



The Second String

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Second-string *adj.*

1. being a substitute as distinguished from a regular 2. being of the second or an inferior order of quality or importance.

Webster's Third New International Dictionary, 1961.

In the history of aviation, there have been those aircraft which--due to inspired design, great achievements or just being in the right place at the right time--have occupied a place in aviation's Hall of Fame, such as the P-51, the B-29, the P-40. And there have been those aircraft which, due to a variety of circumstances, have quickly faded into obscurity. Such a plane was the Consolidated B-32. Although its moment of glory would come in August of 1945, it would quickly return to obscurity.

On November 10, 1939, General H. H. Arnold, then Chief of the Air Corps, asked the War Department for permission to issue a specification for a large bomber to replace the B-17 and B-24. Permission was granted on December 2, 1939.

The specification, Data R-40B, was circulated among the Boeing, Lockheed, Douglas and Consolidated companies on January 29, 1940. It called for a bomber with a speed of 400 mph, a range of 5,333 miles and the ability to deliver a 2,000-pound load within this range.

Evaluation of the preliminary designs placed Boeing first, followed by Lockheed, Douglas, and Consolidated. On June 27, 1940, contracts for initial engineering data were issued, the bombers designated XB-29, XB-30, XB-31 and XB-32. Lockheed and Douglas soon withdrew from the competition.

Although the XB-32 was to be developed at the same time as the XB-29, it was looked on as a back-up, insurance against possible failure of the B-29.

On September 6, 1940, Contract AC 15549 for two B-32's, and Contract AC 15429 for two B-29's were approved. A short time later, a third airplane was added to each contract, by change order.

The first XB-32 was to be delivered within 18 months of the contract date. The second airplane, within 90 days of the first; and the third, within 90 days of the second.

The original concept of the B-32 was for a twin-tailed, pressurized airplane with remote-controlled turrets similar to the B-29.

In June of 1941, a contract was issued for 13 YB-32's. These were to be in the twin-tailed configuration. The service test order for the 13 aircraft was cancelled in February 1943, however, and the aircraft were added to the first production contract.

Construction was undertaken in San Diego on the first XB-32, 41-141, and it rolled out in mid-1942. Number 41-141 had a nose similar to the B-29, while the second XB-32, 41-142, reverted to a stepped nose.

On September 3, 1942, 41-141 began taxi tests. A few minor problems were encountered, but they were ironed out before the airplane's first flight on September 7.

Russ Rodgers, pilot on the XB-32's first flight, lifted the plane off San Diego's Lindbergh Field with no difficulty. A short time later, however, a rudder trim tab broke and the XB-32 began to experience severe tail flutter. Rodgers was able to control the airplane, but landed at North Island as a precautionary measure.

Severe rudder tab flutter would continue to plague the twin-tailed XB-32's. In common with many Consolidated aircraft, the B-32 used tab control (the tab flies the surface). Problems with the tabs would finally be a major reason for the change to a single tail.

Flight tests continued with 41-141. On the 31st flight, tragedy struck. It was May 10, 1943. The test crew climbed aboard 141 and, in a few minutes, the big plane was moving from its parking spot.

Engine run-up was normal and the plane moved onto the runway for takeoff. Power was applied and

141 began to roll. To observers, the plane seemed to be accelerating slowly; but everything was normal to the crew.

Two bystanders thought they saw the flaps in the up position as the plane passed them. The end of the runway was fast coming up and the crew realized that 141 was going to have a hard time getting off the ground.

In an effort to get the plane off, the nose was rotated, and the XB-32 staggered off the ground in an extremely nose-high attitude. 141 remained in the air for just a few seconds, then settled back to the ground in the San Diego Marine Base area.

Dust and smoke boiled up around the plane. It skidded along the ground, leaving pieces of it strewn in its wake. As the plane came to a stop, the crew members who were able scrambled out of the tangle of wreckage.

Six crewmen were injured and one was dead. Richard A. McMakin, the senior company pilot, would not be making any more flights.

Consolidated personnel immediately began sifting through the wreckage, in an effort to find the cause of the accident. The definite cause was never determined; but a flap failure of some kind, causing the flaps to retract, was considered most probable.

Due to the destruction of many of the test records in the crash, the test program was retarded somewhat. Many of the flights had to be made again in the second XB-32, 41-142, which first flew July 2, 1943.

The loss of the first XB-32, with the consequent delay in the test flights of the second airplane, combined with design and engineering changes, were to cause delays in the first production aircraft. The weight of the B-32 was to be a problem during the plane's lifespan and was never completely

The prototype XB-32 was first flown on 7 September 1942. The Twin tail was changed to a single fin and rudder on Airplane No. 3 late the next year after many trials. (Photo - Convair)





First of the production model B-32s made at Convair-Ft. Worth. (Photo - U. S. Air Force Museum)

solved. Eventually, the B-32 became a nonpressurized type with locally controlled turrets, reversible props, and a single vertical tail.

Consolidated felt that directional stability and control was better in the twin-tail airplane than the single tail. However, it was also felt that longitudinal stability and control was better in the single tail airplane. The severe rudder tab flutter in the twin-tail, along with the better longitudinal stability of the single tail, soon led to the adoption of the single tail on the third XB-32.

The third XB-32, 41-18336, flew for the first time on November 9, 1943, with twin tails. After 25 flights, the plane was fitted with a 16-1/2 foot

vertical fin. When flight tests indicated that more tail fin area was needed, the fin and rudder were extended to about 19-1/2 feet. The resultant height gave the B-32 one of its most distinctive features.

Sperry remote control turrets had first been contemplated for the pressurized XB-32. However, development delays with the installations, a growing concern with the remote control and sighting features, and a savings in weight, shifted emphasis to locally controlled turrets.

A Bendix chin turret was considered for nose armament but a Sperry nose turret was finally approved. Martin turrets replaced the remote controlled Sperry installations.

Problems with the turrets were not the only



Nearly all B-32s were built at the Ft. Worth plant. 2108474 was among the first to be rolled across the base to Tarrant Field to begin the long training period in preparation for the Pacific war. (USAF Museum)



Ultimate revision, bringing B-32 its most distinctive feature, raised fin height to 19-1/2 feet. (Convair)

ones that plagued the B-32 during its production. Delays caused by late deliveries from sub-contractors were common. The A. A. F. felt that the B-32 suffered from poor workmanship in many of its small details. Although Consolidated improved production standards, complaints about the quality of the workmanship would continue throughout the plane's career.

Except for the three experimental aircraft and three production aircraft built in San Diego, the rest of the B-32's were constructed at the Consolidated plant in Fort Worth. The A. A. F. placed production orders for just under 2,000 B-32's during 1943 and 1944, but by the end of August 1945 only 115 had been completed (including 40 TB-32's).

Two B-32's were sent to Wright Field for service tests in late 1944. One, 42-108479, was used for static tests and the second, 42-108473, was used for the flight tests. The second aircraft was destroyed when a Lockheed C-60 crashed into the hangar housing the B-32.

During service tests, several problem areas were brought out. The plane flew at a rather high angle of attack and was apparently not obtaining the speed it should. The flight deck was extremely noisy and very drafty. The heat exchangers were in a particularly poor location, being at a low point in the inboard nacelles where they were exposed to high temperatures. Flimsiness of certain portions of the airframe caused a few crew members to lose



B-32 type name brought official attention from highest levels. First named "Terminator," then "Dominator," the final decision was demanded by State Department and "Terminator" prevailed. (USAF Museum, 150337)

The second of Convair's Ft. Worth plant production airplanes crashed due to nose-wheel failure. Structural failure of the fuselage behind the cockpit resulted in survey of the airplane and salvage of its components.



confidence in the airplane.

There was no clear, visual inspection of the underside of the wing or engines except from the lower ball turret. This location was considered none too healthy a place to go, to view the results of flak or engine fires.

Most of the problems were eventually eliminated. One problem, that continued until very late in B-32 production, was stack failures with nacelle fires caused by high back pressures at high blower conditions.

Most crew members liked the B-32. They enjoyed flying it, although there were many gripes about its draftiness and leaking cockpits during rainstorms. Line crews liked the aircraft because of its accessibility and ease of maintenance.

Training on the B-32 was held at Tarrant Field, Fort Worth, Texas. Tarrant was officially Fort Worth Army Air Field after April 1943, but continued to be known as Tarrant to Consolidated. The first B-32 assigned to Tarrant taxied across the field from the Consolidated plant on January 27, 1945.

As in any training situation, incidents did happen but nothing of any serious nature. However, on March 8, 1945, something serious did occur. Aircraft 42-108495 was on a routine training flight out of Tarrant with an A. A. F. crew. A number of take-offs and landings had been made. After the seventh landing, scanners reported the smell of smoke, but could not find any smoke at that time. Lt. Alderfer, the instructor pilot, decided to leave the traffic pattern and climb out to check the smoke.

At 5,000 feet, the co-pilot and right scanner saw flames streaming from the No. 3 engine. Efforts made to feather the engine were without success. Attempts to extinguish the fire also proved unsuccessful. Alderfer ordered the crew to bail out. The officer, Alderfer, stayed with the plane a few minutes longer, still trying to extinguish the fire. He then followed the crew out the bomb bay. The plane spiraled down, with flames completely covering the No. 3 engine. It crashed into the ground and was completely destroyed.

Two days later, on March 10, fire struck another Tarrant B-32. Captain Robert Quinn was the pilot of 42-108475 on an engineering test flight. Climbing through 17,000 feet, first the No. 1 engine instruments then the No. 2 engine instruments went out.

A few minutes later, the engines started surging. Quinn immediately cut the two engines and sent the flight engineer aft to see what was wrong. The flight engineer reported a fire in the leading edge of the wing between the fuselage and engine No. 2. He emptied a fire extinguisher into this section with no effect. Moreover, every time he touched a part of the fuselage, he received severe electrical shocks. He emptied another extinguisher into the growing fire, to no avail, then tried to open the bomb bay doors electrically for the crew's bail-out. This didn't work, either, and the pilot asked the engineer to come up on the flight deck to operate the doors hydraulically. He had scarcely reached the flight deck when flames burst into the cockpit from the bomb bay. The heat became so intense that the upholstery burst into flames and forced the six members on the flight deck to bail out the bombardier's hatch.

Captain Quinn was the last man out of the airplane and the fire was singeing his parachute as he left. Three crew members in the aft of the plane had to bail out through a sheet of flame covering the belly of the plane and received severe burns. All crew members survived, fortunately.

During its short lifespan, the B-32 had its share of problems; some not very humorous, but one that turned out to be fairly amusing was the "Battle of the Name." In January, 1944, Consolidated notified the A. A. F. that they were naming the B-32 the "Terminator." In August, the Technical Subcommittee on Naming of Aircraft decided that "Terminator" wasn't good enough and selected "Dominator." Consolidated agreed with this decision.

Then the State Department got into the act. During the summer of 1945, during the San Francisco Conference, Archibald MacLeish, then Assistant Secretary of State, made his voice heard. As John O'Donnell said in his newspaper column "... the phone rang and it was none other than Poet Laureate Archibald MacLeish, taking time off from cashing his State Department paycheck and writing sonnets, to bellow that if the name 'Dominator' on our latest bomber wasn't dropped pronto, then the whole San Francisco conference would go to hell, our beloved Latin Americans would make faces at us, the British wouldn't love our lend-lease any more and the Lord alone knew what the Russian Commies would decide.

"At all events, the name 'Dominator' must be

dropped at once. It was as nasty as spit and must never be mentioned in good diplomatic circles."

The State Department prevailed and the B-32, in the last few months of its life, was again, officially "Terminator."

The B-32 had been built, tested and accepted by the A. A. F. Now it was time to find out what it could do in combat. The B-32 was off to war.

May, 1945. The war in Europe was over. The B-29's were burning the heart out of Japan. Army and Marine troops were fighting a savage battle with Japanese troops on Okinawa, while Navy ships offshore fended off the Kamikaze. And back in Fort Worth, Texas . . .

Consolidated representatives and A. A. F. personnel were busy readying the planes for the trip to the Pacific. Three planes were to be sent to the Philippines via Hawaii and New Guinea.

On May 12 all was in readiness. Colonel Frank R. Cook, Commander of the B-32 Overseas Project, his crew and Consolidated tech reps climbed aboard 42-108532, "Hobo Queen II." Soon, all four engines were turning over smoothly. "Hobo Queen II" taxied out and, a short time later, roared off the field at Fort Worth. A few minutes later, "The Lady is Fresh," 42-108529, joined her in the skies with Colonel Franklin Paul as pilot.

The third airplane, 42-108528, was a last minute replacement for one suffering a gear failure. The plane had no name, but was known to its crew as "that _____. . . ." It received even more sulphurous names, after its rather aggravating journey across the Pacific.

528 left Fort Worth on May 14 for Mather Field, by way of Little Rock and Corpus Christi. This devious route had been planned to give the plane as much flight time as possible, before the overwater hop. Due to the last minute change, the plane had not been as thoroughly inspected as the other two.

"Hobo Queen II" and "The Lady is Fresh" reached Mather Field in fine shape, and, after processing, took off for Naval Air Station, Honolulu, at 0115 May 16. Twelve hours and ten minutes later, the two planes set down in Hawaii.

528 came into Mather after a twelve-hour flight but could not get its gear retracted electrically. It was cranked down and a normal landing was made. Maintenance on the plane was to be handled by the field crews but, after little satisfaction, the crew chiefs and tech reps took over and got 528 ready for the next leg.

On May 17, 528 took off for John Rodgers Airport in Honolulu. The flight was uneventful under an overcast, except that it was determined to be 260 miles off course, when sun shots could finally be made. A thorough inspection was given the plane in Hawaii, but nothing was done about a generator on No. 2 engine which had caused electrical problems.

Orders had been changed, by this time. Instead of sending the planes by way of New Guinea, they were to go via Kwajalein and Guam. "Hobo Queen II" and "The Lady is Fresh" took off for Kwajalein on May 19 and, after a test flight, 528 followed on the twenty-first. All flights were uneventful, but Major Britt, pilot of 528, was exasperated with his B-32. (The Consolidated Tech Reps, incidentally, felt that Major Britt had never been enthusiastic about the B-32 and longed to be sent

to B-29's. Ironically, he was killed in a B-29 crash after the war.)

As the International Date Line was crossed, the first two planes landed on the twentieth, and the third plane on the twenty-first. On the twenty-first the first two aircraft took off for Harmon Field, Guam, where they landed approximately seven hours later.

Still having its problems, 528 tried to get away from Kwajalein. Flap problems on takeoff caused the plane to return for repairs. After the work, 528 took off once again for Guam, landing at Harmon Field on the twenty-second.

While the planes were at Guam, crew members visited some of the B-29 groups on Guam, Saipan and Tinian, to gain information on both Japanese and American tactics over Japan.

A crashed B-29 blocked the runway as "Hobo Queen II" and "The Lady is Fresh" taxied out, on the twenty-fourth, giving the B-32's only 4900 feet of runway for takeoff. Both planes easily made it off over the B-29, however, pointing their noses west toward Clark Field.

The B-29 had been removed, when 528 made its takeoff, the next day. The flight to Clark was without troubles.

"Dominator" was now in the combat zone. The three planes remained at Clark Field for a week, enabling Fifth Air Force personnel to become familiar with the B-32. Bomb-loading demonstrations were given to the local personnel, in addition to general aircraft demonstrations. In the loading demonstration, nine 1,000-lb bombs were loaded in thirty-four minutes.

On June 1, 1945, Brigadier General J. V. Crabb, V Bomber Command, issued the following order to the commander of the 312th Bomb Group:

"1. Your group will conduct a combat test of the B-32 airplane, and render report thereof to this headquarters upon completion . . .

"8. The target date for completion of the test is 1 July 1945."

Actually, the first combat mission by the B-32's had already been flown. On the afternoon of May 28, the three airplanes were loaded with nine 1000-lb. bombs each and the mission was set for the next day.

The twenty-ninth dawned with perfect weather. The target was to be the town of Antatet in the Cagayan Valley. The intelligence officers call the target "a worthy one, since it contained one general officer, over fifty men, and several 75mm howitzers, in addition to being the Nip 'Supply Division Number Two' for their troops resisting our advance in the Balet Pass area."

Colonel Cook was to lead the mission with "Hobo Queen II." All planes carried ten crew members plus three observers. "Hobo Queen II" taxied out at 1030 a.m. and roared down the runway, pulling her 9,000-lb. bomb load off after 4,000 feet of takeoff run. One minute later, 528 started down the field. Suddenly, she swerved violently to the left, then skidded back to the right. The pilot succeeded in halting the plane, but 528 would not make the mission. The bad generator on engine No. 2, which had not been changed, had overloaded and caused the turbos to malfunction. As soon as 528 cleared the runway, "The Lady is Fresh" was moving and soon had joined 532.

The two B-32's flew east to Baler Bay, where they tested their guns, then flew directly to Antatet. A large circle was flown over the town to positively identify the target.

As Philippine guerilla troops were within 2000 yards of the town, the runs were made to avoid passing over the troops. At 1200 "Hobo Queen II" made her run at 10,000 feet. Her nine 1,000-lb. bombs blanketed the northern portion of the town. As the smoke and dust boiled up, "The Lady is Fresh" made a run to drop her bombs in the central district.

Several direct hits were scored and a large warehouse was damaged. There was no enemy reaction. The planes re-formed and flew directly back to Clark Field, landing at 1305. The first combat mission of the B-32's was history. Compared with the B-29 raids out of the Marianas, it was a miniscule effort. But the B-32's were finally in the war.

On the thirty-first, the three "Dominators" moved to Floridablanca, twenty-five miles southeast of Clark Field, and were assigned to the 386th Bombardment Squadron of the 312th Bombardment Group.

The 386th called itself "the Air Force's most versatile Squadron," having started in 1943 with P-40's, then moved into A-20's during 1944, and was now the home of the B-32's.

As the 312th Group was still equipped with A-20's, a training program was instituted upon arrival at Floridablanca. It was at this time that a misunderstanding, which had occurred between A. A. F. and Consolidated personnel at Fort Worth, had its effect.

Colonel Cook had stated to the Consolidated people the desirability of having a ground school overseas. When J. R. Lund, Consolidated's Military Training Chief, talked to Colonel Cook about setting up the school, Cook said that there had been a misunderstanding and no such school was to be undertaken overseas.

The Consolidated Tech Reps were flabbergasted when told they were to set up a ground school the next day (June 2). Nevertheless, with little instructional material, the Consolidated people operated a successful school.

Relations between the Consolidated Tech Reps and 312th enlisted personnel were excellent, but somewhat strained between the Tech Reps and some officers, especially the engineering officers.

During the training period, six combat crews were organized from the Special Project personnel, pilots and navigators from B-24 groups in the Theater, and 312th Bomb Group gunners and radio operators. These six crews ran the majority of the B-32 combat test up to June 26. Later, more B-24

crews were made available. But transition training on these people was considered very poor, and they did not give too good an account of themselves. Surprisingly, except for the Special Project crews and the crews of the later planes, no B-32 trained crews ever went overseas.

While training went on, the B-32's continued their missions. On June 12, 529 and 532 flew their second mission. The target, this time, was Basco Runway on Bataan Island. The planes were loaded with forty 500-lb general purpose bombs each. "Hobo Queen II" made two runs at 16,000 feet, dropping her bombs on the northern and western sides of the runway. "The Lady is Fresh" followed at 15,500 feet, covering the central and eastern sides of the runway. No Japanese reaction was encountered. The two planes landed at Floridablanca, after a four hour mission.

There was excitement when crew chiefs found a hole in 529's left stabilizer similar to one caused by a .50 caliber bullet. The excitement died quickly when it was found that the damage was actually caused by a bomb fragment from the previous day's practice mission.

The next day, 528 and 532 were airborne for their first strike at Formosa. Although their target, Koshun Airdrome, had 8/10 cloud cover, both planes were able to make single ship passes visually from 12,000 feet. All bombs covered the strip, except for three hung up on 528 (later salvaged off the Formosa Coast). The trip back was dull, and the "Dominators" landed at 1425 after a 6-1/2 hour mission.

Formosa felt the bombs of the "Dominators" again on the fifteenth. This time, the Taito Sugar Mill was the recipient. The planes were 529 and 532. The first plane across made its run at 1,500 feet, the eight 2,000-lb. delayed action bombs missing the target completely. The second plane made its run from 15,000 feet, a few minutes later, and laid its bombs among the warehouse buildings and the alcohol plant.

The first plane over the target received no anti-aircraft fire. But as the second plane came over, about twenty bursts of heavy anti-aircraft fire were noted--level with, but behind the plane. The plane was not damaged and the flight back to Floridablanca was uneventful.

The following message was received from V Bomber Command, after the fourth mission:

Hobo Queen II, first B-32 to arrive in the combat area, at Clark Fd., July 1945. (Photo-USAF A-60790 A.C.)



"CONGRATULATIONS UPON YOUR SUCCESSFUL COMPLETION OF THE FIRST FOUR BAKER DASH THREE TWO STRIKES IN HISTORY PD IT IS MOST COMMENDABLE THAT THESE MISSIONS HAVE BEEN RUN WITHOUT MISHAP OR DELAY CONCURRENTLY WITH A BIG TRAINING PROGRAM PD THE THREE ONE TWO GROUP CONTINUES TO UPHOLD ITS REPUTATION FOR VERSATILITY PD CRABB PD"

During their stay at Floridablanca, the B-32's had no trouble operating its 7,000 foot strip, but had to use their reverse pitch propellers to back into their small hardstands.

To the crews and personnel of the project, however, the stay on Luzon was no picnic. The mud and weather made living and maintenance work difficult, and extremely tiring.

As training continued, crews grew to like the B-32 more and more. The pilots liked its responsiveness and speed. The navigators and radar operators felt that the plane was "built around a navigator's table" and liked its roominess. The bombardiers, although growling about the odd positions they sometimes had to assume in order to look out, were able to put their bombs on target with accuracy.

Maintenance personnel fought to keep the airplanes flying. Spare parts were to be an exasperating problem during the "Dominators" overseas tour.

To the Consolidated people sitting back in the United States, however, this should never have been a problem. In a special B-32 edition of the Fort Worth division's paper, "The Eagle," the following statements popped up: "(An innovation) which enables them (the B-32's) to keep slugging day after day, is the making and shipping to overseas bases of spare parts--even before the planes arrive at those bases . . ."

"Spares manufacture and shipment from the Fort Worth division carry the same priority as completed B-32's, and in some instances an even higher priority."

John Stuck, B-32 Overseas Project Engineer, didn't quite agree with "The Eagle." In a letter to Consolidated-Fort Worth, he commented: "I have just read Sherrill's Special B-32 Dominator Edition of 'The Eagle' and get quite a kick out of the 'wheeze' that spare parts were sent out far in advance of the airplanes. They must have been sent to the ETO, because we haven't any of them over

here; not even standard AN parts."

Meanwhile, the B-32's continued their missions. On the sixteenth, all three airplanes flew their first mission together. The target was again Taito, on the southeast coast of Formosa. Each plane carried a 20,000-lb. load of incendiaries. The planes took off at one minute intervals and headed for Taito in close formation. At 1030, the B-32's were over the target at 19,000 feet. Still in formation, but now 500 feet apart they came over the target, dropping their 120 clusters into the heart of the town. Smoke rose 4,000 feet in the air, the center of Taito was an inferno, as the "Dominators" departed. Two hours later, the 43rd Bomb Group passed Taito and reported fires burning intensely, smoke trailing 25 miles away.

During the combat test, two missions (night Lab shipping search) were flown by "Hobo Queen II." The first, a twelve hour mission on the night of June 17, uncovered no shipping, but nine 500-pounders were dropped on Hoihow Town, Hainan Island.

On the twenty-third, the "Queen" was out again. Shipping was again scarce, so the bombs were dropped on Sanchau airdrome in the Macao-Canton River mouth area. On the "Queen's" retirement a green light was observed about two miles off the right wing. It stayed in this position for about thirty minutes and then disappeared. Other than this unexplained occurrence, the mission was uneventful.

The three B-32's were airborne on the nineteenth for Formosa. Their mission was to disrupt rail traffic along the east coast of Formosa and the railway bridges at Paiyapai, Rokuryo and Ikegami were the targets.

528 bombed Paiyapai and Rokuryo, but missing the targets. The "Queen" made her runs on the Ikegami bridge and placed her bombs so close, the target and its results were obscured. "The Lady is Fresh" dropped five bombs on the Paiyapai bridge, the closest being fifty feet from the target. The plane's remaining bombs were dropped on Rokuryo, scoring near misses.

The B-32's eighth mission was a planned attack on the Suo railroad yards on Formosa. 528 and "The Lady is Fresh" took off at 0700 on June 20, heading for the primary target. An undercast soon developed and closed in the primary. 528 headed for the Paiyapai bridge. The weather was closing in there, also, and 528's bombs hit 3,000 feet southwest of the bridge.

THE QUEEN, (2108532 nearest) first and last in combat of B-32s, was left on Okinawa after end of war.



When "The Lady is Fresh" made her run on Paiyapai, the bomb doors did not open electrically. During manual operation of the doors, the engineer hit the landing gear "down" switch, extending the gear over the target. This shook up the crew somewhat so another bomb run was made. By this time, the weather had closed in and the "Lady" headed for Tamari Town where she dropped her load. Direct hits were made on warehouses in the center of the town and smoke was climbing up to 1,000 feet when the "Lady" left.

On the twenty-second "The Lady is Fresh" and 528 were over Formosa for the sixth time. The targets were the Heito Butanol plant and a nearby gun position.

The "Lady's" target was the gun position. Carrying 20,000 pounds of fragmentation bombs, she made her run at 15,000 feet. Heavy anti-aircraft fire rocked the plane, as she dropped her bombs. They missed the gun position by about 200 feet but fell across the barracks area.

528 was buffeted by heavy anti-aircraft fire, the first enemy reaction to the B-32's, except for the few bursts noted on the June 15 mission.

528 followed "The Lady is Fresh" at 15,000 feet and planted her load of 500 pound bombs squarely in the target area. Three large explosions were noted, causing fires and heavy black smoke billowing to 5,000 feet.

No damage was experienced by the planes. They landed at Floridablanca after a six hour mission.

The "Dominators" last combat mission from Luzon was flown on June 25 by 532, "Hobo Queen II" and "The Lady is Fresh." The targets were to be the railroad bridges at Kiirun, Formosa. The flight to Formosa was dull (clouds began to form shortly after takeoff and the bridges were closed in when the B-32's made their runs. "Hobo Queen II" was able to drop her nine 1,000 pounders from 20,000 feet when a hole suddenly opened over the target. However, all missed, with the closest being 1,000 feet from the bridge.

When the weather closed in again, "The Lady is Fresh" bombed the town of Giran as a target of opportunity. All of her bombs dropped in the center of the town. The planes returned to Floridablanca and the final combat mission for the B-32's in the Philippines was over.

The combat test had been completed. To everyone concerned, the test had been a complete success. Encountering little or no opposition, the planes had flown 11 missions over Luzon, Formosa and the South China Sea. Crew members were enthusiastic about the B-32, but it was too late. The war was in its closing stages and the B-29 had been a great success. The B-32 wasn't needed. In June, 1945, the A. A. F. cancelled the B-32 contract.

B-32's could still be used in the Pacific, so six more of the aircraft made their way out there. While they worked their way across the Pacific via New Guinea, the three original planes went back into a training program.

A thirty day transition period for former B-24 and A-20 crews was held at Floridablanca, both in ground school and flight. Unfortunately, many of the B-24 crews had enough points to go home and weren't very enthusiastic about checking out in the new airplane.

Many of the B-24 pilots were used as instructors, checking out newer crews. The instructors had not been properly checked out themselves, much to the dismay of the Consolidated people. Efforts

to remedy this situation by the Tech Reps and the Associated Project Pilots were often rebuffed by the local commanders.

While the transition training continued through the month of July, orders directed the 386th Squadron to move to Yontan on Okinawa.

Between August 1 and 11, the squadron moved up to Yontan. The advanced air echelon arrived there August 8, followed by "Hobo Queen II" and 528 on the eleventh. "The Lady is Fresh" was grounded at Floridablanca. A ground fire had destroyed the three way header of one engine and a replacement was not available. The plane would not reach Okinawa until August 20.

The problem of spare parts had become acute. Exhaust stack cracking was creating maintenance headaches, engine fires and landing gear problems were becoming more frequent. But the crew chiefs worked around the clock and the planes were able to fly most of the time.

On August 12, 42-108543, 530, 539 and 544 arrived on Okinawa, followed by 578 the next day. The sixth plane, 42-108531, would not reach Okinawa until much later and would not participate in any missions or training.

On August 13, orders were received to convert the B-32's to a paratroop carrier. "Bleacher type" seats were to have been installed in the bomb bays, using the remaining bomb bay for bail out. Although a mock-up was completed before the planes left Okinawa, the plan was quickly dropped.

Another "project" for the B-32 was a plan to convert the plane into a tow target ship. To the Consolidated people, this was "adding insult to injury." However this plan was never utilized.

With the release of the atomic bombs on August 6 over Hiroshima and August 9, Nagasaki, the Japanese government transmitted its decision to surrender and the next day President Truman suspended B-29 operations. On the fifteenth a cease-fire order came through and the planes were recalled.

The first missions of the B-32's from Okinawa were flown on the night of August 14. 528 made a night low altitude shipping search in the China Sea. A small vessel was sunk. When landing at Yontan, the No. 1 engine caught fire and the pilot was instructed from the ground not to extinguish it. The nacelle and all ducting and wiring were burned beyond repair. The nacelle was later replaced with one from 539.

The other mission, this night, was a three-plane shipping raid which was later recalled by FEAF.

On the sixteenth Tokyo was visited by "Hobo Queen II" and 543, on a photo reconnaissance mission. There was no interception but 543 had a rugged flight back. Over Tokyo, an engine caught fire and burned during the entire flight back to Yontan. The pilot decided against feathering the engine, letting it windmill all the way back.

The next two days were to be the most exciting of the "Dominator's" life. Shortly after 0530, on August 17, the "Queen," followed by 539, 543 and 578, taxied from her hardstand and, at 0545, roared into the air for Tokyo on the second photo mission.

Off Kyushu, the RCM operators picked up early warning signals. The Japanese knew they were coming. The four aircraft arrived over the southern end of Tokyo Bay at 1015. The area was extremely cloudy and it was apparent the planes would have trouble photographing their targets. The B-32's split formation and spread out, each two miles apart to cover their assigned areas.

At 1050, as the B-32 piloted by Lt. Col. Walls was about to finish her photo run, a brownish green "Tojo" slow-rolled up alongside the plane "S"ed and came in firing from two o'clock. Col. Walls turned his plane into the attack and his nose gunner returned the "Tojo's" fire. The fighter broke away quickly and disappeared. The B-32 had met her first Japanese fighter.

Due to the nine-tenth's cloud cover in their assigned zones, the other B-32's were prevented from taking their primary pictures, but got photos of Imba, Kateri, Miyakawa, Matsuda, Haneda, Tomika and Yokosuka Airdromes.

During these photographic runs, heavy but inaccurate anti-aircraft fire was received from Kisarzu and Imba Airdromes. Gun-laying radar signals were picked up in the Imba and Yokosuka areas. The B-32's jammed the signals and the enemy sets were turned off. As 543 was photographing Yokosuka, heavy anti-aircraft fire was noted at 12 o'clock low; and, as the B-32 passed over Yokosuka, tracking anti-aircraft holed the number four engine and peppered the left wing.

Approximately ten enemy fighters were observed, rat-racing, just south of Yokosuka. As 543 approached, at 20,000 feet, the fighters peeled off and began making single ship passes at the plane.

A "Tojo" came in from 12 o'clock and the nose gunner saw his tracers entering the fighter. The "Tojo" rolled away and disappeared. One damaged. Another "Tojo" attacked from the 2 o'clock level, turning in and crossing over. The forward top turret returned its fire, scoring hits. The fighter puffed black smoke from the engine several times, rolled over and started down. One probable.

As the attacks on 543 continued, 539 was getting her share. An exhaust collector failure on the No. 3 engine slowed her down and the enemy fighters pounced. The Japanese fighters and the "Dominator" trade punches at long range, the fighters seeming reluctant to come very close. 539 took numerous hits, however, before the "Tojo's" broke off. No claims by 539.

Meanwhile, 543 was still under attack. She was now pulling full power and in a slight dive heading south toward the sea. The tail turret had jammed, which the Japanese fighters had discovered. However, they seemed content to hang far back, occasionally pulling their noses up and lobbing a few shots at the "Dominator." One pilot decided to be brave. He came in from 4 o'clock low, zooming up past the tail. The upper rear turret gunner sent a burst at him, with no apparent damage. During the tail attacks, 543 was holed in the right flap and left wing tip by 20 mm fire, and in the rudder

trim tab by 12.7 mm fire. With that final action, the Japanese planes departed and 543 continued South.

578 had also been fighting her way through the Japanese fighters, jumped by five "Tojo's" and one "Tony," northeast of Yokosuka. The running battle continued for about fifteen minutes. The "Tony" attacked first, diving from about 5000 feet. The fighter went below the B-32 then pulled up, firing from 6 o'clock. The upper rear turret gunner squeezed off several bursts and hits in the engine and cockpit area were seen. The "Tony" began smoking, a sheet of flame then extending back almost to the tail. The canopy was seen to open, just before the plane rolled over and dove steeply. A definite was claimed. The first kill for the "Dominator."

The "Tojo's" began making their runs after the "Tony" went down. The first one came in from 2 o'clock high. Although the B-32's nose guns jammed, the fighter broke off the attack quickly. As the other B-32's had noticed, the Japanese pilots did not seem very eager to come in close. Only one attack came as close as 500 yards.

Another "Tojo" came up from below and exchanged shots with the ball turret, before breaking away. 578 started a left turn for Lt. Col. Wall's plane, which appeared to be in trouble. The "Queen" was having no problems, however; 578 started southeast, taking evasive action.

Three "Tojo's" were making passes from the rear, where the tail turret was working very poorly. But the fighters did not take advantage of the situation and 578 did not suffer any damage in the fifteen minute action. The Japanese fighters broke off the attacks and the four B-32's left the area at 1215.

It had been an historic moment. Over a supposedly ready-to-surrender Tokyo, the B-32's had beaten off their first fighter opposition and scored their first kill. The "Dominator's" claimed one definite, one probable, and one damaged.

The Japanese pilots, during the action, had not been very eager. Only one came in close for his attack. Their fighters had generally been painted brownish green, with the "meatballs" on wings and fuselage. One plane had red wings and a blue fuselage, another was seen painted gray with black wing stripes, similar to a P-51.

543 and 539 had been hit hard, but there had been no casualties. All four aircraft made it back to Yontan safely. Although 543 had been hit the hardest, the damage was easy to repair. It was decided that 539 would be used as a spare parts airplane. She was towed off and never flew again.

After the attack of the previous day, the crews flying the August 18 photo mission had been



warned to expect enemy opposition. They were not to be disappointed. "Hobo Queen II" again led the mission, with 543, 544 and 578 making up the rest of the flight. Five hours after takeoff, 543 and 544 returned to Yontan with bad oil leaks. The "Queen" and 578 bored on.

The two planes did not fly the same track that had been flown the previous day, but came in over Choshi, on southeasterh Honshu. Flying at 20,000 feet, two miles apart, the "Dominator's" made their runs. Shimoshizu, Kicroshi and Imba Airdromes were among the fields covered.

Although the planes had been tracked during the entire run, and fire control radar signals had been picked up in the Tokyo area, there had been no opposition yet. But resistance soon came. Shortly after the two "Dominator's" began their return trip, a concentrated anti-aircraft barrage was noted about 1,000 yards to the rear of the formation, in the vicinity of Miyakawa Airdrome.

Then, a few miles south of Choshi, the Japanese fighters struck! Fourteen "Tojo's" and "Zekes" made their appearance from the south. They jumped the "Queen," first. Three passes, one after another, were made from 11 o'clock against the upper rear turret. The gunner returned the fire. All three fighters broke off their attacks. No damage to either side. A "Tojo" pressed in close from 3 o'clock below. The ball turret gunner fought him off. Again, no damage to either side.

Another "Tojo" made a pass at the tail from 4 o'clock low, then peeled off to the left when the tail gunner returned the fire. Three more attacks were made at the nose. The gunner squeezed off his bursts and hit the first fighter coming in from 1 o'clock. The fighter half-rolled over the right wing, started to smoke and glided down. One probable claimed.

The second plane came in from 11 o'clock, broke away early, and passed over the two B-32's. The last attacker couldn't seem to make up his mind whether he wanted to attack, or not, then decided "what the hell" and came in at the nose. He, too, broke off early and passed over the formation.

While "Hobo Queen II" was undergoing attack, 578 was fighting a vicious battle with the Japanese fighters. The "Tojos" and clipped-wing "Zekes" ratched around 578, while each one came in singly. Inside 578, the intercom was filled with the shouts of the gunners calling out fighter positions. Tail gunner Sgt. John T. Houston pecked away at a couple of fighters trying to sneak in, then they retreated.

A fighter got a good burst off and knocked out the No. 3 engine. Noticing this, the enemy planes concentrated on 578. In the nose, the gunner cursed as he labored to get his guns to work in elevation. After several passes at the nose, one fighter crossed in front, obligingly level, and received several bursts. The plane began smoking and started down. A probable.

A "Zeke" sneaked in on the tail. Sgt. Houston didn't notice him until he was about 1200 yards away. The "Zeke" closed slowly and began firing at 1,000 yards. Sgt. Houston opened fire. After the third burst, he scored hits. Suddenly the fighter exploded. All that was left were small pieces of what was once an airplane. One down.

Two photographers, Sgt. Marchione and S/Sgt. Lacharite, were in the rear of 578 removing film from their cameras. A fighter darted in from 3 o'clock low and hit the "Dominator" in the rear

scanner's hatch with 20 mm fire. S/Sgt. Lacharite was seriously wounded in both legs. Sgt. Marchione received similar wounds and collapsed. Despite his wounds, Lacharite was able to move Marchione to a different area and was preparing to administer sulfa when a second enemy plane attacking from 9 o'clock, holed the plane, and mortally wounded Sgt. Marchione.

Despite the frantic efforts of S/Sgt. Lacharite, 2nd Lt. Donald Smith and 2nd Lt. Thomas Robinson to save him, Sgt. Marchione died 30 minutes later.

Meanwhile, the fighters kept coming in. A rather uneager pass was made at the ball turret, with no damage to either side. The upper forward turret had beaten off several attacks. No damage to either side, also.

Sgt. Jimmie F. Smart, the upper rear turret gunner, had been having his share of attacks. He finally clobbered one making a pass from 3 o'clock high. The fighter rolled over, dropped below the B-32 where it exploded. Two down.

Before Sgt. Smart got a chance to enjoy his victory, a fighter came in from 9 o'clock and put a burst into his turret. Smart felt the impact of Japanese shells across his forehead and left temple, before he fell unconscious and was removed from the turret. He and his turret were now out of action from the Japanese bullets.

Seeing four of their number now missing, the remaining Japanese beat a hasty retreat. Their unorganized attacks had been failures. Most of the enemy attackers had seemed inexperienced. The planes were once again painted greenish, with one "Zeke" seen in the gray paint job noticed the day before.

The two B-32's turned for Okinawa. "Hobo Queen II" had come through with no casualties and no damage. 578 was another matter. Inside the plane piloted by Lt. John R. Anderson were one dead and two seriously wounded crewmen. The No. 3 engine was out and the other engines had suffered hits of varying degrees. There were numerous holes in the plane and the upper rear turret had been knocked out. Despite the damage, the planes made it back to Yontan after an eleven-and-a-half hour mission and a hot reception over Tokyo.

In their two days of action, the "Dominator's" claimed three definites, three probables and one damaged. 578 was the big scorer, claiming all the definites.

The two days of action over Tokyo had been historic for two reasons. It had been the first--and the last--aerial combat for the B-32's. And more important, historically, the "Dominator's" had shot down the last Japanese airplane of World War II. Although a latecomer to the war, the "Dominator" had written its page in history.

Following the photo missions, the aircraft were readied for 18-hour cover missions over the Tokyo area. On the 20th, "The Lady is Fresh" arrived from Luzon. The next few days were spent on finishing touches for the cover missions. On August 25, 544 and 528 took off on the first cover mission, but were forced back by a typhoon.

August 28 was to be a black day for the Okinawa B-32's. 578, 528, 532 and 544 were scheduled for the Tokyo cover mission. At one minute intervals, the heavily-laden (over 115,000 pounds each) planes roared down the runway into the early morning darkness.

544 was the last to go, at 0423. Ponderously,

she moved down the runway, slowly picking up speed. Suddenly, as far as could be told in the darkness, the No. 3 engine sputtered. The plane was almost airborne, now, but the pilot decided to abort the takeoff.

The sound of the throttles being chopped and the scream of the brakes, coupled with the noticeable absence of the propellers reversing, came through the darkness to the observers on the ground.

It was too late for 544. A coral pit 80 feet deep yawned at the end of the strip. The squeal of brakes stopped suddenly, as the plane went off the strip into the coral pit. Split seconds later, a blinding flash signaled the deaths of the fifteen crewmen.

The two wings were the largest pieces of wreckage left. The exact cause of the crash was never determined, due to the disintegration of the airplane. Observers felt, however, that the pilot could have made it off the strip with three engines at full power and one at partial power.

The other three aircraft continued on to Tokyo. But now, the mood was grim and would become grimmer before they returned, for another plane would not return this day.

With the mission completed, the three B-32's turned for home. 528 now began to have her problems. Apparently, water in the fuel was causing the engines to operate erratically and finally two engines stopped completely. Operating on the two remaining engines, and slowly losing altitude, the pilot decided to abandon the aircraft.

Twelve hours after takeoff, the crew abandoned 528 over a rescue destroyer. Of the thirteen men aboard 528, one was killed when his chute failed to open and another died later of internal injuries after his chute had streamed.

528, one of the original B-32's overseas had one problem too many.

On August 31, Colonel Cook flew 530, now stripped of armament, back to the United States. 530 carried some of the early surrender pictures and was used for a publicity tour around the United States, after its arrival.

On September 1, orders were received to discontinue all training on the B-32's. Around the tenth, the planes were made ready for the trip back to the States. In order to comply with the Air Transport Command's requirements for the flight back, the ball turret was removed and as much equipment as possible was stripped from the planes.

Finally, in October, the B-32's started for home. On the tenth, "Hobo Queen II's" nose gear retracted while sitting on the ground. While trying to repair the plane, the "Queen" was dropped three times, causing considerable damage to the forward fuselage. She was finally left on Okinawa. The last plane left on October 16, 1945, and the B-32's combat career was over.

The B-32 was needed no longer. The A. A. F. had cancelled the contract and the production line had closed down. The B-32 crews went on to other airplanes or out of the service. The crew chiefs on the graveyard shift at Tarrant would no longer use the bunks, fore and aft in the B-32.

On September 10, I. M. Laddon, Executive Vice-President at Consolidated, sent a short, terse message to B-32 Flight Research. It was fitting for the entire B-32 program.

"All flight testing and other expense being incurred on XB-32 and B-32 Flight Research program shall be stopped at once."

The B-32's began their short trips to Walnut Ridge, Arkansas, and Kingman, Arizona, to wait for the wreckers. For some, it would be their only flight. At least 87 "Dominators" went to Walnut Ridge and the rest to Kingman.

APPENDIX

San Diego built the three XB-32's:

41-141, 41-142 and 41-18336

Fort Worth built the following production aircraft:

B-32 42-108471-108484

42-108525-108584

TB-32 42-108485-108524

San Diego built one production aircraft:

B-32 44-90486

The following aircraft were not completely finished, but were delivered as flyable Termination-Inventory, flown directly to Walnut Ridge and Kingman:

San Diego 44-90487-90488

Fort Worth 42-108585-108594

Eleven B and TB-32's were destroyed or Class 26'd:

42-108472, 473, 475, 486, 489, 495, 499,
528, 532, 539 and 544.

Specifications:

Manufacturer's designation	Model 33
Span	135 feet
Length	82 feet 1 inch
Height	32 feet 2 inches
Weight	
Empty	60,278 pounds
Useful (normal)	39,728 pounds
Useful (maximum)	62,970 pounds
Takeoff (normal)	100,000 pounds
Takeoff (maximum)	123,250 pounds
Speeds	
Maximum level	357 mph at 30,000 feet
Maximum at 5,000 feet	302 mph
Normal cruise	290 mph
Economical cruise	200 mph
Landing	118 mph
Climb and ceiling (80,000#)	
At 5,000 feet	1270 feet/min.
At 25,000 feet	780 feet/min.
Time to 10,000 feet	8 minutes
Time to 20,000 feet	17.5 minutes
Time to 25,000 feet	23.5 minutes
Service ceiling	34,500 feet
Distance to clear 50 feet (119,000# A.U.W.)	
Still air	2150 yards
Over 50 feet	2950 yards

Range	
Maximum	4,200 miles
With 8,000# bomb load (10,000 feet)	3,500 miles
With 20,000# bomb load (10,000 feet)	2,900 miles
Maximum endurance	18 hrs. 40 min.

Maximum bomb load 20,000 pounds

Power plants

Four 2,200 hp Wright R-3350-23 aircooled radials

Maximum power output (each engine)

Take off 2200 BHP at 2800 RPM

Maximum at 30,000 feet 2200 BHP at 2800 RPM

Propellers

Four-bladed, hollow steel Curtiss electric

Diameter 16 feet 8 inches

Height-C.L. hub to ground

Inboard 10 ft. 7-5/8 in.

Outboard 11 ft. 9.37 in.

Clearances-inboard prop tips to

Fuselage 15.16 inches

Prop tips to ground

(taxi position)

Inboard 2 ft. 3-5/8 in.

Outboard 3 ft. 5.7 in.

The Curtiss propellers were the largest used on a production aircraft at that time. They were synchronized by a Curtiss automatic synchronizer, which provided constant speed control for each engine by altering the propeller blade angles automatically. The B-32 was the first aircraft to have this unit as a production item. The two inboard engines were equipped with reversible propellers for reverse thrust braking.

Fuselage

Maximum diameter 9 ft. 6 in.

Distance - nose tip to theoretical

leading edge of wing on

centerline of fuselage 27 ft. 3 in.

Clearance - fuselage to ground

at main wheel 2 ft. 9.5 in.

Wings

Area 1422 sq. feet

Airfoil section

Root Davis - C.V.A.C. 22.9%

Tip Davis - C.V.A.C. 9.3%

Chord

Root (theoretical) 16 feet

Tip (theoretical) 5 ft. 2.4 in.

Incidence 3°

Dihedral 3° 26 min.

Sweepback 3° 30 min.

Taper ratio 3.075:1

Wing loading 83.5-84 lb./sq.ft/

The B-32 incorporated a low-drag Davis wing which was built up of two spars, metal ribs and stressed skin with flush riveting. It had two independent sets of Fowler type metal flaps. With Maximum deflection of 40° these added approximately 30% to the wing area. The ailerons, along with the elevators and rudder, were of monospar metal construction, fabric covered. The trim tabs were electrically operated from toggle switches in the cockpit.

Landing Gear

Main gear - dual wheels 56 inches

Nose gear - dual wheels 39 inches

The main gear retract into the inboard nacelle wells in approximately ten seconds. The nose gear was a self-centering caster type operating on a complete 360 degree swivel. The tail bumper was a fully retractable hydraulic strut.

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Mr. Royal D. Frey, of the Air Force Museum, Mr. Ronald D. Neal, Mr. Eugene Roth, and Mr. T. L. O'Connell also provided information for this article.

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After this article was written, information was received by the author of the use of two B-32's in air-to-air refueling, using hoses through the top and bottom of the aircraft. Col. Bill Irvine was supposedly in charge of this. Also, Bill Odom was supposedly trying to obtain a B-32 for the Reynolds Company for a round-the-world flight. Do any of the readers know anything about these stories?

ABOUT THE AUTHOR

Tom Y'Blood is 29 and has been interested in aviation since grade school. He graduated in 1959 from the University of Oregon with a degree in Music Education. In 1960, he went into the Air Force and flew B-, EB-, and RB-47's until leaving the Air Force in January 1966. He is the Society's B-47 specialist. He joined Continental Airlines in February 1966 and is now a DC-9 pilot flying out of Denver, Colorado. He is married, has one child and lives at 425 South 40th Street in Boulder, Colorado.