensure a unified and concentrated strategic bombing effort against Japan. According to the plan, a new strategic air force was created and would remain under the centralized control of the JCS with a single commander, Gen Arnold, acting as their agent to direct worldwide strategic bombing operations. This new strategic air force was designated the Twentieth Air Force. Thus, on 12 April 1944, the Twentieth Air Force became the first unit to be activated with B-29s and



Control Wheel "Horn Button"

operationally controlled by the JCS.

Additionally, the JCS established the strategic mission and force composition of the Twentieth Air Force. Its mission reflected the potential strategic power of a concentrated B-29 bombing campaign against Japan.

The primary mission of the Twentieth AF, the first very heavy bombardment organization committed to combat, was to achieve the earliest possible dislocation of the Japanese military, industrial, and economic systems and to undermine the morale of the Japanese people to a point where their capacity to wage war was decisively weakened.

To accomplish its mission, the Twentieth Air Force was authorized a striking force of a thousand B-29s. This powerful force was assigned to two bomber commands—XX Bomber Command and XXI Bomber Command. The XXI Bomber Command was directed to operate out of the Marianas Island in the Pacific with five very heavy bombardment (VHB) wings assigned to it. The 315th Bomb Wing was one of these VHB units.

ORGANIZATION AND TRAINING

*I expect to have the best damned Wing
that ever goes out of the country, and
I expect to bring it back.*

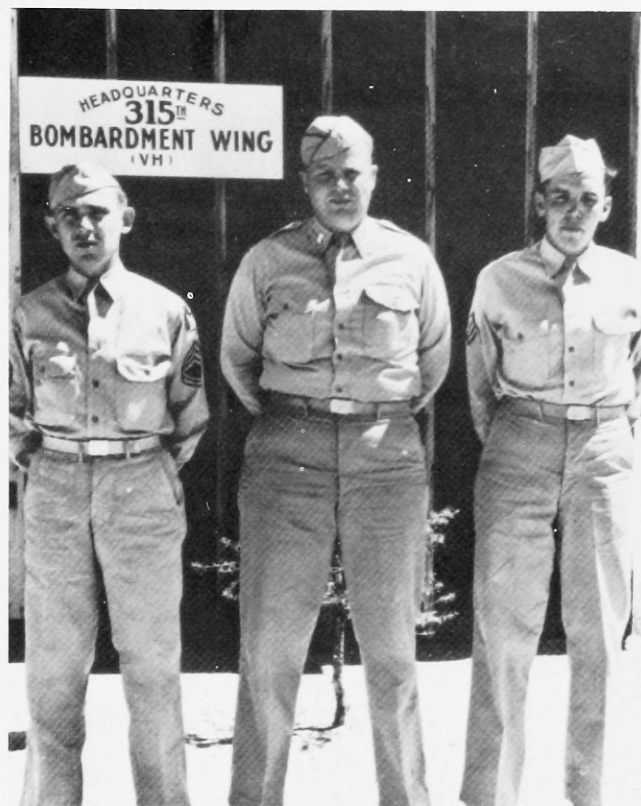
General Frank Armstrong (Nov 44)

Organization

The 315th Bomb Wing (VH), activated on 17 July 1944 and headquartered at Peterson Field, Colorado Springs, Colorado, was a complex and widespread organization. The Combat arm of the wing was composed of four very heavy bomb groups (BG), the 16th, 331st, 501st, and 502nd, stationed at Dalhart Field, Dalhart, Texas. Each bomb group was composed of three very heavy bomb squadrons. The 15th, 16th, and 17th joined the 16th BG (VH); the 41st, and 485th joined the 501st BG (VH); and the 402nd, 411th, and 430th joined the 502nd BG (VH). In addition, four photographic squadrons were activated, the 23rd, 28th, 29th, and 30th, with one assigned to each bomb group. To support the combat groups, four service groups were activated in May 1944. These units, the 24th, 73rd, 75th, and 76th, were initially based at Fresno, California, and Warner Robins, Georgia, and would be mated with the rest of the wing's units overseas.

Training

During the combat training period, the 315th Bomb Wing Headquarters did not directly command its newly designated subordinate units. Instead, the 315th Wing



T/Sgt. Gay, Lt. Locke, Sgt. Dutton

Headquarters and its four bomb groups were placed under the control of Second Air Force.

The Second Air Force, because of its enviable position as a pioneer in heavy bombardment training...and available training facilities, was the logical selection by the War Department for the manning and training of all such Very Heavy units in preparation for duty in the combat areas.

Subsequently, the four bomb groups were attached to the Second Air Force's 17th Bombardment Training Wing for all necessary training and administration. As a result, the 315th Wing Headquarters maintained only a supervisory role over the bomb groups. Similarly, the four service groups completed their entire training under the jurisdiction of the Army Air Force's Air Service Command headquartered at Patterson Field, Ohio. Since their training program was independent of the 315th Bomb Wing Headquarters and bomb groups, the service groups will be described separately later in this chapter.

The manning of the new 315th units to authorized strength was a gradual and continuous process. Initially, most units were hardly more than skeletal organizations. On the date of activation, the 315th's Wing Headquarters had a total of one officer, First Lieutenant Philip Locke, and two enlisted men assigned. Lieutenant Colonel Robert A. Koerper arrived on 28 July and assumed command of the 315th until replaced by Lieutenant Colonel Stanley A. Zidiales on 11 August. By the end of July 1944, the 502nd Bomb Group's strength table showed only 10.7 percent of the authorized officers and 4.2 percent of the authorized enlisted personnel actually on station at Dalhart Field. Such gradual personnel increases were common throughout the 315th,



315th Wing Headquarters

and, like the 331st Bomb Group, each unit adapted to its temporary manpower problem.

The handful of officers present for duty were of varied classifications, but took temporary duty assignments or many of the administrative and organizational duties and carried them out in a very commendable manner. The enlisted men as well as officers worked in a truly soldierly manner and showed very profound interest in helping with the Group organization. Airplane technicians substituted as clerks, truck drivers as supply men, and so on throughout the Group.

As more and more men reported for duty, small classification boards were started to interview each newcomer to determine how his military occupational specialty (MOS), experience, and grade level could best be used in the unit. This process continued until each unit reached full strength.

Facilities, equipment, and supplies were equally limited during the early months following activation. Basic equipment such as picks and shovels was severely restricted. There were only a limited number of buildings for offices and classrooms. The lack of training manuals and 16mm film projectors hampered classroom training. Office and quartermaster supplies such as desks, typewriters, manila folders, soap, brushes, and brooms were scarce. In July, the 501st Bomb Group reported that at one point the lack of toilet paper almost became a major consideration for the unit. In a group staff conference, Lieutenant Colonel Arch Campbell, the 501st Group Commander, stated, "however good the intentions of the Quartermaster, we still couldn't use requisitions in place of toilet paper." In response to repeated failed attempts to obtain supplies through normal channels, some

units resorted to unorthodox methods to secure needed materials. The 16th Bomb Group successfully arranged air transportation to fly in needed administrative materials from other bases where certain of its current ranking officers had previously been assigned. Thus, each 315th unit faced numerous environmental limitations as it started training operations.

Despite these initial problems, classification of personnel for training programs began immediately throughout the 315th. The location and type of training depended on each man's MOS and classification as either flight, air, or ground echelon personnel. Aircrews comprised the flight echelon. The group commander determined personnel classification as either air or ground echelon based on the final duty assignment of personnel at the time of their embarkation for overseas combat duty. The air echelon consisted of the bare minimum personnel who would deploy overseas by aircraft. All other personnel would deploy via surface transportation and were classified as the ground echelon. Once classified, personnel started their respective training programs, and some men were sent to schools throughout the United States.

There were five major training programs. Each program was independent of the other, and some personnel completed more than one. The five major programs were: (1) Initial B-29 Flight Crew Training School at Alamogordo, New Mexico, (2) Air echelon (Group Cadre) schooling at the Army Air Force School of Applied Tactics (AAFSAT) in Orlando, Florida, (3) Three-part ground echelon training conducted at each VHB unit, (4) Training for officers and enlisted men at specialized schools throughout the country, and (5) Bivouac training conducted by each VHB unit.



Brig. Gen. Armstrong, Maj. Gen. Paul Williams

Most of these programs and schools operated continuously to satisfy the training requirements of B-29 units steadily increasing in strength. Thus, 315th personnel were scheduled to complete these programs at various times throughout the predeployment training period.

The B-29 flight crews trained at Alamogordo, New Mexico. Flight crews were sent to the 231st Combat Crew Training School (CCTS) at Alamogordo Army Air Field (AAF) to complete 3 months of flight and technical training. The Second Air Force's Flight Training Directive for Combat Crews: B-29, dated 14 March 1944, specified the flight training program.

This flight training program is based on the principles and training program time per month that are shown to be available in the introduction to the Technical Training program. This allows during each month 25 hours for briefing and stations, 15 hours of interrogation, and 85 hours of flying time to accomplish 65 hours of training missions. Training missions totaling 65 hours will be accomplished each month within the 125 hours set aside for their accomplishment.

In addition, Second Air Force's Technical Training Manual for Combat Crews: B-29, dated 5 March 1944, directed each crew member to complete 75 academic hours of technical training in his primary and secondary crew duties. The B-29 flight crew trainees were also sent to Lincoln Army Air Field, Lincoln, Nebraska, to complete a special altitude training program with instruction on explosive decompression and an altitude chamber flight. After completing training, the crews were assigned to a 315th bomb group for advanced flight training and joined the ground and air echelons already assigned to that group.



A selected number of air echelon personnel were sent to the Army Air Force School of Applied Tactics (AAFSAT) in Orlando, Florida. Both officers and enlisted men from the bomb group headquarters and bomb squadrons attended the two-phase, four-week AAFSAT course for indoctrination into very heavy bombardment operations. The first phase consisted of two weeks of orientation and academics. Courses for officers included operational and navigational weather, radar, group intelligence functions, briefing and interrogation, minelaying procedures, and bombardment. Courses for enlisted personnel included camouflage, armament, mapping, safeguarding military information, radio, supply, engineering, and gunnery. The second phase was also two weeks long and allowed the students to put into practice what they had learned in the classroom. This phase was completed at nearby Pinecastle AAF, where flight operations simulating combat conditions were conducted. "Between the two phases of AAFSAT, the Group Cadre was thus able to make a start on the problem of the Very Heavy Operations."

The Second Air Force's Ground Echelon Training Program for all Ground Personnel of Very Heavy Bombardment Operational Training Units, dated 24 June 1944, out-



Top Row: Shepardson, P.S.; Watson, J.C.; Bahnsen, E.J.; Culpepper, C.A.; Segal, H.; Murphy, E.L.; Johnston, E.N.; Smith, O.E.; Reser, G.F.; Cole, J.W.; Wissen, G.; Martin, W.A.; Plott, W.C.; Grimm, N.R.; Blackwell, T.W. Center Row: Harris, J.E.; Rogers, B.F.; Martin, L.L.; Locke, P.E.; Crouch, T.H.; Koerper, R.A.; Zidiales, S.A.; Oenslager, D.M.; Bagstad, C.W.; Harrington, G.E.; Bacon, W.C.; Denny, D.; Marantette, T.M. Bottom Row: Robinson, H.S.; Lewis, T.M.; Saccoccio, P.P.; Winsor, W.E.; McCuiston, C.; Filippi, J.P.; North, W.A.; McKanna, E.J.; Leasure, W.C.; Marsh, E.L.; Wiese, J.F. Missing: Smith, Maj.; Clark, CWO; Rimpau, Capt.; LeRoux, 1st Lt.
36th P.T. 10-6-44 G-13 OFFICER GROUP, 315th BOMB V.H. PETERSON FLD. COLO.
Original Cadre — (Before Armstrong Assignment)

lined the training program for ground echelon personnel. This directive specified three categories of training. The first, Basic Technical Training, applied to all ground personnel and listed the minimum requirements to be accomplished in preparation for overseas movement (POM). Training courses included Army orientation, bomb reconnaissance and dispersal, chemical warfare, gunnery, and camouflage. The second, Technical Training for Special Sections, prescribed training requirements for personnel in the unit ordnance, photographic, armament, and communication sections. The third and final category covered On-the-Job Training (OJT) for special sections such as supply, engineering, and communications maintenance. Ground echelon training in each of these categories continued throughout the predeployment period to train newly assigned personnel and to maintain the proficiency of previously trained personnel.

Selected ground and air echelon personnel were also assigned temporary duty to attend specialized training schools. The B-29's aircraft systems incorporated many of the latest technological improvements and required specialized personnel training to operate and repair them. Thus, along with full-scale development of the B-29, specialized schools had been set up around the country to provide courses of instruction for personnel in the new very heavy bombardment units. Five of these schools were: (1) The B-29 Factory Airframe Course, Boeing Aircraft Corporation, Seattle, Washington; (2) The R-3350 Engine Course, Amarillo, Texas; (3) The Fluxgate Compass Course, Air Position Indicator Course, 3502nd AAF, Base Unit, Chanute Field, Illinois; (4) The Turbo-Supercharger Course, 3526th AAF, Base Unit, Lincoln School, West Lynn, Massachusetts; and (5) The C-1, Automatic Pilot Course, Minneapolis Honeywell Regulators Company, Minneapolis, Minnesota.

Graduates of these schools returned to their units to apply and share their new technical knowledge and skills.

During August and September 1944, the 315th's four bomb groups conducted their first bivouac training at Yankee Canyon near Raton, New Mexico. For five days, air and ground echelon personnel lived and operated under simu-

lated wartime field conditions as specified in Second Air Force's Unit Bivouac Training Manual, dated 5 January 1944. During the bivouac, group personnel received training in camouflage, chemical warfare, close order drill, bomb dispersal, field sanitation, malaria control, mapping, infiltration techniques, gunnery, and defense against air attack. Members of the 16th Bomb Group vividly remembered what all the men of the 315th experienced during bivouac training.

We had to toughen up, the book said in large print. And Raton, NM is where the toughening up process took place. Toward the end of August we moved out to the bivouac area in Raton—a squadron at a time. We met the engineers (a little careless with their dynamite but otherwise O.K.) and we almost met every insect, snake, and lizard in the state of New Mexico. For diversion we ducked dive slugs on the infiltration course, walked through gas just to prove that our masks worked, and hiked around (but NOT to look at the scenery). The last night was a real thriller-diller. Until dark we made faces at each other from either side of the gully. Then somebody fired a flare and we mixed it up a bit. At midnight somebody called off the war but a few carried on a personal war until late in the morning. Dalhart looked just a little better after Raton.

Bivouac training was conducted periodically throughout the predeployment period to insure all new personnel completed the training.

During August and September, ground echelons of the 16th, 501st, and 502nd Bomb Groups left Dalhart Field for operational training bases in Nebraska. The 16th was assigned to Fairmont AAF, Geneva, Nebraska, and the ground echelon arrived there on 15 August. The 501st arrived at Harvard AAF, Harvard, Nebraska, on 22 August. The 502nd reached its new home at Grand Island AAF, Grand Island, Nebraska, on 26 September. The group echelons paved the way for the arrival of their air echelons still on detached service at AAFSAT in Orlando, Florida. The bomb groups soon discovered their newly assigned bases were also occupied by other bomb groups still completing their final phase of predeployment training. The 16th, 501st, and 502nd overlapped with the 504th, 505th, and 6th Bomb Groups (VH), respectively. This unit overlap had mixed effects.

The unit overlap benefited both tenant bomb groups at each base. For the 315th's bomb groups, all personnel immediately began to absorb the practical experiences of their more experienced counterparts. The accelerated training of 315th personnel was particularly evident in maintenance. Sergeant Edward H. Hering, an armament crew chief in the 501st Bomb Group at Harvard AAF, stated, "I learned more about the B-29 working with the crews of the 505th Bomb Group than I did in any technical school." By October the combined maintenance performance of the 502nd and 6th Bomb Groups at Grand Island AAF was so exemplary, the

Commanding General of Second Air Force commended all personnel for their achievement in the number of hours flown per aircraft. Their success was largely due to a new method of completing aircraft preflight inspections following flight instead of just prior to flight. This technique significantly improved the rate of aircraft able to meet the flying schedule, and the first eight-plane formation of B-29s was launched on 22 October. Finally, when the 504th, 505th, and 6th Bomb Groups' ground echelons prepared to deploy overseas in advance of their air and flight echelons, the 315th's ground echelons easily assumed their duties to facilitate their departure. Thus, the unit overlap accelerated the training of 315th personnel and prepared them to provide operational support to the departing groups' air and flight echelons.

On the other hand, the unit overlap severely strained the limited resources at the Nebraska bases. Office, transportation, mess hall, post exchange, and housing facilities designed to handle one bomb group had to stretch to meet the needs of two. Consequently, overcrowding was commonplace. The housing shortage was particularly critical with little relief provided by the small communities surrounding the bases. Pyramidal tents sprang up at each base to provide temporary housing for the men of the 16th, 501st, and 502nd Bomb Groups. For the 502nd at Harvard Field, the area where the six-man pyramidal tents were set up was promptly nicknamed "Tent City." As more and more tents sprang up, the men began to make improvements to their new housing area, and Tent City developed a character all its own.

The 'naming' of their tents became somewhat of a major christening what with all the tent-dwellers openly contesting with their neighbors with newly painted signs ranging from 'Commanding General' to 'Esquire Club'; 'Club Rendezvous';...and other similar names. Each tent-group tried its best to install new innovations varying from painted interior and exterior woodwork to new electrical installations. Anything to outdo his next-door neighbors' tent for originality became the vogue.

The problems of overcrowding continued until the 504th, 505th, and 6th Bomb Groups deployed overseas.

Actions to maintain and improve morale in the 315th continued throughout the training period. Unit special services sections provided day rooms equipped with pool tables, ping pong tables, radios, magazines, books, writing materials, card tables, and coke machines. Sports leagues were started in softball, volleyball, basketball, and bowling. Movies were shown weekly at most units. Newspapers were started by some units like the 331st Bomb Group--still based at Dalhart--which first printed The Target on 25 August. Dances were held regularly, and on holidays, with local girls, nurses, and USO girls invited to attend.

Fenolli boppers from Brooklyn, toddlers from Massachusetts, hop-cats, clucks, and jitter-bugs from everywhere



Maj. Gen. Williams, Brig. Gen. Armstrong, Col. Prindle, Col. Gurney, Col. Sanborn, Col. Hubbard

jammed the floor to the Base Gym in wicked rug cutting last eve to make the initial dance of the 331st Bomb Group a success. There was plenty of food for wolfish GIs and partners, and drinks (soft) too. But what pleased the EMs most were the Dalhart fluffs and WACs who braved mud and rain to make the evening memorable. During intermission, 'Tick' Jones brought down the house with his tap-dancing. Miss Mary L. Barnes, hostess at the Colored Service Club, charmed the audience with sweet singing, while SSgt Joseph P. Griffin moved them with Ink Spots. The men of the 331st look forward to future dances of which there will be many.

There were also special events such as the 16th Bomb Group's trip on 7 October to Lincoln, Nebraska, to attend the football game between the Second Air Force "Superbombers" and the Iowa Naval Preflight School. Finally, off-base activities such as the local USO, Veterans of Foreign Wars Clubs, theaters, shopping facilities, dance halls, and high school sports events complemented on-base activities to support morale.

A singularly important morale factor in the 315th Wing was the personal pride in being a member of a B-29 Superfortress outfit. The Army Air Force and the news media had repeatedly heralded the final development of the new, powerful B-29 and associated very heavy bomber units. The men of the 315th knew they were part of a Superfortress outfit—a new, elite flying organization. This knowledge gave each man an inner pride and sense of importance in the war effort.

Routine unit activities and a tragic event characterized 315th operations in October. The 331st and 501st Bomb Groups held their second bivouac training exercises. The 331st also sent an advanced ground echelon to McCook AAF, McCook, Nebraska, to prepare for its upcoming move there in November. Colonel Kenneth O. Sanborn assumed command of the 502nd Bomb Group on 6 October. Major George Harrington and Captain Nathaniel Grimm, from the 315th Headquarters staff, visited the 501st at Harvard Field to assist that unit in winterizing some 185 tents in Tent City. Clothing shakedowns were held in each unit to determine

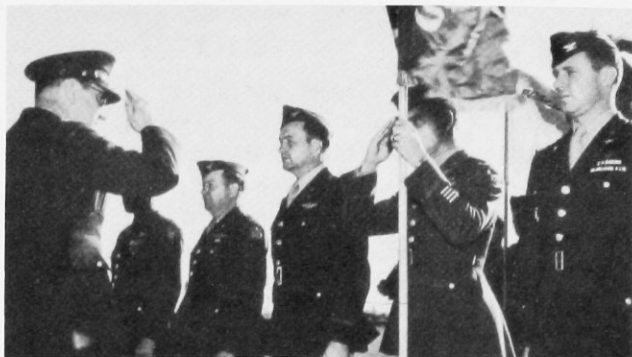
needs for the coming winter months. Medical and dental examinations continued at a hectic pace as new personnel joined their units. Halloween dances were held at the end of the month to maintain morale. Unfortunately, the month's positive gains were somewhat marred by the loss of Captain Edward M. Woddrop, Assistant Operations Officer of the 17th Bomb Squadron, who was killed in an aircraft ground mishap at Fort Worth, Texas, on 11 October.

In November, a combat veteran named Brigadier General Frank A. Armstrong was selected to command the 315th Bomb Wing. He had served as a combat group and wing commander in Europe until August 1943. During his assignment as Commander of the 97th Bomb Group, Gen Armstrong earned a reputation as a tough and demanding officer. Major Paul W. Tibbets, appointed by Gen Armstrong to be the 97th's Executive Officer, witnessed Gen Armstrong's leadership style.

As a commander, Frank Armstrong was a leader not a 'driver,' but he demanded compliance and performance. He knew what had to be done; how to do it; and made it abundantly clear what he expected of everyone. Frank was not afraid of responsibility and when warranted he took the blame for mistakes rather than remain silent and let subordinates take the brunt. Frank never asked anyone to do any thing he himself would not do....Frank Armstrong was a man's man and looked up to by those working with him to attain the objectives but feared by those who shirked their duty.

Gen Armstrong* left the 97th to command the 306th Bomb Group and promptly turned that troubled unit into an effective combat force. After his return to the United States, Gen Armstrong joined the Second Air Force and subsequently commanded both the 46th Bombardment Training Wing, Ardmore, Oklahoma, and the 17th Bombardment Training Wing, Grand Island AAF, Nebraska. Gen Armstrong departed the latter assignment to command the 315th.

*The fictional character Frank Savage in the popular movie Twelve O-Clock High was based on the real-life experiences of General Armstrong in the European theater.



Maj. Gen. Williams, Col. Prindle, Col. Gurney, Col. Sanborn, Col. Hubbard

On 18 November 1944, Gen Armstrong assumed command of the 315th Bomb Wing (VH). He promptly held a briefing and outlined his command philosophy to his wing staff and group commanders.

I don't contemplate any wrangling between the Group Commanders, their staff, or the 315th staff. We are from this day on, one big family. I hope it will be a happy family. We have only one purpose in mind, and that is to train the four Groups of the 315th, and needless to say I don't have to elaborate on training, because when the 315th goes out I expect and demand that it go out the best trained Wing in the B-29 program....I expect to have the best damned Wing that ever goes out of the country, and I expect to bring it back. What more can I tell you?

Gen Armstrong's commitment and reputation as an effective combat commander fueled a sense of purpose and cohesiveness throughout the 315th.

November 1944 was a month of consolidation and planning for the 315th. The 331st Bomb Group moved to McCook AAF on 11 and 21 November to complete the transfer of all 315th bomb groups to their predeployment training bases in Nebraska. Of course, the 331st experienced the same unit overlap situation as its sister bomb groups had earlier. Meanwhile, the 501st took sole control of Harvard Field and promptly moved the men from Tent City to permanent barracks. Sixty-two flight crews were assigned to the 315th following their completion of B-29 training at Alamogordo, New Mexico. Each of the bomb groups received 15 or 16 of the new flight crews as the initial allotment toward their authorized strength of 50 crews. The 315th Wing Headquarters also initiated tentative planning for the wing to conduct simulated combat training flights in the Caribbean. By the end of the month, the bomb groups were finalizing training plans to start flying operations in December.

The 315th enthusiastically supported two American traditions in November. The 6th War Bond Drive was in full swing throughout the month, and personnel had the opportunity to contribute on payday. At the 501st, one NCO in each barracks was designated as War Bond representative to encourage purchases. Officers in the 501st were also encouraged to purchase "at least one \$18.75 bond over and above allotments." On 30 November, each unit held its own Thanksgiving celebration, and the men and their families gathered together in the mess halls for turkey dinners with all the trimmings. Entertainment was also provided throughout the day. At the 502nd, Frankie Masters and his band played in one of the hangars during the afternoon and later in the evening for the officers' dance. The War Bond drive and the Thanksgiving Day celebrations were highly successful.

On 7 December, the 315th Wing and its four bomb



Maj. Gen. Williams, Brig. Gen. Armstrong, Col. Prindle, Col. Gurney, Col. Sanborn, Col. Hubbard

groups received their colors and standards. Major General Robert B. Williams, the Commanding General of Second Air Force, made the presentations at a ceremony held at Peterson Field, Colorado. Gen Frank Armstrong received the colors for the wing while Colonels Hoyt Prindle, Samuel Gurney, Kenneth Sanborn, and Boyd Hubbard accepted the colors for the 16th, 331st, 501st, and 502nd Bomb Groups, respectively. This ceremony, held on the third anniversary of the Pearl Harbor attack, symbolically marked the beginning of the 315th Wing as a distinct combat entity.

Bomb group flight operations began in December. Aircrew ground and flight training schedules were completed and published. The flight crews who had arrived in November were assigned to one of three squadrons in each bomb group. Each squadron was divided into three flights and while one flew, the other two completed ground training. As specified for the first phase, initial flight training for the B-29 crews was limited to local transition missions. These included routine takeoffs and landings, short cross-country flights, and emergency procedures practice. The flight training was also completed in the B-17 aircraft still assigned to the bomb groups pending delivery of additional B-29s. Unfortunately, the month's flight training was hampered by the severe Nebraska winter.

The 315th Wing Headquarters's flight personnel also began B-29 flight training in December. They had been unable to fly until December because no B-29s were available to the wing headquarters at Peterson Field. However, on 18 December, the Second Air Force assigned the newly activated 509th Composite Group to the 315th. Subsequently, the 315th borrowed a B-29 from the 509th, and the

wing's flight personnel immediately began transition flying to parallel the bomb groups' flight training activity.

The assignment of the 509th Composite Group to the 315th raised many questions. The 509th was based at Wendover Army Air Field, Utah, and commanded by Lieutenant Colonel Paul Tibbets, Gen Armstrong's former Executive Officer at the 97th in Europe. The 315th became the 509th's parent unit due to a request by Lt Col Tibbets.

At the time of my assignment to organize and train a unit capable of delivering atomic weapons, I was assigned to a B-29 instructor training school at Grand Island, Nebraska. Frank Armstrong was the [17th Bombardment Training Wing] Commanding General. This was September 1944. When Frank got the 315th Wing, I asked Second Air Force to assign the 509th to his Wing for the obvious reasons, i.e., our past relationships and the fact that the 509th, once outside the U.S., would have to be attached to some organization.

Although the 509th became part of Gen Armstrong's command structure, he did not know the highly secret mission the 509th was training to accomplish. The guarded secrecy also prevented Gen Armstrong and his staff from discovering the 509th's mission or interfering with its operations. As a result, the 315th wing staff wondered what affect the 509th would have on the wing's overseas deployment date and future combat operations.

A special project known as the "Gypsy Task Force" was inaugurated in December and affected the 315th's future training operations. In the late fall of 1944, the Second Air Force was concerned about the dramatic decline in flying

training time logged at the VHB bases in Nebraska and Kansas due to adverse weather. In response to this situation, Colonel William A. Miller, Commanding Officer of Grand Island AAF, proposed setting up training bases in the Caribbean area to train VHB flight crews. In December, Second Air Force permitted Col Miller to conduct a two-week test of the idea at Borinquen Field, Puerto Rico, using the 6th Bomb Group (VH) as the test group. The 6th Bomb Group quickly proved the practicality of the operation by completing all training requirements ahead of schedule. Consequently, Second Air Force promptly approved Col Miller's plan and christened the new operation as the Gypsy Task Force. The plan called for the establishment of three bases at Antilles Air Command fields in the Caribbean: Vernam, Jamaica; Batista, Cuba; and Borinquen, Puerto Rico. These fields became the advanced flying training bases for all VHB units preparing to deploy overseas.

The 502nd Bomb Group was the first 315th unit to participate in the Gypsy Task Force. Since the 6th Bomb Group had completed all training ahead of schedule, the 502nd Bomb Group, collocated with the 6th at Grand Island, was sent to Borinquen Field and began flight operations on

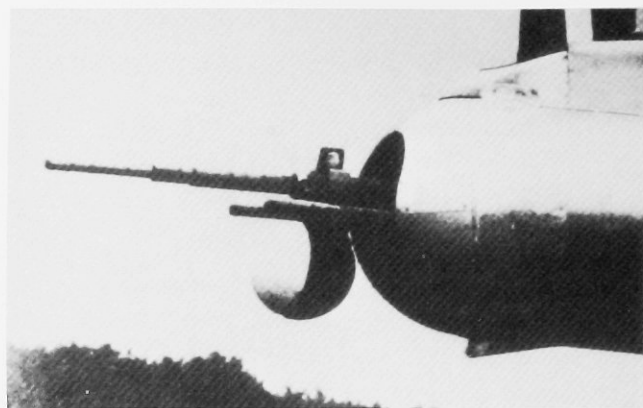


APQ-7 Eagle Radar Antenna

22 December. Under Project Gypsy, all B-29 bomb groups were scheduled to train in the Caribbean in the early months of 1945 using the personnel rotation system established by Second Air Force.

With necessary exception, 1/3 of the combat crews of each VH group will accomplish flying training with the Gypsy Task Force for ten (10) days; 1/3 of the combat crews will be involved in the movement either to or from the advanced area and understudying the crews in training; the remaining 1/3 of the combat crews will accomplish ground school and flying training at their home stations in the rear area.

Thus, the Gypsy Task Force project provided an excellent opportunity for the 315th's bomb groups to escape the wintry conditions in Nebraska and to complete their flight training.



APG-15 Tail Turret

On 17 December, the 315th Headquarters received an important teletypewriter message (TWX). The TWX directed special modifications to the wing's B-29s, including the removal of the armament and central fire-control system. Instead, the B-29s were to be equipped with only a new radar-directed tail turret, the APG-15, having three 50-caliber machine guns. The plexiglass gunners' blisters protruding from the sides of the B-29 were also to be removed and replaced with smooth enclosures. The 315th flight crews were reduced from 11 to 10 men by replacing the 3 original gunners with 2 visual scanner positions. The TWX also notified the 315th that the APQ-13 radar navigation and bombing system would be replaced by the new AN/APQ-7 radar, code named "Eagle." This TWX raised many questions about the future role of the unit.

The modifications to the 315th's B-29s were based on a special study conducted at Alamogordo, New Mexico. The study originated to test the vulnerability of the B-29 to fighter attack. Lt Col Paul Tibbets, while assigned to Grand Island AAF, had been ordered to test the B-29 in simulated combat with fighters at Alamogordo AAF, New Mexico. Unfortunately, the heavyweight B-29 proved difficult to control at 30,000 feet. Lt. Col Tibbets reported, "A too-steep bank or sudden movement of the controls might cause the plane to stall." Then one day his test B-29 was down for repairs at Grand Island, and he borrowed another B-29, equipped only with tail guns, and took off for Alamogordo. The lighter weight B-29's climb performance was remarkably better. In subsequent tests above 30,000 feet, Lt. Col Tibbets found that he "could turn in a shorter radius than the attacking P-47." Further tests showed the lightweight B-29 could also fly well above 30,000 feet and at speeds greater than some fighters were capable.

Based on the Alamogordo study, the 315th was selected as the first unit to test the tactical potential of lightweight (stripped) B-29s in combat against Japan. The stripped B-29s would also be able to carry the maximum 20,000-pound bomb loads over the long distances required to reach Japan from current American bases in the Pacific. With the addition of the new APQ-7 Eagle radar, the stripped

B-29s would also be able to conduct precision bombing from higher altitudes and in adverse weather. Thus, the 315th's new combat role became high-altitude, all-weather, precision bombing. As a result, the 315th was directed to strip its B-29s until modified B-29s, designated B-29Bs, could be rolled off the assembly line.

On 20 December, the 315th received its warning order for movement to the Pacific Theater of Operation (PTO). The warning order established readiness dates of 1 February and 1 April for the ground and air echelons, respectively, of the 315th Headquarters, 16th Bomb Group, and 501st Bomb Group. These units immediately began preliminary preparations for the movement. Later, Air Terminal service Command personnel arrived to give three days of instruction on proper methods of packing and crating supplies and equipment. The units then began the difficult task of building crates and boxes for shipping equipment overseas. The apprehension caused by the preliminary actions was heightened by the receipt of the movement order on 26 December. Fortunately, the concurrent announcement of numerous promotions and a new furlough policy helped to offset the apprehension. The furlough policy entitled personnel to 15 days of leave prior to their departure date unless they had already used 15 days since 1 July. Nonetheless, everyone knew the 315th would soon move out for overseas duty.

Despite the hectic pace in December, the Christmas spirit was alive in the 315th. At the 411th Bomb Squadron, the mess hall was decorated in style with trees, wreaths, streamers, and giant candles. At the 16th Bomb Squadron, the Jewish men volunteered to perform mess hall duties on Christmas. Col Gurney, the 16th Bomb Group Commander, commended their actions by stating, "When men work together this closely, with mutual regard for each other's religious beliefs, no foe, however strong, can ever break the



Bob Hope, Brig. Gen. Armstrong, Frances Langford

spirit of American idealism." Tragically, this was the last Christmas for some men as the 315th prepared for combat in 1945.

The year 1944 closed on a somber note for the men of the 430th Bomb Squadron, 502nd Bomb Group. On 31 December, one of the squadron's B-29s crashed during a training flight at Borinquen Field. Captain Frank H. Beales, pilot, and First Lieutenant Barclay H. Beeby, instructor pilot, had tried to immediately return to the airfield to land their B-29 following the failure of the number one engine on takeoff. However, the aircraft rolled over and crashed just 500 yards from the end of the runway. Five of the six-man crew on board were killed. This was the first aircraft accident for the 315th at the Gypsy Task Force, and it wouldn't be the last.

In January 1945, Second Air Force produced a new training manual for the 315th. The flight manual was entitled, B-29 Flight Training Directive (Special) and outlined the revised training requirements for the 315th's high-altitude, precision instrument bombing mission. It deleted the requirement for formation flight training and increased the number of long-range missions. Fortunately, the 315th's



Brig. Gen. Armstrong, Col. Tifton, Bob Hope

planned operations in the Caribbean under the Gypsy Task Force were ideal for completing the new training requirements.

The 16th and 502nd Bomb Groups began rotating personnel to the Caribbean in January. They were assigned to Gypsy Sub Task Force No. 3 at Borinquen Field, Puerto Rico.

The first [16th] aircraft for Borinquen Field left Fairmont Army Air Field on 3 January 1945. On board were Lieutenant Colonel Andre F. Castellotti, Deputy Group Commander and Tactical Inspector, Major John S. Gillespie, Assistant Group Operations Officer, and Captain Oliver C. Mosman, Jr., Group S-2. Together with other officers, they constituted the advance party, which was to prepare the way for the rest of the organization. The B-17 made the trip in less than 16 hours with one stop at Miami, Florida, for refueling. It was followed on 5 January by more B-17s and on 9 January, the first B-29s arrived with crews ready for training. The 15th Squadron was the first to send its crews to Puerto Rico. It was to be followed by the other two squadrons in order.

This personnel rotation scene was repeated many times by the 315th bomb groups in early 1945 to complete the advanced phase of flying training. The flight crews flew numerous 3,000-mile overwater missions under weather, sea, and terrain conditions similar to those they would face in combat. Additionally, the flight crews and ground support personnel worked to improve operational efficiency since this was their final simulated combat training opportunity before they deployed. Naturally, this division of unit operations between the Caribbean and Nebraska created difficult supply, administrative, maintenance and personnel problems. However, they were handled, and the ideal training conditions more than compensated for the logistical problems encountered.

To support the groups' divided operations, maintenance personnel spent many long hours exposed to Nebraska's winter weather trying to keep the B-29s flying. The B-29 was particularly troublesome for maintenance because its engines ran too hot and failures were common. Its cylinder baffles were inadequate and contributed to engine overheating. In addition, Boeing's design of the landing-gear door and bomb-bay door systems led to engine overheating.

The landing-gear doors were operated by an electric jack-screw and didn't come up until the gear was up. The bomb-bay doors were also operated by jackscrews. Both of these systems took much too long to complete their cycle. On takeoff the engines would overheat just waiting for the gear doors to get closed. The added drag only made the engine overheat problem more severe.

Leaky carburetors caused frequent engine fires until maintenance

personnel discovered the problem was due to the carburetor mounting bolts bottoming out before they were snug enough to seal the carburetor. The cold weather in Nebraska magnified these problems because most of the maintenance had to be performed outside due to limited hangar space. At Fairmont AAF there were only three hangars, and each hangar accommodated only one B-29. Moreover, the B-29's engines were also difficult to start in cold temperatures and required special priming by maintenance personnel to get them started. Since the groups' maintenance staffs were split between the Caribbean and Nebraska bases, some men worked two and sometimes three shifts without sleep on the cold Nebraska flight lines trying to keep the Superforts operational.

During January, the 315th increased its preparations for deployment and operations overseas. Between 3 and 6 January, the 315th Wing Headquarters successfully conducted a Command Post Exercise simulating jurisdiction over all four bomb groups in the combat theater of operation. From 11 to 30 January, Gen Armstrong and his selected staff traveled to the Marianas to study the 315th's future home for combat operations. Ground echelons of the 16th and 501st Bomb Groups completed their final preparation for overseas movement (POM) processing. The 501st also completed its final bivouac training exercise before deployment. On 24 January, the 331st Bomb Group received its movement orders as well as a new Group Commander, Colonel James N. Peyton. Moreover, the 331st was at full strength for the first time since activation with the arrival of its final personnel elements from Dalhart Field and 31 additional flight crews. The Second Air Force also increased each group's authorized aircraft strength from 30 to 45 Superforts. Finally, by the end of January, all in-unit B-29 modifications were nearly complete, except for the installation of the APQ-7 radar which was unavailable.

The 315th Wing Headquarters submitted a special request to Second Air Force for civilian experts in the B-29. By January, it was increasingly apparent that the VHB units in training were not being kept abreast of the B-29 equipment improvements made at the factories. Consequently, the 315th wanted 24 civilians to accompany the wing overseas, if necessary, to bring the wing's specialist up to date on the latest B-29 systems improvements.

Among others, the following type experts were listed in the request: a man from the Wright Aeronautical Works to operate on engines; a Boeing-trained engineer; an advisor on flight controls from the Minneapolis Honeywell Corporation; a Goodyear fuel cell repairman; a Western Electric radar worker; a bombsight maintenance man from the Victor Adding Machine Company and others. If this request is granted, these civilians would be allotted to the Wing and groups according to their respective specialties and the needs for their services.

This request reflected Gen Armstrong's demand to have highly qualified unit personnel and the best trained B-29 wing.

In January, the Bob Hope show toured several of the 315th's units. Between 1630 and 1800 hours on 11 January, Bob Hope, Jerry Colona, Fances Langford, Vera Vague, and Tony Romano performed for the enlisted men of the 315th Headquarters at Peterson Field. Later that night at the Broadmoor Hotel in Colorado Springs, these entertainers were the honored guests at a reception dinner for Gen Armstrong and officers of the 315th Wing. The next day, the Bob Hope show was repeated for the members of the 331st Bomb Group at McCook Army Air Field. Entertainment by Hollywood stars was a significant morale booster for the 315th as well as other units throughout the war.

The Gypsy Task Force was costly for the 502nd Bomb Group in January with four training accidents, two resulting in fatalities. In the first accident, a B-29 assigned to the 411st Bomb Squadron ditched off the coast of Haiti due to an uncontrollable fire in the number two engine. The plane broke in half during the ditching, and only five men from Crew 1104 were rescued the following day. The other five crew members were never found. Later, on 26 January, Crew 1107 from the 411th crashed near Fort Riley, Kansas, while enroute from the Caribbean to Grand Island AAF. The accident was due to fuel exhaustion brought on by excessive fuel consumption while flying in strong headwinds. Six of the 15 men on the B-29 were killed. On the same day, Crew 1117, 411th Squadron, crash landed near Lexington, Missouri, while flying to home base. Again the cause of the accident was fuel exhaustion due to adverse weather and navigational error. Fortunately, there were no casualties.

The final accident for the month occurred on 27

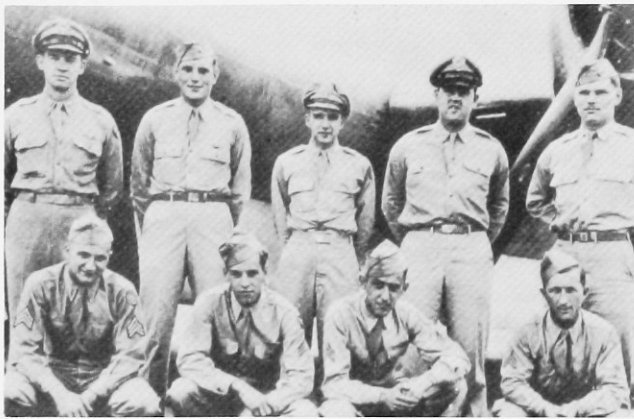
January. Crew 203 from the 402nd Squadron was on a practice bombing mission out of Borinquen Field when the number one and number two engines and electrical system malfunctioned. The crew had to shut down the number two engine while the number one engine had to be operated at drastically reduced power. After checking the electrical problem, the crew found they could not extend the landing gear or wing flaps. The young aircraft commander, Captain Arthur W. Dippel, and his crew headed for Borinquen Field, losing altitude all the way. Once over land and at 4,000 feet, Capt Dippel rang the alarm bell for his crew to bail out. Four men in the front compartment bailed out, but those in the rear of the plane did not hear the bell. By the time he discovered this, Capt Dippel knew the aircraft was too low for the remaining crew to bail out. An instructor pilot was in the copilot's seat and began flying the airplane toward the runway at Borinquen Field. On the final approach, Capt Dippel took over the controls and made a perfect no-gear, no-flaps crash landing. As the aircraft skidded along the runway on its belly, sparks caused the plane to catch fire before it came to a stop. Fortunately, all the men escaped before the ensuing fire spread through the aircraft. The month of



Seated Foreground: Jerry Cologna, Ellen Drew, Lt.C. Sy Bartlett, Col. Ken Sanborn



Maj. Brown, Lt.C. George Harrington, Rosemary Harrington, Col. Emile Kennedy, Mrs. Brown, Col. Hoyt Prindle, Mrs. Bright, Capt. Wayne Bright



January was costly in lives and aircraft for the 502nd Group, but it could have been worse.

In February, the 315th units were busy completing their final preparations for overseas movement (POM) actions. Ground echelons of the 16th and 501st Bomb Groups completed POM processing and packed and crated their equipment for shipment overseas. In a three-week period, the 501st crated and stacked more than 175,000 pounds of equipment in plywood cases and marked each case with the unit code number, box number, and coded destination. On 20 February, advance parties from the 16th and 501st went to the Port of Embarkation (POE) in Seattle to coordinate final preparations for unit deployment. Meanwhile, the 331st and 502nd Bomb Groups secured and packed athletic and recreational equipment since these items were difficult to get overseas.

During the month of February, much of the Special Service

department's activity revolved about morale problems in preparation for overseas movement. Among the pieces of recreational equipment which arrived during the month and were packed and prepared for shipment were: a public address system, a 2,200 book library, an ice-making machine capable of eighty pounds per hour, washing machines, electric irons, coke machines, bar fixtures, photographic equipment for a photo club, beer coolers, and a great amount of athletic equipment. Individual Group members examined much of the material secured and responded favorably.

The 331st and 502nd followed in the footsteps of the 16th and 501st which were scheduled to deploy first. All four bomb group ground echelons were poised and ready for movement overseas by the end of the month.

By February 1945, all 315th personnel had completed, or were scheduled to complete, their final phases of predeployment training. Second Air Force directed the 315th Headquarters staff to participate in Project Gypsy prior to deployment overseas, to increase wing staff and group coordination in unit combat operations training. An advance party from the 501st bomb Group went to Vernam Field, Jamaica, to prepare for its scheduled Gypsy Task Force training. On 16 February, the first 45 of the scheduled 180 wing and group officers began a 2 1/2-week training class on the APQ-7 Eagle radar at Victorville, California. The 315th Wing Headquarters also formulated plans to send crew radar operators to Boca Raton, Florida, and Victorville, California, for extensive training in the APQ-7 radar. Moreover, the 315th Wing Radar Intelligence Section began a program to secure radar identification charts and scope photos of Japan for bomb group and squadron study.

Photo strike pictures of B-29s from the XXI Bomber Command were received and distributed to the Groups for an exercise involving interpretation and compliance with the Wing photo interpretation report system. A program consisting of three problems for radar and visual target and terrain identification was distributed to the Groups, placing emphasis on the industrial targets of Japan.

Finally, the 315th was granted authorization to obtain 24 civilian technicians to supplement the training of its maintenance specialists. By the end of February, time for training was rapidly running out.

In March, the 331st and 501st Bomb Groups began training in the Caribbean. They were assigned to Gypsy Sub Task Force No. 2 at Vernam Field, Jamaica, which became operational with the arrival of the 501st on 3 March. Originally, training for the 331st and 501st was scheduled for February, but was delayed until March because the facilities at Vernam were poor and the runway was too short for B-29 operations. After arriving at Vernam, the 331st and 501st faced a severe shortage of maintenance personnel and maintenance equipment, especially aircraft and radar parts. In addition, no night operations were permitted because of unlighted terrain obstructions around the field. Despite these problems, the 331st and 501st put their best efforts into accomplishing the training.

The day was divided into two flying periods of six hours each. Briefing was held at 0300 each morning and at 1000 for the training missions involving bombing and gunnery. Two adequate bombing ranges, Walker Bay and Portland Rock, were situated within a fifty mile radius of the base, and, since our ranges in Nebraska had serious limitations, especially for radar bombing, every effort was made to accomplish all radar bombing requirements from Vernam and these efforts were successful. The base's situation also afforded a good aerial gunnery firing range over the ocean and three P-63 type fighters were based at Vernam to provide mock interceptions for camera gunnery. Once our operations began to function smoothly, a good amount of training was accomplished.*

Flight training included long-range, 13-hour missions to the eastern coast of the United States and back before nightfall at Vernam Field. The simulated combat operations for the 331st and 501st at Vernam were challenging and productive with all personnel honing their respective skills.

On one mission, First Lieutenant Leonard Jones, 501st Bomb Group, and his crew tested the theory of the stripped B-29 versus fighters at high altitude. The crew took off, climbed to 25,000 feet, and radioed down to send a P-39 fighter up. They knew the P-39 had been designed with high-

pitched wings for maneuverability, and they believed it wouldn't be able to reach the B-29s at altitude. Within minutes the P-39 was right off Lt Jones' wingtip. He climbed to 30,000 feet, but right away the P-39 was there again. After this experiment, Lt Jones' crew was convinced they would see Japanese fighters at 30,000 feet when they started combat operations overseas. Until then, they wanted to enjoy their stay in the Caribbean.

The Caribbean environment was great for morale. The warm, tropical climate at Borinquen and Vernam Fields was a welcome change of pace from the wintry days in Nebraska.

It just couldn't happen to us. But it did! Uncle Sam actually paid our expenses for a trip to the land of 'Rum and Coca-Cola', and he picked the best time of the year for it--January, February, and March. The War Department called us 'The Gypsy Task Force' and they meant it. Borinquen Field, Puerto Rico, was the ideal spot for a Gypsy. Swimming pools, a golf course, and soft, tropical breezes that were a far cry from the sub-zero blasts that were hitting FFAF (Fairmont AAF).

At Vernam Field, Col Peyton, the 331st Group Commander, also set up a pass system for 20 officers and enlisted men each day to take the 2-hour train ride to visit Kingston. Unfortunately, the morale building experiences at the Gypsy Task Force were sometimes offset by tragic training accidents.

Two more fatal aircraft accidents occurred in March. In the first on 6 March, a B-29 assigned to the 402nd Bomb Squadron, 502nd Bomb Group, crashed into the golf course near the runway at Borinquen. Earlier in the flight, the plane was at 10,000 feet and the number one and number three engine propellers malfunctioned. By the time the pilot, Second Lieutenant Harold C. Anderson, and his crew returned to Borinquen, the number three engine had been feathered and the number one engine was on fire. The aircraft stalled while trying to land and crashed short of the runway. Six of the nine crew members on board were killed. On 10 March, the 501st Bomb Group had its first fatalities. A B-29, piloted by First Lieutenant V. Tulla, crashed while trying to land at Alexandria AAF, Louisiana. The ten-man crew was killed. It was a severe blow to their fellow group members, but the intensive training continued.

In March, 315th personnel finally started learning about the APQ-7 Eagle radar. The Eagle radar had been conceived by professor Luis W. Alvarez, Massachusetts Institute of Technology (MIT), and developed by MIT's radiation laboratory and Bell Telephone Laboratories. The new Eagle radar equipment employed a much higher frequency than previous radars and gave a clearer presentation of ground images on the radarscope. The Eagle was ten times more efficient than the radar equipment being used in other B-29s.

*The P-63 Kingcobra was a modified version of the P-39 Airacobra.

The antenna was the key to the APQ-7 radar bombing system. The antenna was a straight structural beam 16 feet long, mounted on the lower part of the fuselage. It mounted 250 dipoles and used electronic scan rather than rotational scan. It produced a much finer degree of resolution, but it surveyed only a 60 degree forward sector. It had a .4 degree beam width.

The antenna was housed in an 18-foot wide, airfoil-shaped section and mounted perpendicularly on the underside of the fuselage. The mounting of the antenna below the fuselage permitted greater target identification but also made the B-29 look somewhat like a biplane. The APQ-7 Eagle radar was a new and significant element in the 315th's future combat operations.

To use the Eagle radar system, the 315th's crews had to learn a new method of attack called synchronous radar bombing. With the APQ-7 system installed, the radar bombardier and his radarscope were not collocated with the Norden optical bombsight in the nose of the B-29. Instead, the radar bombardier sat aft in the navigator's compartment and his radar was synchronized electrically with the optical bombsight. During a bomb run, the radar bombardier tracked and aligned the target using a reticle on his scope. This radar information was automatically fed to the bombsight and produced a radarscope display of the target track to fly, ground speed, and time for bomb release. Thus, the term synchronous radar bombing meant the bombsight was used in conjunction with the radar equipment during the bombing attack.

The 315th's flight crews modified their bomb run procedures to incorporate the synchronous radar bombing method. The target information displayed at the optical bombsight was also presented on an indicator in the cockpit.

The pilot set the plane on automatic pilot, turned to the track displayed on the PDI (Pilot's Direction Indicator), and held that course to the target. He also stabilized the airplane speed and altitude, so that the pilot himself was controlling all three parameters of the bomb run. In the usual approach to optical bombing, the pilot only controlled speed and altitude; the bombardier held the course.

During the target run, the radar bombardier used the APQ-7 radar and visual sighting to spot the target while the autopilot's gyroscopes kept the aircraft straight and level. At the target, the bombsight indicators came together, a red light flashed in the cockpit to signal the bomb-bay doors had snapped open, and the bombs were released. The crews spent many hours learning the synchronous radar bombing method and even more hours in the air trying to perfect their procedures.

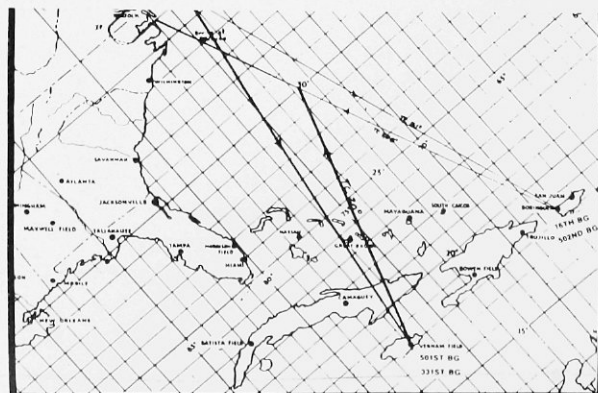
In March, the 501st Bomb Group picked up the first of

the 315th's "Flyaway" B-29Bs at the Bell-Marietta aircraft factory in Georgia. The term flyaway meant the flight crews picked the aircraft up at the factory and flew it to their home bases prior to deployment overseas.

The crews that received them have certainly 'gone to town.' The first plane, #600, was given to Major Tintensor, of the 21st Squadron, who immediately named it 'ROADAPPLE' with a picture of a horse painted on the side of the nose. The second ship, #615, was given to Captain Braun, also of the 21st Squadron, who immediately named his airplane 'BEEGAZBURD,' which was very appropriate for the occasion.

The B-29Bs were specially modified B-29s with the armament removed and the APG-15 radar tail gun turret and APQ-7 radar installed. In addition, the landing-gear doors and bomb-bay doors had been modified to a pneumatic system to reduce system cycling times. The engine baffles were also modified to make the engines run cooler. The flyaways represented the bulk of the aircraft programmed for the 315th to use in combat against Japan. Thus, the four bomb groups continued to pick up additional flyaway B-29Bs as they came off the assembly lines.

The 315th flew its first coordinated wing training mission in the Caribbean on 27 March. A maximum bomb load, 3,000-mile mission was planned from Borinquen Field to Charleston, South Carolina, closely simulating a Pacific theater combat mission from the Marianas to the Yokosuka Naval Base near Tokyo. The Gypsy Task Force (GTF) Headquarters acted as a bomber command and authorized the 315th Wing staff to act as the tactical headquarters. The GTF sent a field order to the wing directing it to attack Yokosuka, and the 315th's Operations and Training staff then issued a wing field order to alert the bomb groups. Each group briefed its crews on the mission, including a detailed description of enemy defenses in the target area. The wing launched 16 aircraft for the mission using 15-minute takeoff intervals. Two 502nd Bomb Group crews had engine trouble over the target area and made emergency landings at Jacksonville and Morrison Fields in Florida. The remaining aircraft successfully dropped their concrete bombs in the ocean near their simulated target and returned to Borinquen



The 315th's simulated attack on Yokosuka (Charleston) was a valuable training exercise. For the first time, the wing and group staffs acted as a tactical organization and used operational procedures similar to those in combat. Their coordination on mission planning, briefings, reports, communications, and maintenance improved the cooperation between the staffs. On the other hand, the mission revealed flight crew weaknesses in radar identification, radar bomb run training, and LORAN navigation procedures. As expected, the crew members who had attended the APQ-7 school at Victorville were better at radar target identification than those who had not yet attended. The results of this mission indicated the 315th needed to fly additional training strikes using the Eagle radar equipment and procedures it would employ in combat against the Japanese industrial targets.

A second wing mission was immediately planned for 6 April. A wing conference was held at Borinquen Field on 4 April to plan the mission. The Newport News Shipbuilding and Drydock Company at Norfolk, Virginia, was the target, simulating the Mitsubishi Drydock Company at Kobe, Japan. Once again, the GTF acted as bomber command and ordered the wing to attack the target with all four bomb groups. The wing staff alerted the groups, and representatives from the 331st and 501st flew to Borinquen from Vernam and joined the 16th and 502nd for the wing briefing held on 5 April. The bombing attack was planned for 30,000 feet using a wind vector, or no drift, downwind bomb course similar to the first mission. After the briefing, the 331st and 501st men returned to Vernam to brief their crews and prepare for the mission.

The following morning, 6 April, the 315th launched nine B-29s to strike the Mitsubishi (Newport) installations. The 16th and 502nd supplied five aircraft from Borinquen Field while the 331st and 501st launched four planes from Vernam Field. The weather over the target was a solid overcast at 22,000 feet and ideal for radar bombing. Unfortunately, the two 502nd crews had to make a dead reckoning bomb run, but all other crews used radar bombing and had excellent results. The second wing training mission was very successful, and the groups requested more of the same to allow additional crews to practice inter-group operations before deploying overseas.

In April, the 315th altered its training program to comply with a change in XXI Bomber Command tactics. Between 24 March and 3 April 1945, General Curtis LeMay, Commander of XXI Bomber Command since January, ran four experimental missions to test the selective precision bombing capabilities of his APQ-13 radar-equipped B-29s. Unfortunately, the APQ-13 proved inadequate, and Gen. LeMay temporarily abandoned the effort. Instead, he directed his B-29 wings to methodically destroy Japanese urban industrial areas from greatly reduced altitudes. Subsequently, the 315th was advised to expect to conduct night, all-weather, precision radar bombing operations at 15,000

feet instead of 30,000 feet. The 315th modified its training program toward this new guidance and planned to keep a small headquarters staff at Peterson Field and in the Caribbean to oversee group training during the remaining weeks before deployment.

THE SERVICE GROUPS

American and Allied air power in Europe during 1944 stimulated the development of a new type service group. Prior to 1944, enemy air strength had led to a concept of flight operations from individual squadron airdromes. This was done to avoid the destruction of entire units on the ground. During this period, service groups had performed third echelon (field) maintenance and supply functions for two combat flying groups which were dispersed at separate airdromes. These service groups were also dispersed at a considerable distance from both flying groups, thus creating an inefficient and clumsy service group system. However, by 1944, the number of aircraft furnished to the combat theater increased dramatically, and Allied air superiority had been established. The increase in aircraft and resultant air superiority permitted the concentration of forces at airdromes without undue risk. As part of the plan to concentrate flying groups at airdromes, the service groups were also reorganized to support the new flying group operations.

The new type service group was streamlined to provide complete station complement services to keep one flying group constantly combat ready. The organization and training of the new, also called special, service groups were specified in the Army Air Force's Service Group (New Type) Training Manual, dated 23 May 1944.

Directives setting up Service Groups (Special) provided that all personnel of other arms and services were to be absorbed into well-integrated organizations consisting of three streamlined squadrons: A Headquarters and Base Services Squadron; a Materiel Squadron; and an Engineering Squadron. The special staff organizations of the older groups were thereby to be eliminated. Each Service Group (Special) was to serve one combat group, and to be capable of operating a base complete with Finance service, fixed communications, Medical dispensaries, interior guard, internal security, utilities, firefighting, and motor transportation. Moreover, if tactical situations necessitated such action, they were to be capable of supplying combat groups at dispersed airdromes through the use of refilling and distributing points, and maintaining them by means of mobile repair units.

The total complement of men in the new service group's three component squadrons was stripped to the bare essential number needed to provide quick, efficient operations. The new service groups worked "right with the combat

groups, so close to it that the two groups, combat and arms, are almost one.”

The development of the Service Groups (New Type) coincided with the introduction of the B-29 Very Heavy Bombardment (VHB) Program, and the two were linked. In March 1944, the B-29s were rolling off the assembly lines and available for use in training programs. In April, the Twentieth Air Force had been created, and B-29 Combat Crew Training Programs were initiated.

In May, the training manual for the new service groups was published, and the stated support requirements for the new service groups were remarkably compatible to the support needs of the new B-29 VHB units.

The original object of the new style of service groups organization incorporated in these units had been to accomplish the integration of arms and services, with the addition of conventional base functions, but the project was so closely associated with the preparation of the VHB units for the Twentieth Air Force that the two programs were quickly identified with each other in the minds of all concerned. Furthermore, they were both under the jurisdiction of the same special body, The Executive Committee of the B-29 Liaison Committee, headed by Brigadier General K. B. Wolfe.

Thus, the new service groups were also earmarked for the B-29 VHB program. However, to meet the large mission support requirements for the Twentieth Air Force’s future force of a thousand B-29s, many new service groups were needed.

The 24th, 73rd, 75th, and 76th Service Groups were activated in May 1944 under the new service group concept. The 73rd and 76th were activated on 11 May followed by the 24th and 75th on 24 May. The 75th and 76th were based at Warner Robins Air Service Center, Warner Robins, Georgia, while the 24th and 73rd were stationed at the Air Service Command Training Center, Fresno, California. All four service groups were destined for assignment to the 315th Bomb Wing (VH) and immediately began to organize and train for their future combat support duty.

The Service Groups (New Type) Training Manual specified a two-phase, six-month training period with three categories of training. The initial phase was the Activation and Unit Training period. This period lasted approximately two months and began when the units reached 90 percent of authorized strength at Fresno and Warner Robins. For the four-month second phase, the service groups were transferred to another base to provide operational support to a combat flying group also in training. During these two phases, three categories of training were accomplished: Basic Military Training (BMT), Basic Technical Training (BTT), and Advanced Technical Training (ATT). BMT

“consisted of instruction in subjects common to all soldiers, and necessary for discipline, security, morale, and proper physical conditioning.” BTT consisted of elementary specialized training and prepared the soldier for the “performance of a specific occupational function within a unit.” ATT was designed to provide skilled technicians and specialists. All three categories of training were conducted throughout the six-month training program.

The service groups completed their first phase of training at Fresno and Warner Robins. They quickly overcame initial start-up problems common to all newly formed units and began the unit training period. The 4506th AAF Base Unit (Service Group Special) at Fresno and the 5410th AAF Base Unit (Service Group Special) at Warner Robins provided the instructors and instructional materials for the BMT. The facilities for BTT and On-the-Job Training (OJT) were provided by the Air Service Commands at the respective bases. The 76th Service Group described the atmosphere at Warner Robins during their first phase of training.

To catch all the excitement, fervor, and fullness of purpose of this organization, to realize to some degree its deep feeling of a great mission and the intangible presentment permeating all of its personnel, from the Commanding Officer down to the newest buck private, of a coming rendezvous with destiny, one would have to come to its present location at Robins Field, Georgia, and spend a few days in the field, taking thousands of feet of film in an effort to capture on celluloid the vital, stirring pangs of a unit which the Air Service Command has already marked for an important role in the air war of the near future. In lieu of this imagined documentary film, an unfeeling, prosaic type-writer must labor to catch on paper enough of the growth and forward surge of this revolutionary type of service group to give a reasonably accurate picture of its brief history and present status. The readers of this quib, whoever they may be, must bear one thing constantly in mind as they leaf through the pages to follow—no musty archives or time-worn documents form the structure on which this skeleton of words is built. A scene in the field as a low-flying B-25 sprays troops in training with gas; several hours down at the Instrument Repair Building watching soldier specialists from the engineering squadron getting direct on-the job training; a day up in Atlanta witnessing some the Group’s airplane and engine mechanics dismantling a B-29—this is the warp and woof, the solid foundation of fact which underlines the story to follow.

During this first phase of training, service group personnel conducted their first bivouac experience, learned the basics of their jobs, and started working together. Now they were ready for advanced training.

All four service groups moved to bases in Kansas to start the final four-month phase of training. The 76th was the first to move out. On 18 August 1944, the unit headed for

Great Bend AAF. Shortly thereafter, on 1 September, the 73rd entrained for the trip to its new home at Pratt AAF. The 24th and 75th Service Groups didn't depart Fresno and Warner Robins until November and were sent to Tinker AAF, Oklahoma. They spent 35 days at Tinker until space was available for them at their new training bases in Kansas. Consequently, the 24th and 75th didn't arrive at Smoky Hill AAF and Walker AAF, respectively, until December. The 24th's trip to Smoky Hill was particularly memorable.

The entire 24th Service Group departed from Tinker Field, Oklahoma, 9 December 1944, bound for Smoky Hill AAF, Kansas. The movement was made by truck and will long be remembered by all involved. A cold, freezing rain at the time of departure changed into a cold driving snow storm in the 20 hours required to complete the 265 mile trip. Breakfast was served by the Quartermaster Truck Company in Wichita, Kansas, at 0930, 10 Dec 1944. This stop allowed everyone to thaw out and begin living again. A hot chow was served at Smoky Hill AAF upon arrival, and was probably the best time of the entire journey.

"It Could Be Me"

Out in the plains of Kansas
Where man has feared to go,
They built a mighty airbase
In the heat and wind and snow.
And when they had it finished
And stocked it well with men,
They named the damned place Walker
And flying then began.
From early in the morning
Till way into the night,
You can hear the drone of aircraft
And it fills your soul with fright.
For suppose this never ended--
Just suppose it had to be--
That someone had to stay here.
Ye gods, it could be me!

Author Unknown
75th Air Service Group
1944

In Kansas each service group was assigned to support a B-29 flying group also in training at their base.

Unit and Combined Training was the final phase of training and had a two-fold purpose. First, the unit training portion was designed to enable the individuals of service group squadrons to work together. The training emphasized teamwork within, and between, squadrons to support the operations of the service group. The men learned how to perform their duties in cooperation with other members of their section. Secondly, the combined training portion provided a realistic training environment for each service group to perform its assigned mission. The combined training period had two major objectives.

1. To train individuals and specialists teams in the

performance of their assigned tasks, using the tools and equipment that will be available in the theater of operation.

2. To weld all component units into an effective operating Service Group (New Type), capable of performing its assigned mission of supply and maintenance for the combat group under conditions likely to be encountered in the theater of operation.

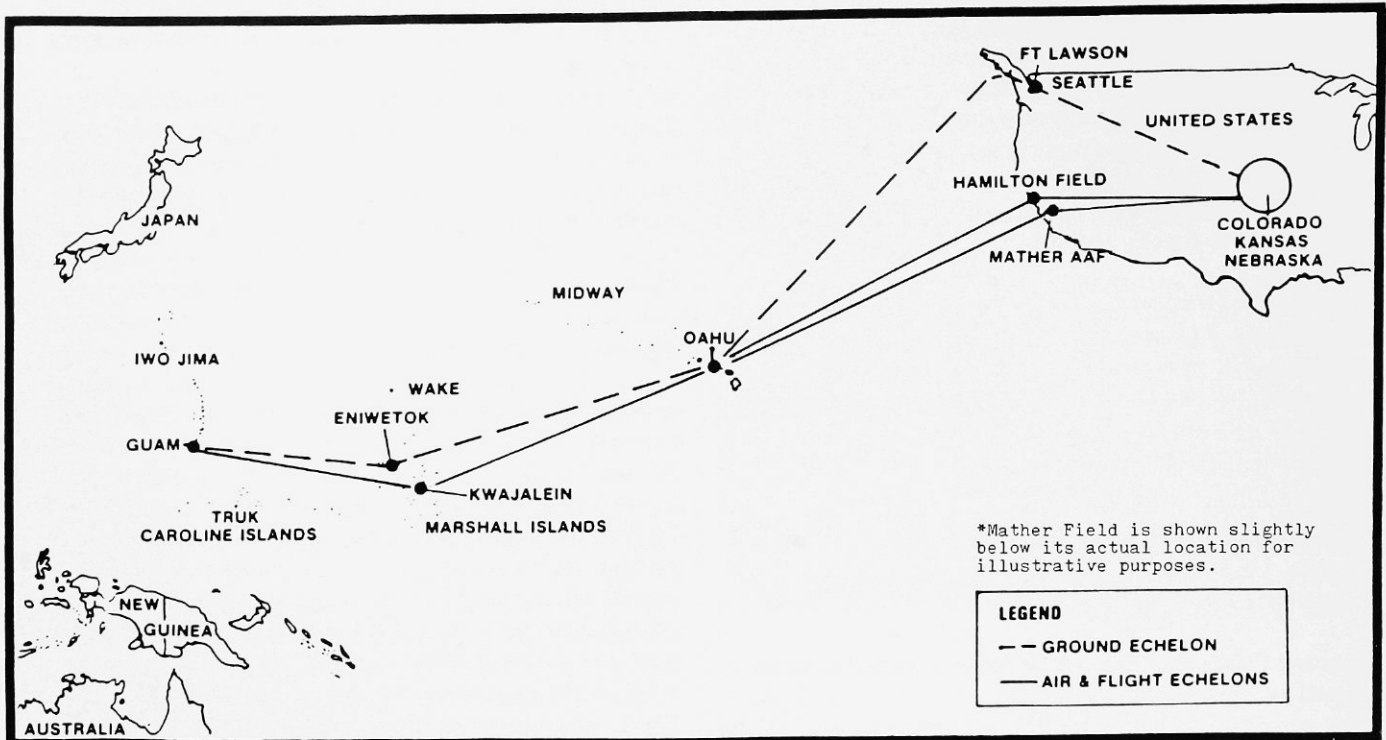
By the end of this intensive phase of training, the service groups would be fully capable of performing their combat group support mission.

In January and February, the service groups entered a period of hurried preparations for the coming overseas movement. They received their movement orders and passed the preparation for overseas movement (POM) inspections. Personnel completed final clothing and administrative processing, including immunizations. Teams of 6 to 24 men packed and crated required equipment as well as recreational and athletic materials. A detachment of enlisted men from the 24th's Utilities Section completed a training program on road and bridge building at the Osage City Bomb Range. The utilities sections of all four service groups also prepared their heavy equipment for shipment. Forced and tactical road marches with simulated aerial bombing, strafing, and gas attacks were conducted to maintain physical fitness and an awareness of combat operations. All personnel completed weapons training. The port call was received on 1 February, and advance parties from the 73rd and 76th left on 20 February for the Port of Embarkation (POE) in Seattle to coordinate the groups' movement overseas. Their time for final preparations was rapidly running out.

The service groups were re-designated as Air Service Groups (ASG) in January and reduced in manpower in February. The re-designation in January did not change the mission or composition of the service groups. It only changed the organizational title to Air Service Group, and the ASG's component squadrons were also re-designated as Air Materiel Squadrons and Air Engineering Squadrons. Effective 9 February 1945, a technical order change directed the elimination of the central fire-control (CFC) sections from each of the air engineering squadrons. The CFC sections were eliminated in response to the removal of the CFC systems on the 315th's B-29Bs. Thus, each ASG was reduced in strength by one officer and seven enlisted men.

Several morale boosting activities in January and February helped to offset the apprehension of the upcoming deployment overseas. On 6 January, the 24th ASG's Headquarters and Base Services Squadron personnel attended a party in Wichita, Kansas, given by the Boeing Aircraft Company and the USO. In addition, every effort was made to give personnel pre-embarkation furloughs and leaves. At the end of February, the groups held farewell parties to celebrate the end of training and the imminent departure for

315th deployment routing to Guam.



315TH BOMBARDMENT WING (VH) TRAINING AND DEPLOYMENT BASING: 1944-45

	315TH HQ	16TH BG	501ST BG	502ND BG	331ST BG	73RD ASG	76TH ASG	75TH ASG	24TH ASG
JUL 44	PETERSON FIELD COLORADO	DALHART AAF TEXAS	DALHART AAF TEXAS	DALHART AAF TEXAS	DALHART AAF TEXAS	FRESNO, CALIFORNIA	WARNER ROBINS, GEORGIA	WARNER ROBINS, GEORGIA	FRESNO, CALIFORNIA
AUG 44		FAIRMONT AAF NEBRASKA	HARVARD AAF NEBRASKA	GRAND ISLAND AAF NEBRASKA			GREAT BEND AAF, KANSAS		
SEP 44						PRATT AAF KANSAS			
OCT 44					McCOOK AAF NEBRASKA				
NOV 44							TINKER AAF OKLAHOMA	TINKER AAF OKLAHOMA	
DEC 44							WALKER AAF KANSAS	SMOKY HILL AAF, KANSAS	
JAN 45									
FEB 45									
MAR 45	POE SEATTLE (G)	POE SEATTLE (G)	POE SEATTLE (G)			POE SEATTLE	POE SEATTLE		
APR 45	N.W. FIELD GUAM (G)	N.W. FIELD GUAM (G)	N.W. FIELD GUAM (G)	POE SEATTLE (G)	POE SEATTLE (G)	N.W. FIELD GUAM	N.W. FIELD GUAM	POE SEATTLE	POE SEATTLE
MAY 45	GUAM (A&F)	GUAM (A&F)	GUAM (A&F)	N.W. FIELD GUAM (G)	N.W. FIELD GUAM (G)		N.W. FIELD GUAM	N.W. FIELD GUAM	N.W. FIELD GUAM
JUN 45				GUAM (A&F)	GUAM (A&F)				
JUL 45									

LEGEND

(POE) — POINT OF EMBARKATION
(A) — AIR ECHELON
(F) — FLIGHT ECHELON
(G) — GROUND ECHELON

NOTE: THE GROUND ECHELONS TYPICALLY MOVED IN ADVANCE OF THE AIR AND FLIGHT ECHELONS.

overseas duty.

Deployment

In March 1945, the 315th Wing Headquarters sent six officers to the Pacific Theater of Operation (PTO) to make preliminary arrangements for the arrival of the wing's ground echelons overseas. Colonel Emile T. Kennedy, Deputy Chief of Staff, Supply and Maintenance, led this group of officers. They reached West Field, Tinian, on 19 March and established the 315th's overseas headquarters. However, their initial effort to prepare West Field for the arrival of the wing's personnel was in vain. On 2 April, the XXI Bomber Command informed Col. Kennedy that the 315th had been reassigned to Northwest Field, Guam, because the 58th Bombardment Wing had been assigned to West Field, Tinian. Furthermore, the JCS had directed that the operational readiness date of the 315th "be deferred for thirty days." Thus, on 5 April, Col. Kennedy and his staff left Tinian for Guam. At Northwest Field they immediately began to complete priority arrangements for the "construction of temporary latrines, showers, kitchens, and an adequate water supply" for the ground echelons due to arrive in a few days.

Meanwhile, the group echelons of the 315th Wing Headquarters, 16th and 501st Bomb Groups, and the entire 73rd and 76th Air Service groups had moved out to the Port of Embarkation (POE) in Seattle, Washington. The rail journey went smoothly, and the experiences of the 501st ground echelon, commanded by Major Bob R. Lockhart and Major Harry L. Young, were common to all the units.

We were sent off in farewell gesture by local towns folk, wives, sweethearts, and the Band of the Army Air Field, Harvard, Nebraska. Quarters for enlisted men constituted troop sleepers and tourist cars. Officers traveled in pullman cars with connecting lounge. General opinion of enlisted men was that the troop sleepers proved more comfortable than the tourist car. Mess was provided by kitchen car and considering the handicaps for serving, the cooks, mess sergeants, and mess officers are in line for congratulations on the quality and the manner in which the food was served. Administrative details necessary to be performed daily, such as sick call and morning report, were controlled by Squadron from the field desk accompanying troops. By 1600 hours on Saturday, 10 March 1945, both trains delivered the troops to Seattle and the transportation corps had delivered them by truck to Fort Lawton.

At Ft. Lawton, the ground echelons joined the respective advance parties sent earlier to the POE to complete final coordination for the movement overseas.

The 315th units spent several days at Ft. Lawton completing final overseas processing prior to shipping out. Quarters were assigned, a physical examination was given, clothing was inspected, instructions were given on the care

and preservation of individual clothing and equipment, and a movie on ship abandonment was shown. Due to the number of men processing, many of the inspections and examinations were accomplished rapidly—and less than thoroughly. The physical exams were conducted in a large gymnasium where the men were required to strip down and pass by a line of medical doctors at the rate of one doctor every two seconds. When the units weren't scheduled for processing, the men received passes to visit Seattle where they feverishly tried to live it up before boarding ship.

On 16 and 17 March, the men boarded their ships and set sail from Seattle. The 73rd and 76th Air Service groups boarded the USS Dix, a naval transport, on 16 March and headed for Pearl Harbor. The following day, 17 March and St. Patrick's Day, the ground echelons from the 315th Wing Headquarters, 16th Bomb Group, and 501st Bomb Group departed pier 37 in Seattle aboard the USS Exchange, a naval troop transport formerly used in the Mediterranean Sea tobacco trade. The USS Exchange was also bound for Pearl Harbor, and both ships sailed into Pearl on 25 March.

The ships anchored at Pearl Harbor for five days. The men were confined to the ships and the immediate dock area while the ships were replenished with supplies. Movies, boxing matches, and a troupe of Hawaiian dancers performing hula shows helped to ease the monotony on board ship. At 1130 hours on 29 March the USS Dix and USS Exchange joined a large convoy with three destroyer escorts and headed for Eniwetok in the Marshall Islands. Life for the 73rd and 76th Air Service Groups aboard the USS Dix was less than ideal.

The officers of the group were crowded into small state-rooms below the decks while the enlisted men were crowded into the holds of the ship. Living conditions were poor due to the condition of the ventilation system which failed to operate during most of the trip. Due to failure of the ventilation system and the extreme heat below decks, it became necessary for both enlisted men and officers to spend most of their time, both day and night, on the topside. Space for preparing food for the AAF mess, which for both officers and men was separate from that of the ship's officers and crew, was inadequate. Only one water converter was in operation and water was strictly rationed. Salt water was used for bathing.

The convoy crossed the International Date Line on 1 April, and the 315th's personnel were promptly issued membership cards initiating them into the "Sacred Order of the Golden Dragon." This card signified they had crossed the 180th Meridian. The convoy dropped anchor in the large lagoon of Eniwetok on 6 April.

The USS Dix and USS Exchange departed Eniwetok in separate convoys for the last leg of the voyage to Guam. The 73rd and 76th Air Service Groups, in the USS Dix,

weighed anchor on 7 April and completed their 6,000-mile voyage at Apra Harbor, Guam, on 11 April. The two service groups disembarked the next day with the men in full back packs climbing down the side of the ship using nets. They were trucked 25 miles up the west coast of Guam to Northwest Field and caught glimpses of their new airfield being constructed in the jungle.

Meanwhile, the USS Exchange had steamed out of Eniwetok on 11 April with the remaining 315th personnel. It arrived at Apra Harbor on 14 April, and the men immediately began to disembark. It was well past sunset by the time they were trucked to Northwest Field. "It is easy to imagine the confusion that existed when that bunch of extremely tired, hungry, and grimy men reached the pitch black confines of the embryo airfield, loaded with one another's gear and equipment." Col. Kennedy assumed command of both group echelons and established the 315th Wing Headquarters at Northwest Field on 15 April.

Back in the States, ground echelons of the 331st and 502nd Bomb Groups and the entire 24th and 75th Air Service Groups had already begun their movement overseas. On 6 and 7 April, personnel from these units boarded troop trains at their home bases in Nebraska and Kansas and began to trace the same route to Guam used by the previous 315th units. The 331st and 502nd set sail from pier 39 in Seattle on 14 April aboard the USAT Cape Newenham. Two days later, on 16 April, the 24th and 75th boarded the USAF Kota Baroe and headed for Guam. Unfortunately, the Kota Baroe broke down shortly after leaving Hawaii. Her only escort ship continued on and left the Kota Baroe to fend for herself. While the ship's crew completed repairs, the 24th and 75th men felt alone and an easy target for the enemy. Chaplain Cooper and Colonel Joe L. Neyer, the 75th ASG Commander, seemed to have prepared for such an event. Before leaving the States, they had secretly written to the men's loved ones and asked them to write letters, but to address the letters to Chaplain Cooper.

The 75th Group, while sitting dejected and lonely in the middle of the Pacific blue, heard over the ship's speaker, "The 75th Air Service Group please report for mail call." The men couldn't believe their ears, but were a happy group as they received letters from home. Several thought Colonel Neyer had picked them up in Hawaii as he had gone off the ship there. Following mail call, they were each given a can of beer, also planned back in Kansas.

By 11 May, both ships had arrived at Guam to complete the transfer of all 315th ground echelons to the PTO. The men were glad to set foot on land again and were anxious to get into the war as soon as their flight and air echelons arrived.

The 315th's flight and air echelons were divided into two sections for the deployment overseas. One air echelon section traveled by troop train to Hamilton Field, California.

There they boarded Air Transport Command aircraft for the trip to Guam with intermediate stops at Hawaii and Kwajalein in the Marshall Islands. The other air echelon section flew overseas on 315th B-29Bs with the deploying flight crews. The 16th and 501st Bomb Groups used Kearney, Nebraska, as their staging base while the 331st and 502nd Bomb Groups used Herrington, Kansas. They headed for Mather Field, California, as the POE enroute to Hawaii, Kwajalein, and Guam. The 16th Group's aircraft "Ellie Barbara and Her Orphans," commanded by Captain Ralph Howard, and the 501st Group's "Roadapple," commanded by Major Allen Tintensor, were the first 315th B-29Bs to follow this routing and arrived at Guam on 26 April. The deployment of the remaining 315th flight and air echelons continued throughout May, June, and July as each bomb group completed its stateside flight training.

Captain James C. Mitchell's crew, 501st Bomb Group, had a unique experience during their deployment to Guam. His crew left Kearney, Nebraska, on 11 June 1945 in their aircraft "Late Date" and flew three uneventful legs to Mather Field, Hawaii, and Kwajalein. After landing at Kwajalein, they were surprised to see a small, formal group of people waiting for them at their parking spot.

There was no one around any of the other B-29s being parked. When we completed our check lists and disembarked from the aircraft the group came to attention, gave us a big salute, (and) then the leader stepped forward, introduced himself as the Base Commander, and gave us a reception speech. He welcomed us as being the 1,000th B-29 and crew to deploy through Kwajalein from the U.S. to the Marianas.

The crew autographed a softball and put the tail number of their B-29B on it. Capt. Mitchell's crew was escorted to the base club and served a steak dinner with cold beer. The autographed softball was placed on a shelf behind the club's bar beside various other trophies. Later, the crew received a number of sharp comments from other newly arrived B-29 crews who were treated less royally to C-rations in the mess hall. The next day, Capt. Mitchell's crew left Kwajalein for Guam to join their comrades at Northwest Field.

THE PACIFIC THEATER

War is hell, but it is double hell in the skies.
Gen. Frank Armstrong

The Early Months on Guam

By mid-April 1945, ten Army Engineer and Navy Seabee construction battalions were struggling to complete the airstrip at Northwest Field. Construction officials had underestimated the task in early March and assigned three