

THE LONG WING RB-57D

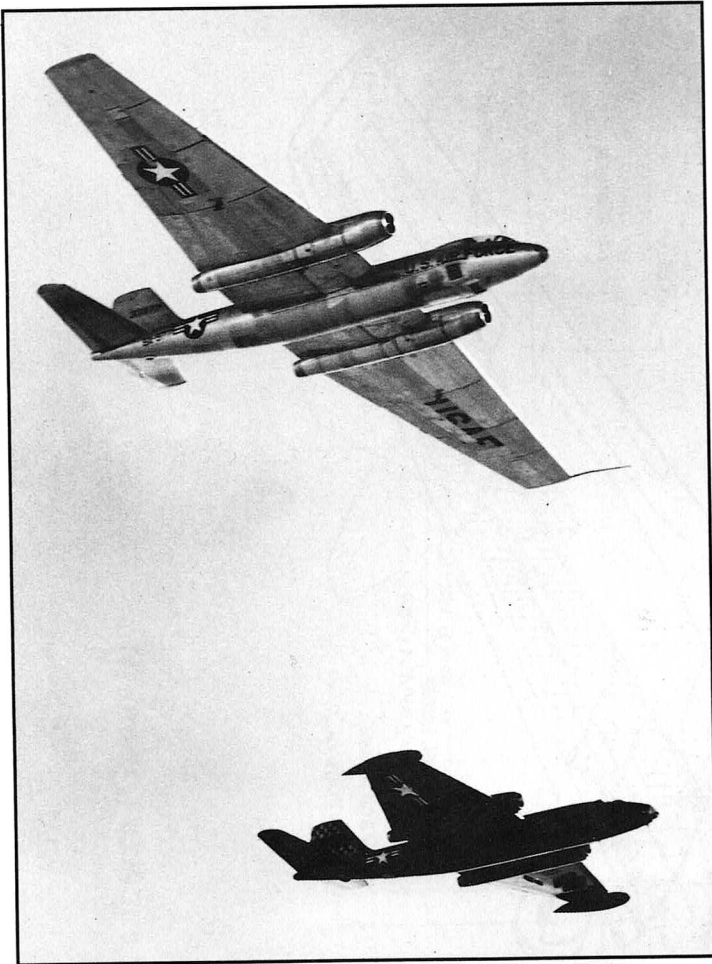
When 'Teddy' Petter first designed the stubby-winged Canberra, he could never have envisioned to what extremes these wings would be stretched by American designers. While the B-57 tactical bombers were beginning to take shape on the production line, word leaked out that a B-57D swept wing strategic bomber was in the making for the Strategic Air Command. There did evolve a B-57D for SAC, but it was a reconnaissance airplane sporting a straight wing, stretching 106ft, nearly twice the standard model's 64ft span.

Of the 20 RB-57Ds built, there were four distinct model Groups (see Appendix 4). Differences were slight, but seemingly all were designed for specific parts of the world for a given mission. In ad-

dition to the oversized wing, enlarged nacelles housed 10,000lb thrust J57 engines. Bomb bays were skinned over to reduce the weight of the standard bomb bay door. Wing spoilers augmented a stubby aileron, and wing flaps and speed boards were eliminated as a further weight saving measure. Despite its large wing and bigger engines, its empty weight was comparable to that of the B-57B. Honeycomb sections formed the wing in which all the fuel was carried in the wet wing and leading edge tanks. The often waxed skin was literally glued to the structure and its greatest hazard was de-icing fluid which might loosen the glue, and damage caused by the dropping of mechanic's pliers and screw drivers on the thin .010 skin surface.



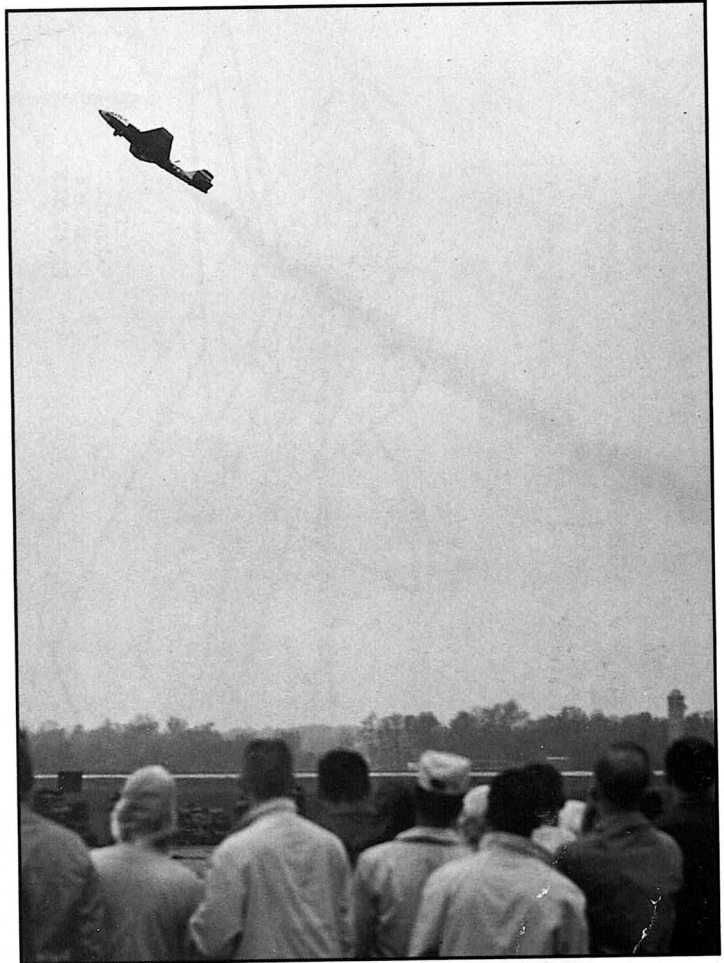
Upper air sampling was one of the primary missions of the RB-57D, later designated WB-57D to signify that purpose. This view shows 53-3979 turning toward a test nuclear explosion in the Pacific to use its wing mounted air samplers at or near the cloud. (D. Bell)



Daylight high altitude reconnaissance, a mission not envisioned for the original Canberra, was also added to the B-57's versatile repertoire of assignments. This publicity picture of an RB-57D above, shows the vast wing design change required in transforming the basic RB-57A also shown here. Note the covered rear canopy indicating that this is a single seat type. Twenty were completed, of which six carried two man crews. An overpowered glider, the RB-57D was unarmed and in the rarified atmosphere above 50,000ft it could not be intercepted by the MiG-15 type of fighter, the primary threat at that time. (Martin)

While I was at the Martin Plant to take deliveries of B-57Bs, I had the feeling I should pretend that these strange looking Canberras on the ramp did not exist. Any comments made about the long, drooping winged birds was done in hushed tone. This was April 1956 and deliveries were being made to the newly formed 4028th Strategic Reconnaissance Squadron of the 4080th Strategic Reconnaissance Wing, SAC. As the specialists completed the factory training course for the airplane, they moved to Lockbourne AFB, Ohio, where most thought they were going to remain. This was not to be the case, however, for as soon as the organization was formed under Colonel Gerald W. Johnson, they relocated to Turner AFB, Georgia where the last of the SAC fighter squadrons were just been deactivated. Many of the personnel from the 31st and 508th Fighters Squadrons were absorbed into the 4028th SRS and the later to be formed sister squadron, the 4025th SRS.

At the early receiving end for RB-57Ds at Turner AFB was Stan Bunicky, a recent graduate of the B-57 transition school at Randolph, but these 'Ds' were not like any of the Canberras he had



Black smoke trails from the RB-57D's twin J57 engines as it forms a spectacular climb curve after take-off. In about 15 minutes the 'D' could reach 50,000ft. Take-off roll was less than 2,000ft, leaving the runway at 106kts. Best initial climb angle was about 25 deg. (J. Andrews)

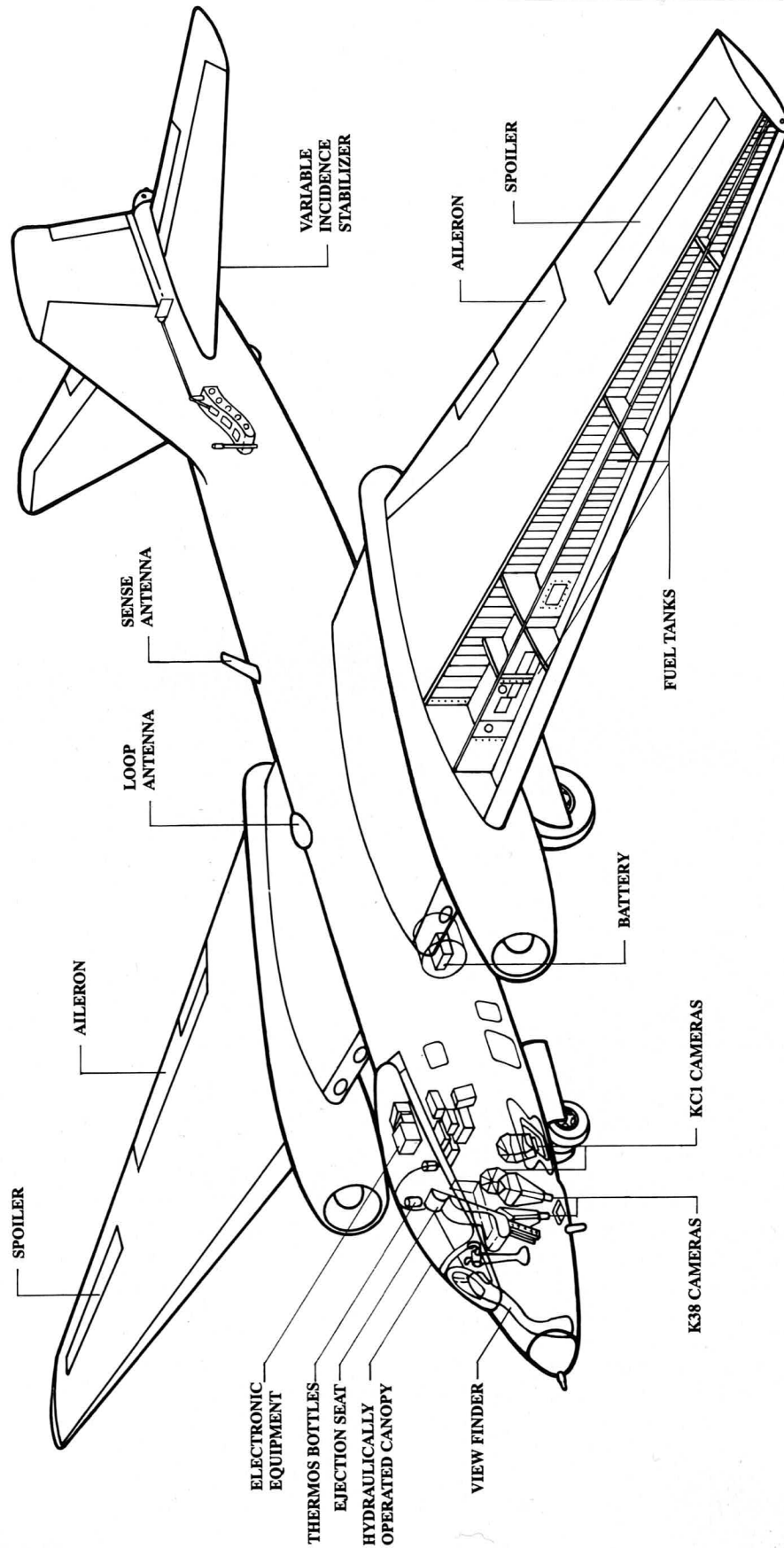
flown. However, it became his task to train the newly assigned pilots as they joined the unit. At Turner, the all silver aircraft were soon given a black and gray paint scheme unique to the 'D' model. A team of painters from Warner-Robins AFB, the depot for the B-57 aircraft, were put to the tedious task of painting. When finished, the aircraft looked like they were kin to the skunk family rather than being creatures of flight.

This was not the first unique project the men of the "Black Knights" were to encounter. Hail was familiar in that part of the country during the rainy season and hail would put the new bird out of commission in a hurry. The honeycomb used in the construction of the wing panels would not endure a hail storm. The wings had to be covered, but the problem of procuring covers that would not corrode the metal was not easily found but was eventually resolved.

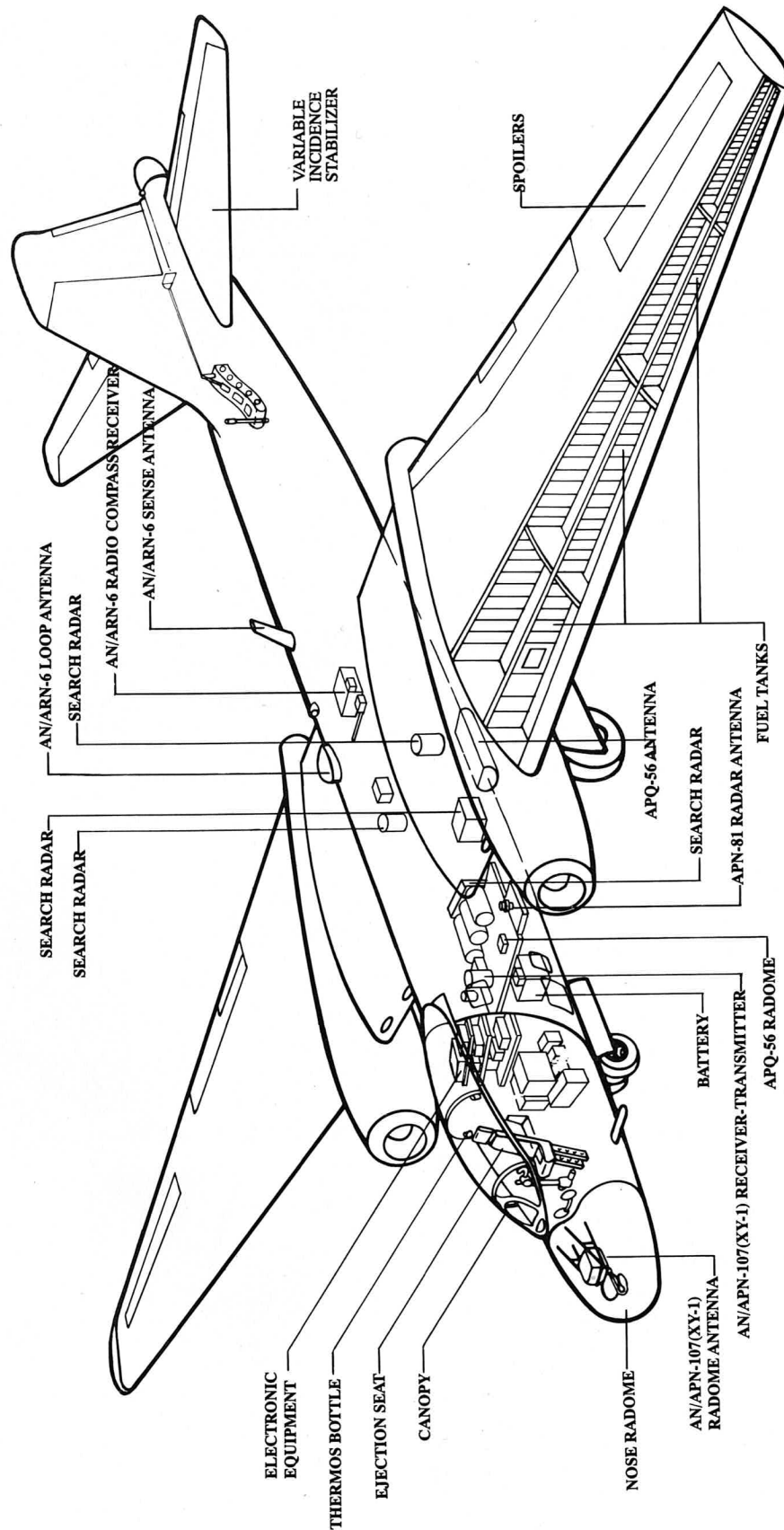
Some of the other problems that plagued the new organization were; autopilot failures, engine bleed pressures, a ruptured wing tank, nepho equipment malfunctions, lack of trained people compared to the work loads, and one case of the bends. In all they totaled to an average of over 5500 man-hours per month overtime from September 1956 to the end of that year.

By the time the squadron was declared operational after a mere 120 days following receipt of the first aircraft, six of the airplanes

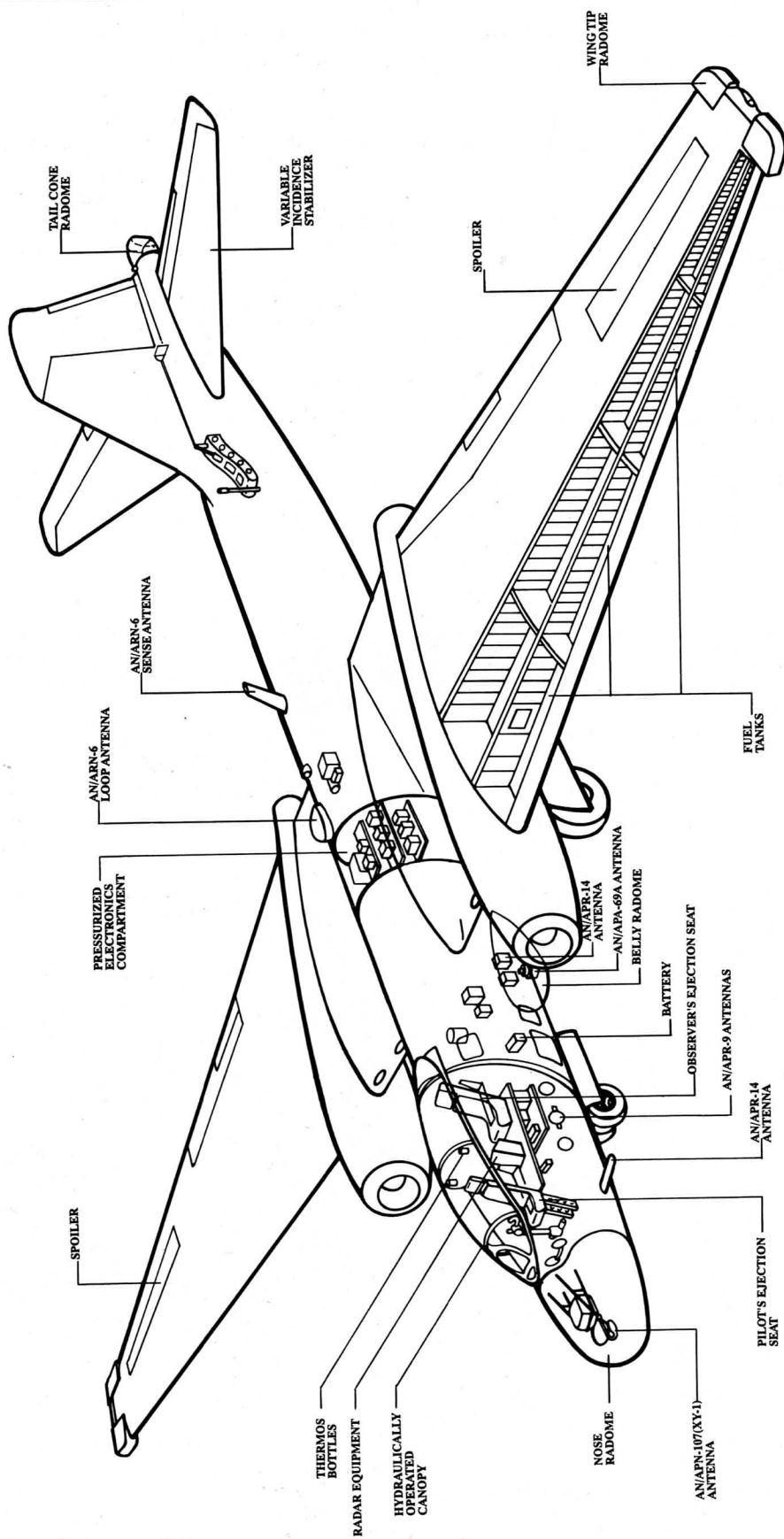
Martin RB-57D 'Zero' Canberra (Groups A and B)



Martin RB-57D-1 Canberra (Group D)



Martin RB-57D-2 Canberra (Group C)





Pressure suits required for all high altitude flights in the RB-57Ds were always a task to get into. Capt Homer Caldwell of the 4677th DSES in 1962, gets into a capstan partial pressure suit variety that was later replaced by CFU-4P experimental suits. All were commonly called 'Get-me-downs' which related to anxiety of crews to land and get out of their discomfort. (E. Bruch)

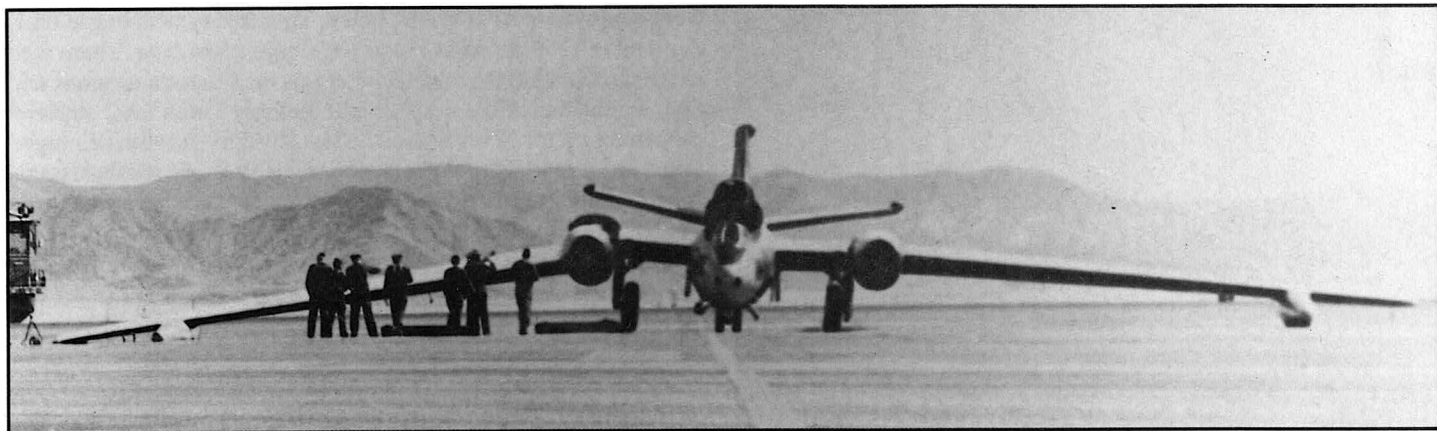
were deployed to Yokota AB, Japan. This deployment began on 11 September 1956 for what was called Project *Sea Lion*. These were of the Group A airplanes of the photo reconnaissance versions with only a pilot, and without in-flight refuelling. These SAC airplanes supplemented the Yokota based 6021st RB-57A-1s with their higher thrust J65 'Heart Throb' engines for their strategic reconnaissance mission in the sensitive areas of the Far East. While en route from Turner to Japan, one aircraft landed gear-up at McClellan AFB, California because of mechanical problems. This dampened the spirits of the men somewhat but they continued to forge ahead with their new birds.

Beginning in early 1957, the Wing and its squadrons moved to Laughlin AFB, Del Rio, Texas. With the men and airplanes scattered to many parts of the world, just how are families, dogs, cats, birds, and tank fish moved hundreds of miles, and still maintain some resemblance of an organization? For those residing at Turner, they made the move to Laughlin, then went TDY to relieve the group overseas so that they too could return to Turner and move their families to Texas. It was a difficult time for all concerned.

In close order, the Yokota based RB-57Ds left the scene in late 1957, only to have about three of them reappear in late 1958 on Taiwan, at Taoyuan AB, near Taipei. Carrying Chinese markings, they made frequent reconnaissance flights over the mainland during this period of the Taiwan Straits Crisis. At least one was shot down when making a premature descent back to Taiwan, while two are known to have returned to the U.S. when the program ended around 1963. At the onset, Ellis Bruch and Bill Bunting of the 3rd BW took two B-57Cs from Japan to Taiwan and trained two Chinese pilots to fly the Canberra. This checkout program code-named *Diamond Lil* ended abruptly at just under 30 days when the two sides began air engagements. According to Bruch, the pilots were top-notch and may well have managed their own training for the 'D' from that point on.



After an absence in the Far East of about one year following assignment in Japan, three 'Group A' RB-57Ds took up station on Taiwan in 1959 prompted by the Taiwan Straits Crisis. This time they were clad in Nationalist Chinese markings and operated at Taoyuan AB, Taiwan, carrying out high-altitude reconnaissance flights over the mainland. The author took this picture of 981 when taxiing by in another B-57 on this heavily guarded base.



The main drawback of the RB-57D was wing failure like this one of two that literally broke off after landing. A third occurred at altitude, grounding the fleet a second time. Some were structurally beefed-up and remained in service until 1970. (D. Anderton)

On 14 April 1958, six RB-57Ds, crews, and support personnel and equipment were in place at Eniwetok Atoll (Fred Island), Marshall Islands for Operation *Hard Tack*. They were to participate in the atomic bomb tests conducted in that remote part of the world. The last of this Det. 7 of the 4080th did not return from these tests to Laughlin until 11 August of that year.

On the other side of the world, four of the Group B aircraft with in-flight refuelling capability, were sent from the States to make occasional visits to Rhine Main, Germany. Their missions were long and for this reason the airplanes were equipped with an autopilot, and rudder pedals that could fold, giving the pilot room to stretch his legs. Two more 'long wings' joined the unit, one being the only RB-57D-1, 963, featuring a large nose radome and lengthy sausage-like radomes faired into the center of the fuselage under the wing roots. Its special high resolution side-looking radar capability was obviously designed exclusively to penetrate the Iron Curtain. On 9 June 1959, six of these airplanes were permanently assigned to Rhine Main as part of Project *Big Safari*, forming the 7407th Support Squadron, and assigned directly to USAFE Operations. All RB-57D operations were closely guarded, and they received only a trace of publicity in their early operations. They too were termed the 'Spy in the Sky' along with the U-2.

The long wing model began to lose favor when wing failures occurred and SAC placed several in storage by early 1959. Two outer wing panels literally broke off after landings at Del Rio and

Kirtland AFB. Their 500-hour mark for the designed airframe life was being surpassed by some, but a few were retained to continue with the mission out of Rhine Main until 1964. In the meantime, the Air Defense Command saw the potential of this high altitude airplane as a 'target' for the increasing capabilities of fighter-interceptors. Modifications were made to strengthen the wings of the grounded 'Ds', and Electronic Counter-Measures equipment was installed. The 4677th Defense Systems Evaluation Squadron of ADC at Hill AFB, Utah, received 12 of the RB-57Ds over a period of time which joined the 30 standard wing models of that unit. These aircraft filled the 'target' training mission well, and also mixed in a small amount of high altitude photography. Another use found for ADC RB-57Ds was to supplement SAC assigned 'Ds' for continuation cloud sampling in the vicinity of nuclear bomb tests as with previously described Operation *Hard Tack*. (As early as 1954, RB-57As were used for Operation *Castle* in Nevada for this sampling, followed in 1956 by Operation *Red Wing* at Eniwetok using B-57Bs.) All models of the B-57 proved very useful for this type of work, and the feature liked most about the 'D' was its ability to carry a good-sized payload of sampling sensors higher than any other current aircraft.

After a three-year period during which nuclear testing had been discontinued, plans for tests resumed. This detonation test called Project *Dominic*, took place in 1962 and, unknown at the time, was the last above ground nuclear shot by the U.S. The 4677th DSES at



The long wing span is emphasized in this picture of a 4677th DSES 'target' RB-57D. Hose to port engine extends from ground-power unit used for air starting the J57 engine. In pressure suit in front of engine is Jim Scanlon preparing to depart from Hill AFB, Utah. (J. Scanlon)



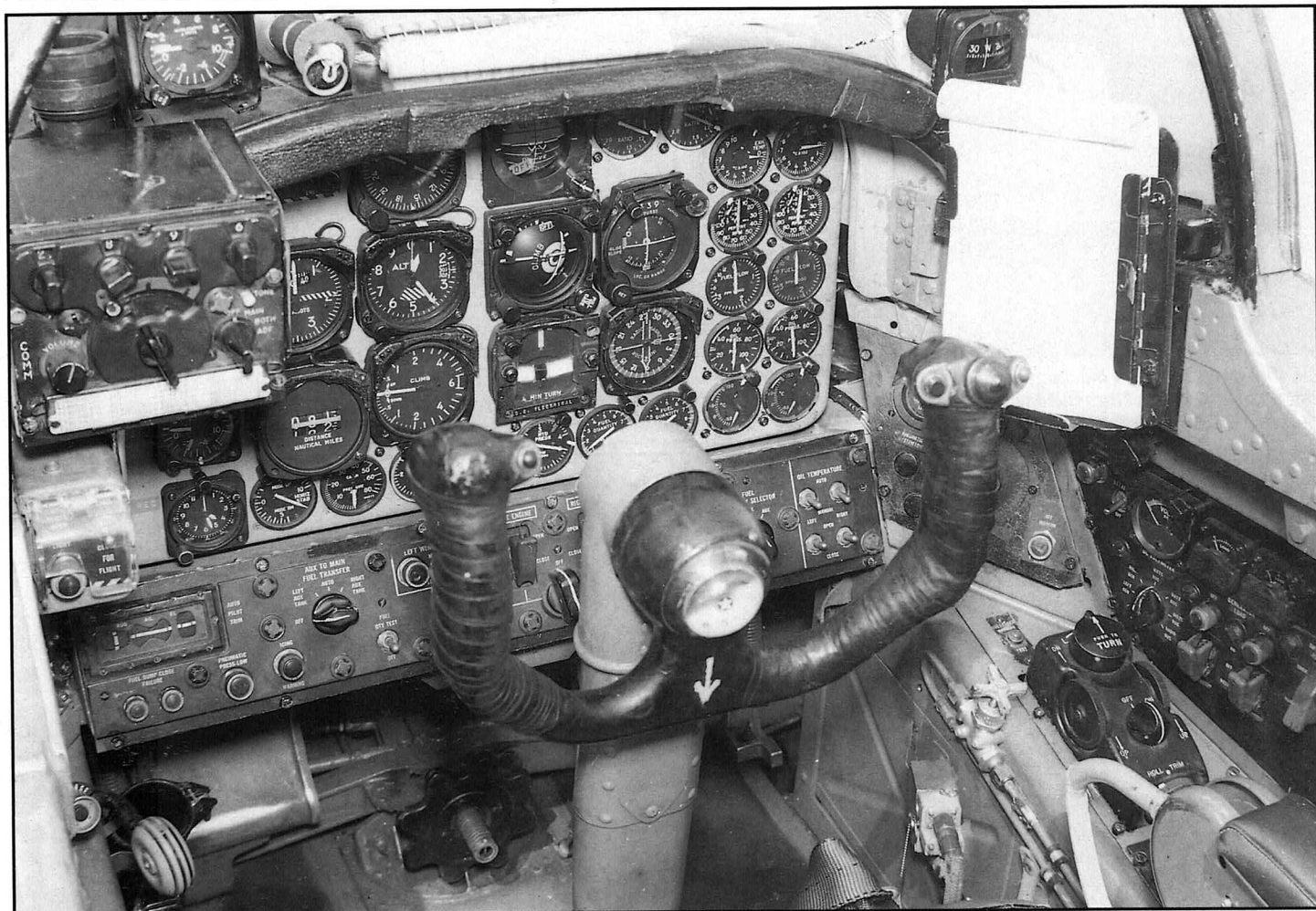
On Christmas Island in the Pacific, B-57s gather in 1962 for the nuclear detonation test called **PROJECT DOMINIC**. Eight black RB-57Ds shown in this picture were used for reaching very high altitudes for cloud sampling in the vicinity of the test area. White B-57Bs tested the radiation effect of the blast as if they were in the escape location after delivering such a bomb. (W. Boyne)



WB-57Bs served along with WB-57Ds in the high altitude air sampling missions after nuclear detonations in **PROJECT DOMINIC** in 1962. Decontamination teams wash down 504 after its cloud penetration sampling.



The Air Defense Command obtained a number of RB-57Ds and converted them to EB-57Ds as intercept targets for fighter training purposes. This EB-57D-2 now stripped of intelligence gathering radar, retained its radome nose configuration.

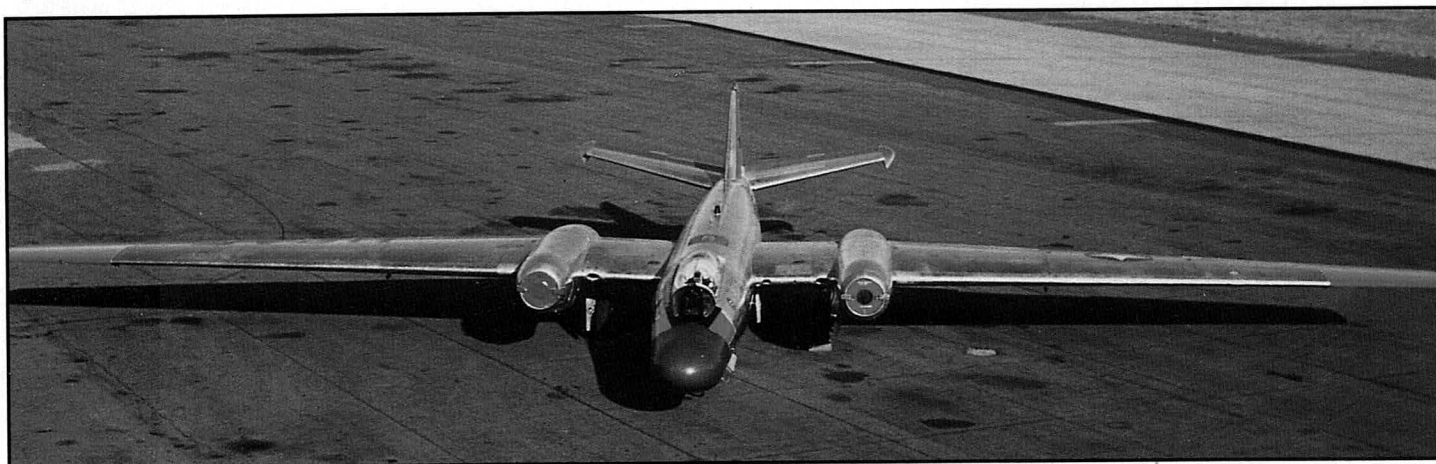


Cockpit of this EB-57D-2, 968, is very similar to the standard wing models. On the right console are the auto pilot controls not found in earlier models. Control wheel had a comfortable, sturdy look and feel on all models.

Hill AFB provided five 'Ds' along with crews. These were joined by the one 'D' from Wright Patterson AFB (973) assigned there for flight test projects. (WADC received three RB-57Ds from the 4080th SRW beginning 16 June 1959.) Six of the standard wing B-57s were also at Christmas Island for this mission. The 1211th Test Squadron (Sampling), Air Weather Service, had operational con-

trol over the loaned aircraft and in time acquired permanently assigned WB-57s for the sampling program. This Kirtland AFB, New Mexico, based unit eventually became the 58th Weather Reconnaissance Squadron.

Structural problems in 1963 put most of the 'Ds' back in storage for a second time when all were grounded after 973 lost its



This Martin EB-57D sits at rest on the ramp of the 4677th DSES at Hill Air Force Base, Utah in the early-1960s. It was at this time that day-glo orange paint became standard high visibility coloring applied to wing tips, nose and aft fuselage.



RB-57Ds were used as a platform in a wide range of special high altitude testing of various equipment. This aircraft, 53-3973, shown as it taxis at Wright-Patterson AFB. On February 19, 1964, it had the misfortune of having both wings separate from the fuselage at 50,000ft. The pilot escaped, and although the fuselage landed in a school yard, no one was injured. (Picciani)

wing at 50,000ft. Years passed, and ADC still had a requirement for a high altitude 'target' aircraft, seemingly only to be satisfied by the 'Ds' performance. Martin agreed to modify the wings of the 'D' and guaranteed an additional 3,000 flying hours. Only the 'D-zero's' and D-2s could be made airworthy for the flight to Martin for modification. When completed, it was the third time these airplanes were brought into operational service. Updating of their ECM (Electronic Counter Measures) gear brought about a redesignation to EB-57D. This 'long wing' model served other test and evaluation missions throughout the Air Force, but by mid-1970, the last were again placed in storage. In time all were scrapped except for 982 which is now at the Pima Air Museum, Tucson, Arizona.

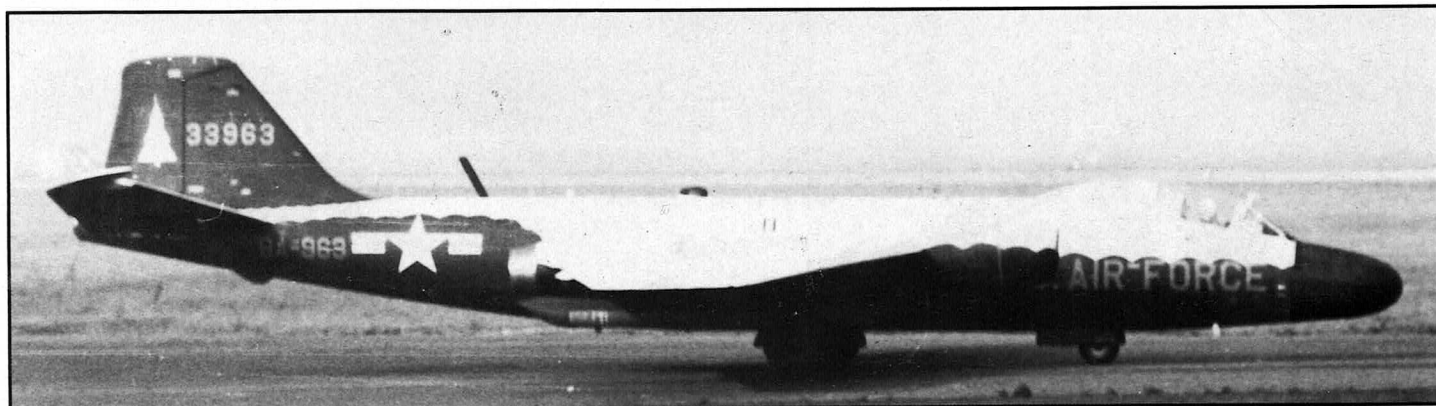
Piloting the RB-57D was a unique experience in itself when compared with other aircraft. Only half power was used for take-off due to the excessive thrust of the larger engines. Should one engine fail at low airspeed and at full power, corrective reduction in power of the other engine could not be done quickly enough to maintain control of the aircraft. After a ground roll of less than 2,000ft, lift-off at 110kts resembled that of a sailplane, then transitioning to a high nose attitude, it was out of sight in a matter of moments. Everything stopped on the field to watch these spectacular take-offs. Initial climb would go to 57,000ft as the optimum altitude for level off. For the best range, cruise-climb would continue until maximum altitude of about 65,000ft would be reached.

This capability was slightly less than that of the lighter U-2. Despite the much larger engines on the 'D', fuel consumption at these heights was very low. Climbing in this manner to these altitudes, approximately seven hours of flying could be obtained with the total fuel capacity of about 214 U.S. gallons less than that of the standard B-57B that could fly for about 4.5 hours.

The airplane had a maximum indicated airspeed limitation of 190kts that was further reduced to 180kts IAS when the outer wing auxiliary wing tanks became empty. Although this reduced airspeed seems exceptionally low, it worked out at 420kts TAS plus at its operating altitude.

Landing the airplane was quite different from any other because of its low sink rate. Idle power at traffic pattern altitude was still 60% far more than actually needed. Even with spoilers out and gear down (there were no speed brakes or landing flaps), to dive the airplane on the glide path did little more than increase the airspeed. By raising the nose to produce a slight stall was the best method to hold the airspeed down and to let the airplane settle back to the glide path.

According to Jim Scanlon who flew the 'D' and other models of the B-57s for many years, 'If ever an airplane needed an anchor and a long string to get it down on the runway, the EB-57D was that airplane.'



This picture was taken as RB-57D-1, 53-3963, moved down the taxiway at Rhein Main Air Base, Germany. It was assigned there with the 7407th Support Squadron. This one-of-a-kind model was equipped with SLAR (Side Looking Airborne Radar) that can be seen where the trailing edge of the wing joins the fuselage. (R. Koch via D. Menard)

FLYING THE B-57

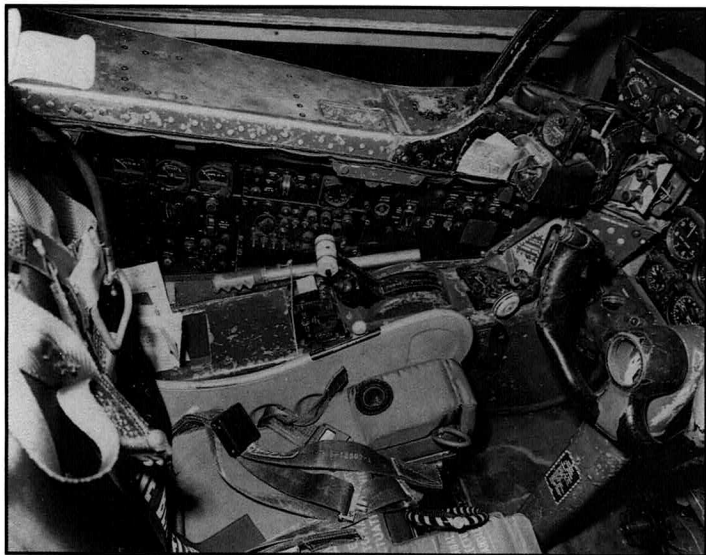
Imagine this to be your familiarization ride in the Canberra. Our seat pack parachutes have already been positioned in the aircraft, so climb in the back seat while I make a walk around inspection and check the usual items from the checklist. Once this is done, our clearance filed, and we are strapped in, the hard work is over and what flying is all about is soon to begin.

Battery switch on. Now we can talk to one another on the interphone hot-mike. I've already gone through the 'before engine start' check list which assures that all the switches and handles are

in the right place. The right-hand throttle is now moved out of the detent into the idle position and the right engine is ready for start. I signal to the crew chief for wind-up. At the front of the right console panel are two switches marked 'start' and I press the right-hand one up. Instantaneously, the one shot starter cartridge ignites to our right with a deafening sound like escaping high pressure steam. This starter is a small turbine that connects to the engine turbine and causes it to turn. This burning cycle lasts 10 seconds during which time the engine instruments come to life. Automati-



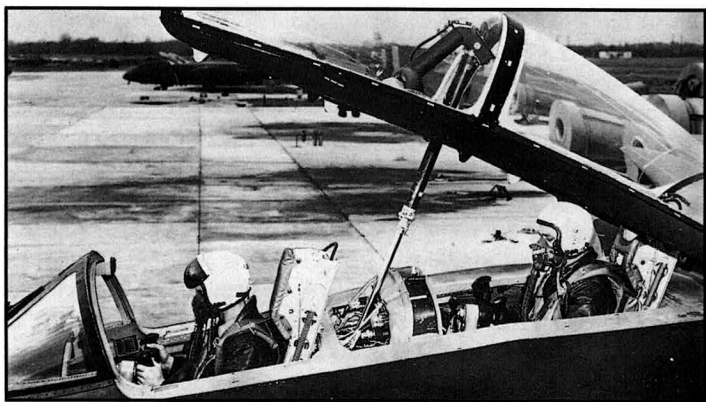
With seat packs and inflatable dinghies already on, the author gives Ron Cutting a helpful boost up the ladder of the B-57. Looking on is crew chief R. F. Frost. Place is Johnson AB, Japan, 1958.



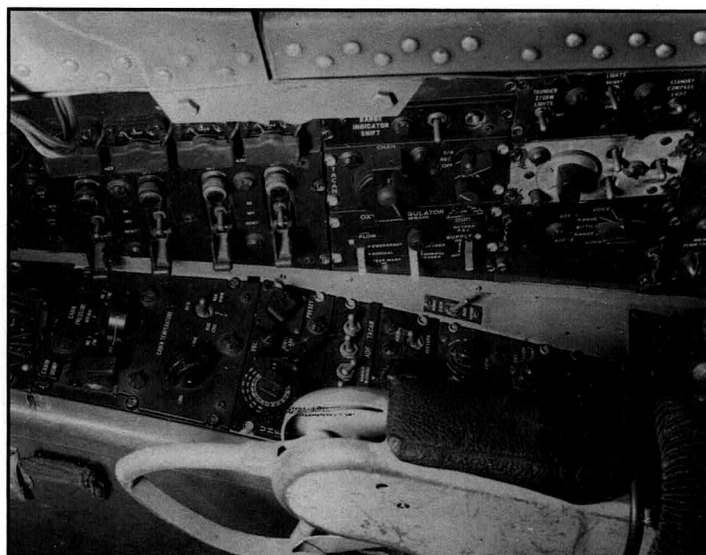
This is the front office of the B-57. Very few switches, instruments or controls are considered hard to reach or see. The Canberra is a big airplane to require only one crew member, but it is an easy bird to fly. Arm rests are missed from the old type seats which were deleted on this Douglas ESAPAC seat modification.

cally, ignition and fuel take over to bring the engine up to 42%, idle speed. What could be simpler? We always watch for a possible over-heat, but I have never seen this happen with the J65 engine – one of the most reliable engines I have ever operated. A check of the hydraulic pressure – it is up and I signal for the crew chief to pull the landing gear down-lock pins which are then stowed in the right side fuselage access hatch. Be sure your hands are clear of the canopy rail, for the canopy is coming closed. When down and the red warning light goes out indicating it is locked, it becomes refreshingly quiet in the cockpit. The left engine is started like the first. Smoke from the starter swirls outside the canopy giving good reason why this engine is started after the canopy is closed. Both starter exhausts eject smoke out the right side of the engine nacelle.

Setting the throttles at 50% reduces the ground noise of the annoying, pulsating rumble-beat which seems unique to J65 engines. The thumbs-out signal to the ground crewmen is given and chocks are pulled. We remove our seat safety pin to arm it for emer-



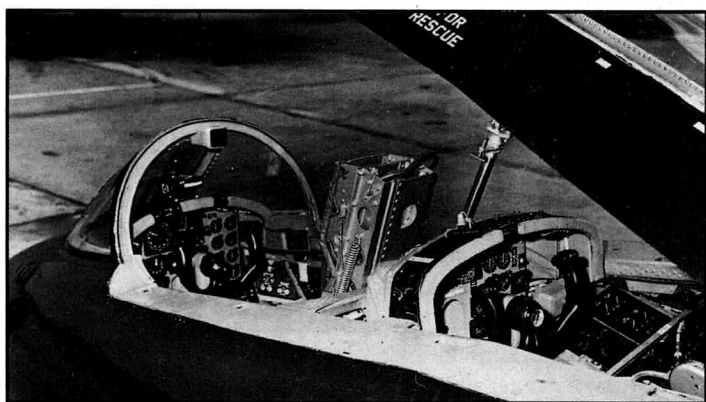
Before dual control B-57Cs were available to the units, pilot checkouts consisted of one back seat familiarization ride, then move to the front seat and it was solo from then on. 'Cs' were not long in coming however, and the USAF acquired 38. Their combat potential remained equal to that of the 'B.' (Martin)



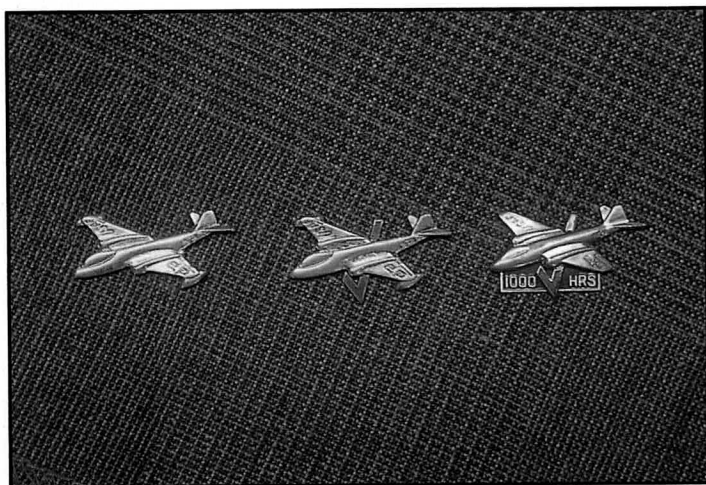
Right pilot console. Above left to right: Four generator switches and voltmeters, TACAN and oxygen regulators, transponder (IFF), radio mixer and light switches. Below; oxygen quantity gauge, cabin pressurization and temperature control, UHF radio and monitor switches, and partially hidden by early style ejection seat armrest is the automatic direction finder (ADF). (D. Beggerly)

gency ejection. Ground Control clears us to taxi and we are on our way. Adding just a little power, our Canberra rolls forward and we tap the brakes as a functional check. Since steering is accomplished by differential braking, adding power to the engine on the outside of the turn eases us out of the confined parking area with no difficulty.

When in position on the runway, the throttles are pushed forward to their limits and the engines wind up quickly with a deafening roar to full RPM. There is a feel that the Canberra is ready to go as vented oil from the engines begins to swirl like smoke around the outside of the canopy. A quick check of all the instruments is made as brakes are released smoothly. The loud noise of the engines slips behind us as we gain speed rapidly, causing an almost quiet, eerie state. The rudder comes into play quickly, replacing the brakes for directional control. As we pass 100kts, our forward pressure on the husky control wheel is slowly changed to back pressure and the nose wheel comes off the runway. We hold this level atti-



It was hardly noticeable, but the rear seat in all models, including this dual control B-57C, had the rear seat slightly off set to the left. Forward visibility for landing was fairly good from the rear seat.



Martin presented promotional lapel pins or tie tacks when they were closely involved with the B-57. The one on the left was an all purpose pin for selected receivers. The center pin was presented to pilots as they checked out in the airplane, and the one on the right was for pilots when reaching the 1,000 hour mark. No further recognition was made.

tude as speed builds. As lift-off speed of 133kts is approached, the nose is raised higher and we are in an attitude to leave the runway in less than 4,000ft (based on 45,000lb take-off weight). The moment of lift-off is hard to detect, mainly because the large tires dampen the beat of the runway expansion joints. Unwary pilots have been known to retract the wheels too soon, thinking they were airborne only to have the airplane settle down on its belly. In the initial climb there is an illusion that the nose is still slightly down due to the negative slope of the side canopy rail.

Our initial climb is established anywhere between 250 and 360kts, depending on our mission. As we go through 10,000ft we note that cabin altitude has stopped climbing and it should remain there until we reach 20,500ft. From then on it will maintain a constant 3.5psi differential whereby when reaching our optimum level off altitude of 37,500ft, our cabin altitude will be 21,000ft. This is a comfortable pressure, but we still have need to keep our oxygen masks in place.

At level off altitude our cruise is 0.73 Mach giving us a true airspeed of 420kts. About 93% RPM will initially hold this speed. The airplane trims up well but it does take some watching to hold it on altitude for it tends to make a slow hunt longitudinally. At any altitude, the B-57 could outmaneuver most – if not all fighters of its prime operational time period. This was a result of its light wing-loading which permitted tighter turns than fighters with higher wing-loadings. Control forces are heavy at low altitudes since it does not have boosted controls. But a little grunting and groaning on the part of the pilot will make the airplane do what he wants it to do. It has a very positive feel while doing aerobatics such as loops, tight turns, rolls, Immelmann turns, etc. One can easily forget that the Canberra is supposed to be a bomber.

Ten minutes or more before starting descent from a prolonged stay at the cold, high altitude, the canopy defog switch must be turned on. It is easy to be caught short by an early descent before having a chance to preheat the canopy. That is why I carry an automobile windshield frost scraper in my leg pocket so I can clear the windshield on the inside – and see to land.



Martin presented these chrome display models of the B-57B to people involved with the airplane, particularly initial aircrews and senior staff. This type of gift from a vendor to government consumers became illegal beginning in the mid-1950s and many of these models had to be withdrawn.

The landing field determines the type of pattern to be flown. Since we are landing at a tactical base we take the option to make a 360deg overhead approach. Our entry is 1,500ft above the ground and lined up with the runway at least two miles out. Speed is stabilized at 250kts (later 300kts) indicated. At the approach end of the runway, things begin happening fast, so hang on to your hat!

Simultaneously, the throttles are brought back to 55%, speed brakes out, and a snappy left break is established. This is a 60deg bank which is held until a 180deg turn is completed and puts us on downwind leg. Airspeed has dropped to 200kts which is gear lowering speed. The gear handle is placed to the down position, and a slight jolt is felt as the heavy wheels drop out of their wells. After a short rumble they snap into place with a positive feel and we check the indicator lights and the sound of an unsafe gear horn, and we confirm that the gear is locked down. This brings the speed down quickly to 170kts so the speed brakes are brought in by the thumb switch on the right throttle, and the flap switch behind the throttles start the flaps down. Back pressure and a few clicks of the thumb switch on the control wheel for stabilizer trim holds the nose up for a few moments more until reaching 150kts, and a glide is established by lowering the nose.

'Langley Tower, Randy 34, turning base, gear check complete.'

'Randy 34, cleared to land.'

This turn will be a continual one on around to line up with the runway. At the base leg point, airspeed is reduced to 140 and rolling out on short final we are looking for 130kts. We haven't needed power since retarding the throttles to 55% at the break.

On final we are just a little high. Left rudder and right aileron establishes a comfortable slip and altitude is adjusted right where we want it. Over the fence at 110kts and round-out is begun for setting the Canberra right on the numbers at about 98kts. (Based on 32,000lb landing weight.) Control pressures are moderate provided back pressure is trimmed out. The big tires and long strut travel makes the B-57 sit down with a soft touch. When on the runway, the nose wheel is lowered slowly and it settles closer to the ground than at take-off. All the remaining fuel is in the forward fuselage tank now, which compresses the nose wheel strut more than when

MASTERS

CLUB

*This is to certify that***Robert E. Mikesch**

Having logged one thousand hours as pilot of the
USAF MARTIN B-57 TACTICAL BOMBER
is hereby awarded membership in the
B-57 MASTERS CLUB

GIVEN THIS 18TH DAY OF January 19 61

William B. Beyer
PRESIDENT

Robert D. Turner
CHIEF OF FLIGHT TEST

In addition to the 1,000 hour lapel pin, pilots achieving this milestone were also presented these certificates. The airplane remained in service for so many years that many pilots far exceeded this mark. Martin ended this 1,000 hour recognition around 1959.

all tanks are fully serviced. Roll out can be near 2,000ft if we planned it that way – but we will spare the brakes and roll to an easy turn-off. Flaps coming up. (There are two flap positions; full ‘down’ which is 60deg, and ‘up’.)

This power-off pattern was a little tighter than considered normal, but it was a procedure I liked to follow for getting the airplane down in the shortest length of time. Throttle adjustments were not necessary and as in the case with flying light aircraft, the runway could be reached in a glide at any point in the pattern.

If this flight sequence sounds over simplified, in truth it is not. The B-57 was an easy and operationally comfortable airplane to fly – and it was fun. It was docile and forgiving – but it did have limitations that if exceeded could bring trouble. A word of caution that I recall was said by ‘Pat’ Tibbs, Martin’s Chief Test Pilot for the B-57 when telling us about this airplane, kept me alert in the Canberra at all times: ‘Anything that will disintegrate on impact with the ground – can kill you.’

THE AIRPLANE

There is a personal side about the B-57 that cannot be found in flight manuals or performance curves. What the aircraft can really do is only known by the men that flew the Canberra and understood it intimately for the better part of their Air Force careers. So that I would not impart only one pilot's opinion, I queried many of my colleagues for their viewpoints on selected aspects about the airplane. Their responses often varied, but collectively they provide a good cross section for a pilot's perspective of the Canberra.

When asked what they liked most about the B-57, the list became long. Adjectives heading the list of qualities were: versatility, reliability and simplicity in both operation and maintenance. It was not one of the fastest airplanes for its time, but this was countered by its flight endurance, range, and stability in both level flight and as a gun and bombing platform. The Canberra's maneuverability at all altitudes and its twin-engine reliability were strong features

mentioned by most pilots. Its cockpit layout was liked by all. Doug Beggerly summed up his opinion of the B-57 as being a 'lovable old thing – comfortable as an old shoe.'

The dislikes about the B-57 made a much shorter list than its good features, and some of those questioned even left this space blank. Poor single engine control at low speed of 155kts minimum (135kts for B-57E and others modified later with rudder power boost) was the most common criticism. A deadly mistake was to allow the good engine to surge to full power at or below this speed, which then exceeded rudder control capability. This took a lot of lives. Some wished for boost on all the controls but recognized that the airframe could have been easily over stressed by overzealous pilots. Canopy fogging often got ahead of the de-fog system and should have been improved. And when it came to replacing spent starter cartridges and cleaning their electrical contact points after each flight nothing could be grimmer.



During peacetime tactical flying was one training mission after another. Following a practice weapons delivery sortie at Mito Range, Ellis Bruch (left) with navigator Mike Michaud, discuss their flight as they walk from their B-57 at Johnson AB, Japan in 1957. Back then, AF-blue flying suits were popular. (E. Bruch)



A goodbye between friends! After 3,633 flying hours, mostly for flight evaluation purposes, this NRB-57A, 435 with modified nose was retired in December 1969 to the aircraft reclamation depot and eventually scrapped. It was a nostalgic flight for both plane and pilot, the author, who flew this Canberra on its final trip to the bone-yard.



This was the Military Aircraft Storage and Reclamation Depot in the desert at Davis Monthan AFB, Arizona, which is now called AMARC (Aircraft Maintenance and Regeneration Center). Unless placed here for storage and possible future use, they are stripped of parts to keep others flying, and are eventually scrapped. Except for those assigned to museums, this was a sad ending for these Canberras after they had served their time so faithfully.

Performance charts say one thing but practical application is another. Some of the greater distant flights (and most memorable) were the frequent – into the wind and no room for error – flights from California to Hawaii (2,160nm) en route to the Far East. Equipped with ferry tanks, they always went over five hours. Bob Lince for instance, logged 6hr 5min in March 1966, to reach Hilo, the closest field short of Hickam AFB, the usual landing point. He calculated 6hr 26min to dry tanks. Other critical overwater flights were from Johnson AB, Japan, to Clark AB in the Philippines (1,650nm) as well as Guam (1,375nm) without ferry tanks, took about 4hr 20min and 4hr respectively. My logs show non-stop flights from Los Angeles to Washington, D.C. (2,050nm) ranging from 4hr 25min to 4hr 40min without ferry tanks, but we had to be assured of clear weather on arrival, and no delays. This left about 900lb of fuel showing on the gauge. Winds at altitude were always an important factor as well as having alternate airfields if fuel consumption was not as planned.

Time in the air depends on power setting and altitude for endurance as well as distance. For ‘fuel on board’ we normally filed having 4hr 15min which comfortably left 1,500lb remaining as minimum on cross-country flights. One of the longest flights without a ferry tank was 5hr 10min claimed by Bob Hunter from Reno, Nevada to Otis AFB, Massachusetts (2,250nm). This was in an RB-57A, and the lightest model of the B-57 series. A ferry tank would add another hour to flying time.



When the 17th DSES turned their EB-57Es in for storage at Davis Monthan AFB, much of this last squadron of B-57s from the USAF was set aside for needs that may arise. There was some consideration that they might be sent to the Chilean Air Force but that has now faded. Their fate will undoubtedly lead to scrapping.

What the *book* claims about altitude is one thing and actual practice is another. Topping 50,000ft with standard wing B-57s became rare as the airplanes grew older and gained weight. When new and often without tip tanks, many topped it for one reason or another. A few worth mentioning are 53,500ft by Jerry Russell, 54,000ft by Jim Goodnight, 55,000ft by Bob Hunter, and 56,900ft by Doug Beggerly. This latter was during the Eniwetok atomic bomb tests in 1956 when the airplanes were lighter, but I do wonder what the tailpipe temperatures were reading, for this was often the limiting factor for altitude.

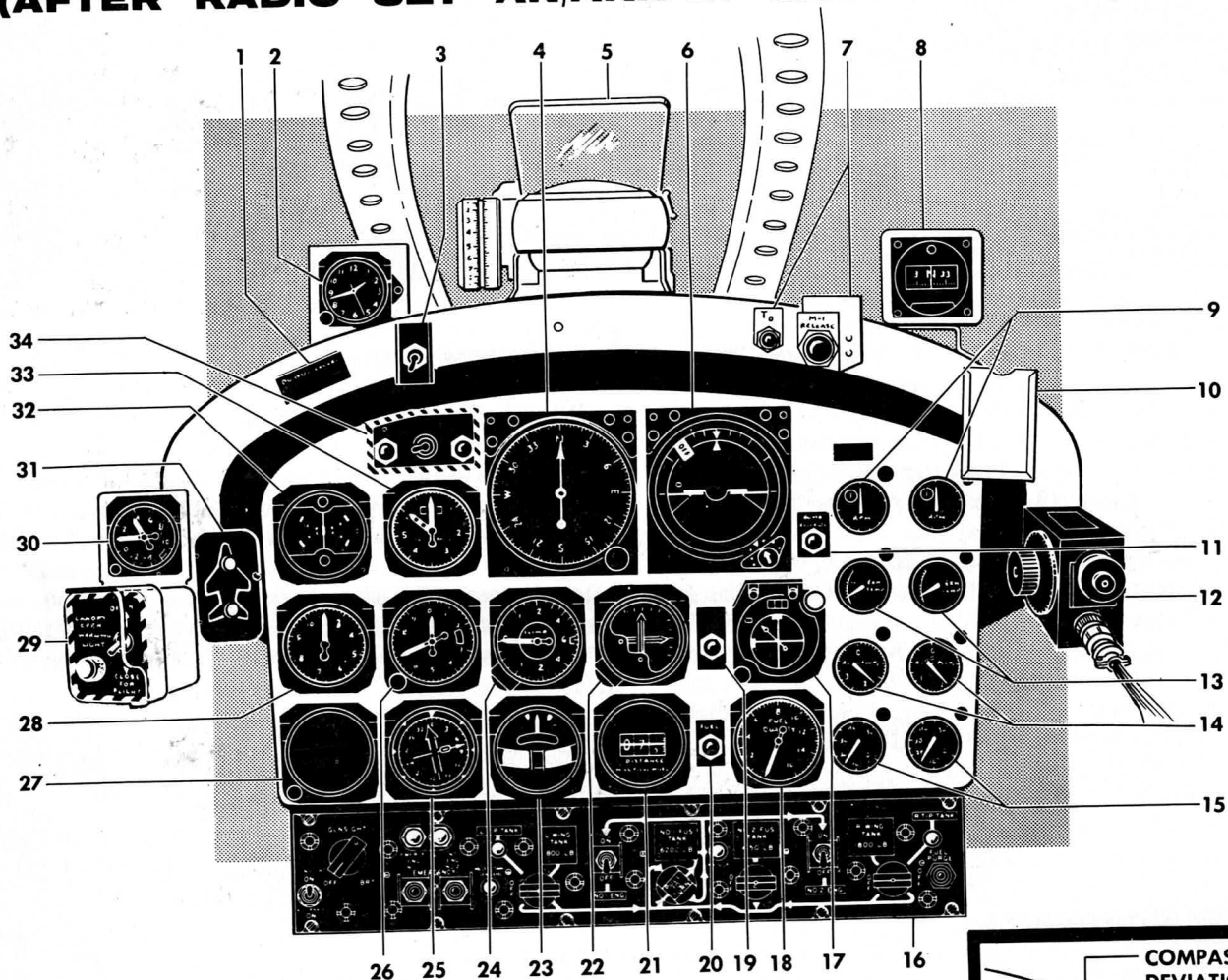
A handful of Air Force pilots have logged close to or over 5,000hr in the Canberra, and that is a lot of time in any military airplane. Paul Pitt logged a staggering 5,209hr in the B-57 before retiring. Another high-timer is Charlie Leonard who finished with 5,060hr, and may be the highest in the ‘F’ model with 1,808hr. He and Ted Jensen are the only two pilots to have flown all models of production B-57s.

The accomplishments of the Canberra and the men who flew her, can go on and on. No one book can contain all there is to be said for this fine airplane. The B-57 served quietly and modestly, seldom in the spotlight, and therefore may never be voted into the aviation hall of fame. But if the record of its accomplishments were to be examined closely, it must be considered one of the all-time great airplanes. Those of us who knew her, salute the few ships that are now only museum aircraft, for there will never be a true replacement for the versatile B-57 Canberra.



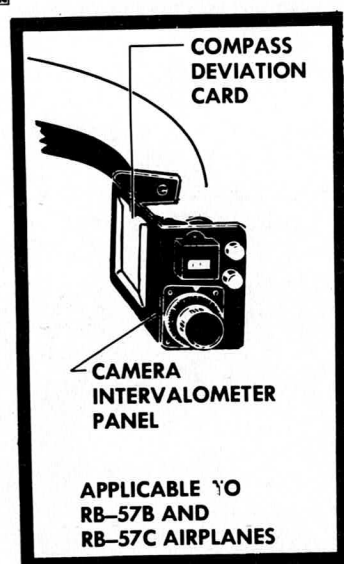
Typical view showing one of 100 B-57s that ended their existence at AMARC following fully successful careers. While sad in appearance, these airplanes survived others for over 20-years that either crashed or were combat losses. This B-57C not only flew combat missions with the 8th Bomb Squadron, but as a dual control airplane, also transitioned new pilots into the Canberra. Seen here in retirement before being scrapped, it gave up many of its parts to keep other B-57s flying.

TYPICAL PILOT'S STATION FORWARD VIEW (AFTER RADIO SET AN/ARN-21 MODIFICATION)



1. INDICATED AIRSPEED WARNING NAMEPLATE
2. CLOCK
3. HORIZONTAL STABILIZER EMERGENCY SWITCH
4. DIRECTIONAL INDICATOR
5. GUNSIGHT (REMOVED FROM RB-57B AND RB-57C AIRPLANES)
6. ATTITUDE INDICATOR
7. BOMB RELEASED INDICATOR LIGHTS
8. STANDBY COMPASS
9. ENGINE TACHOMETERS
10. COMPASS DEVIATION CARD
11. BOMB RELEASED INDICATOR LIGHT
12. POSITION SETTING UNIT
13. ENGINE EXHAUST TEMPERATURE INDICATORS
14. FUEL FLOW INDICATORS

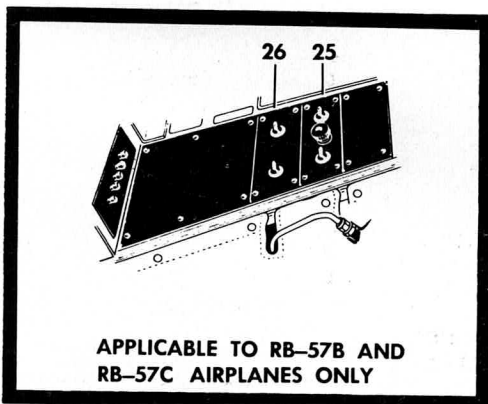
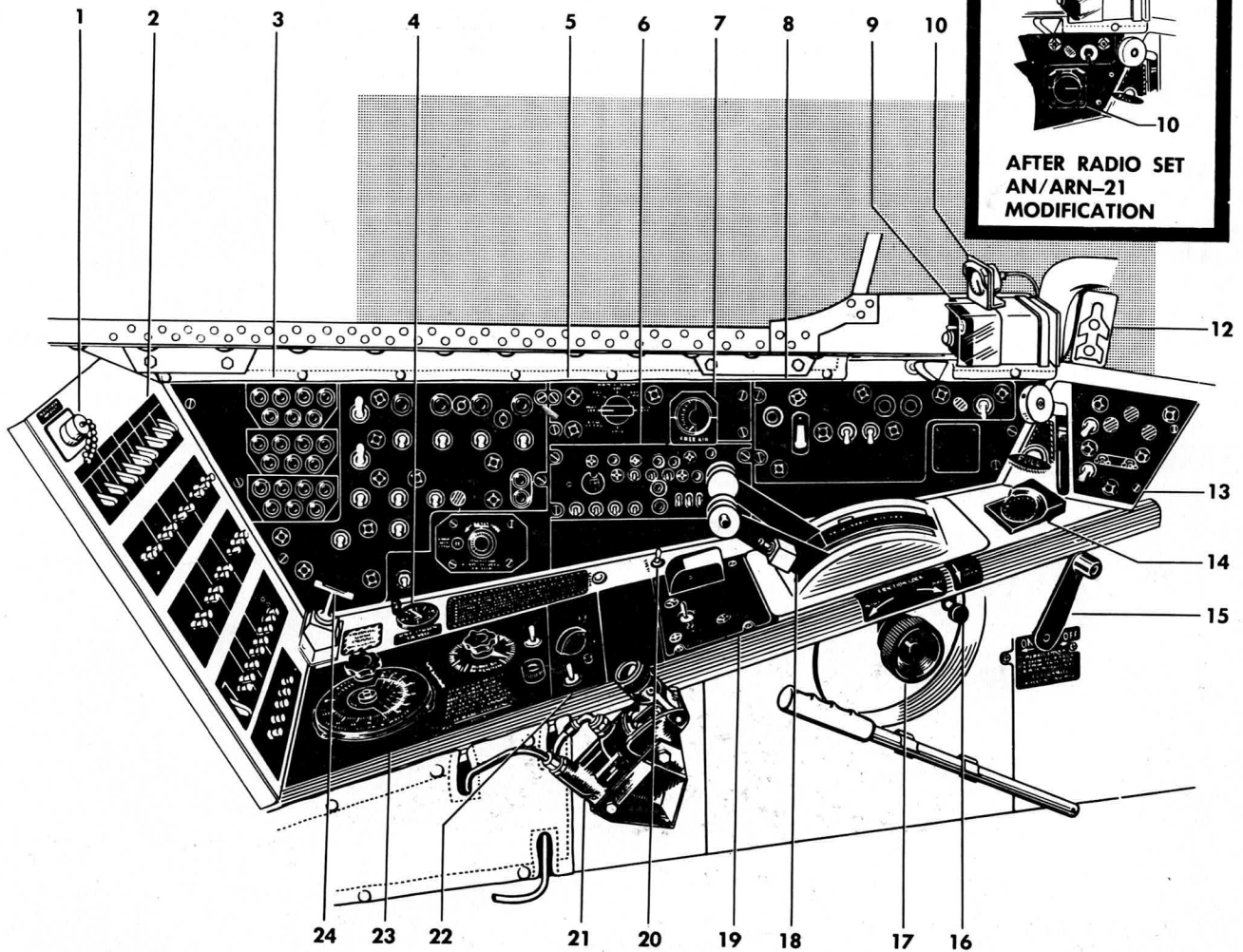
15. ENGINE OIL PRESSURE INDICATORS
16. FUEL CONTROL PANEL
17. COURSE INDICATOR
18. FUEL QUANTITY INDICATOR
19. COURSE SETTING INDICATOR LIGHT (B-57C ONLY)
20. FUEL QUANTITY TEST SWITCH
21. RANGE INDICATOR
22. LABS INSTRUMENT
23. TURN AND SLIP INDICATOR
24. VERTICAL VELOCITY INDICATOR
25. RADIO MAGNETIC INDICATOR
26. ALTIMETER
27. FLIGHT COMMAND INDICATOR
28. MACH NUMBER INDICATOR
29. CANOPY ACTUATING SWITCH
30. ACCELEROMETER
31. AN/APS-54 WARNING INDICATOR
32. POSITION DEVIATION INDICATOR
33. AIRSPEED INDICATOR
34. FIRE EXTINGUISHER PANEL



1-50880A

Figure 1-29

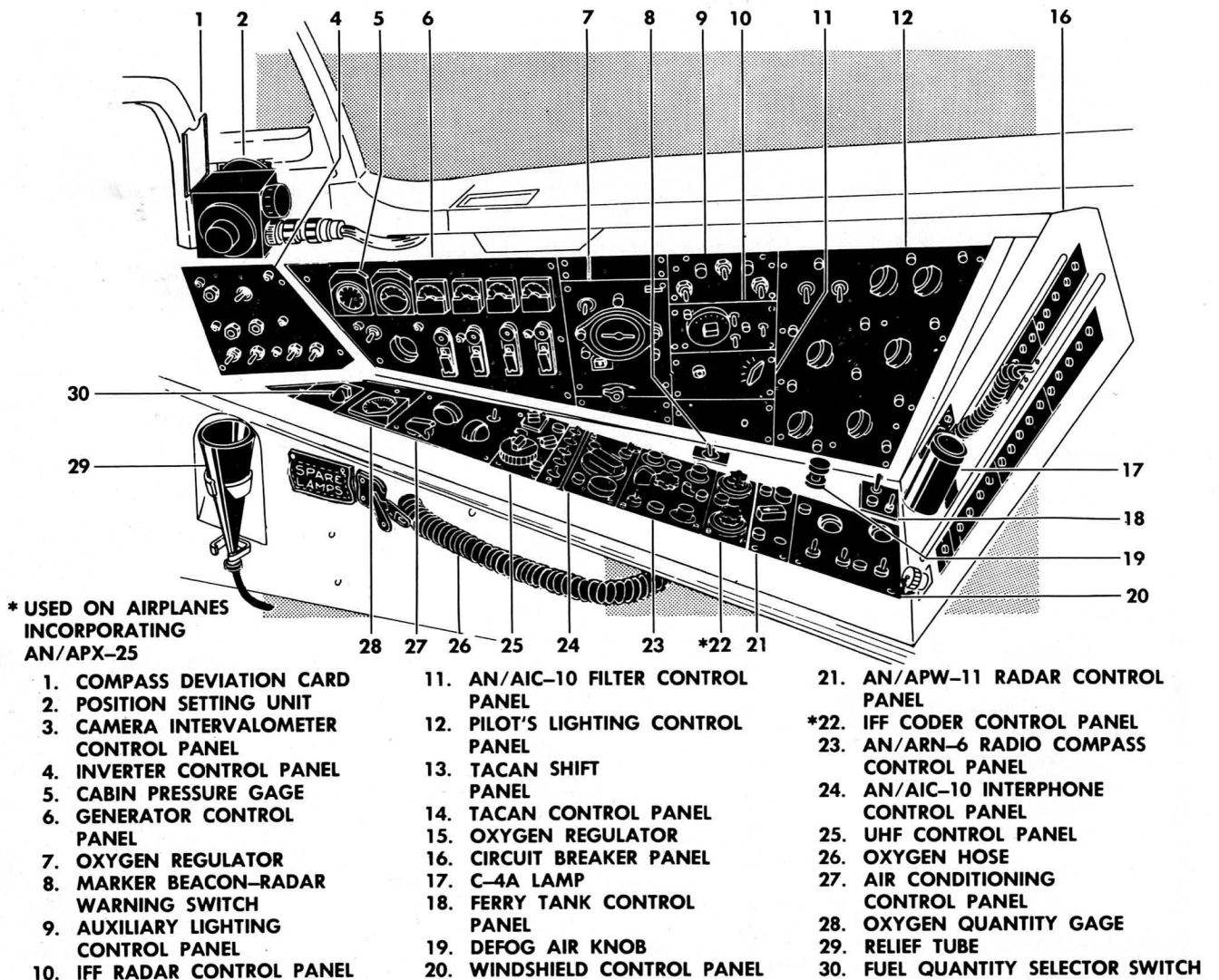
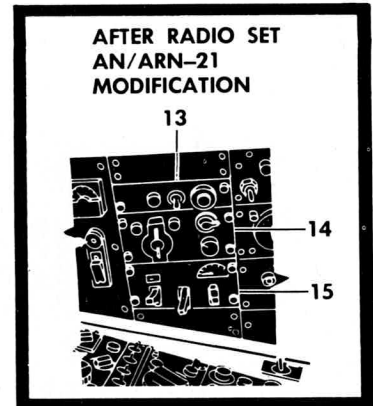
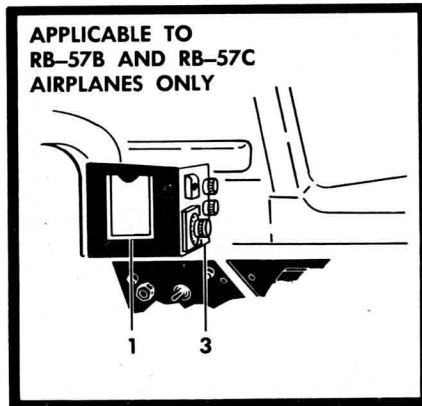
TYPICAL PILOT'S LEFT CONSOLE



1. T-23 POWER RECEPTACLE
2. CIRCUIT BREAKER PANEL
3. ARMAMENT CONTROL PANEL
4. HYDRAULIC SYSTEM PRESSURE GAGE
5. SELECT ARMAMENT CONTROL PANEL
6. T-145 CONTROL PANEL
7. FREE AIR TEMPERATURE GAGE
8. PILOT'S LEFT MAIN CONTROL PANEL
9. CANOPY ACTUATING SWITCH
10. STABILIZER POSITION INDICATOR
11. ACCELEROMETER
12. RADAR WARNING INDICATOR AN/APS-54
13. LANDING GEAR CONTROL PANEL
14. BRAKE PRESSURE GAGE
15. PARKING BRAKE
16. WARNING HORN RELEASE
17. THROTTLE FRICTION KNOB
18. THROTTLES
19. FLAP AND TRIM CONTROL PANEL
20. J-2 COMPASS CONTROLS
21. HYDRAULIC HAND PUMP
22. LABS CONTROL PANEL
23. BOMB RELEASE INTERVAL CONTROL
24. EMERGENCY CANOPY RELEASE
25. CAMERA CONTROL PANEL
26. CAMERA VACUUM AND HEATER BLANKET CONTROL PANEL

Figure 1-30

TYPICAL PILOT'S RIGHT CONSOLE



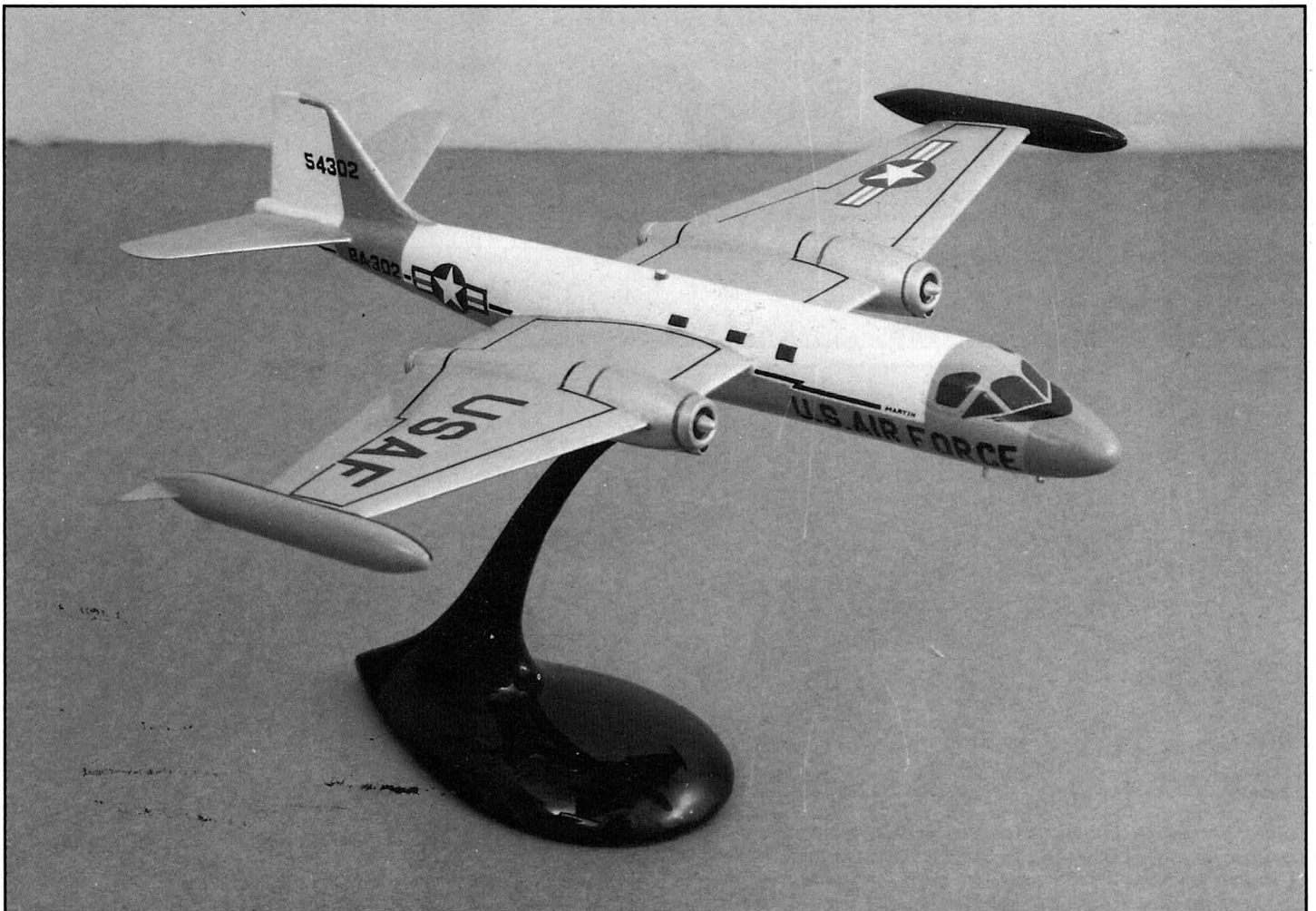
1-12143D

Figure 1-31

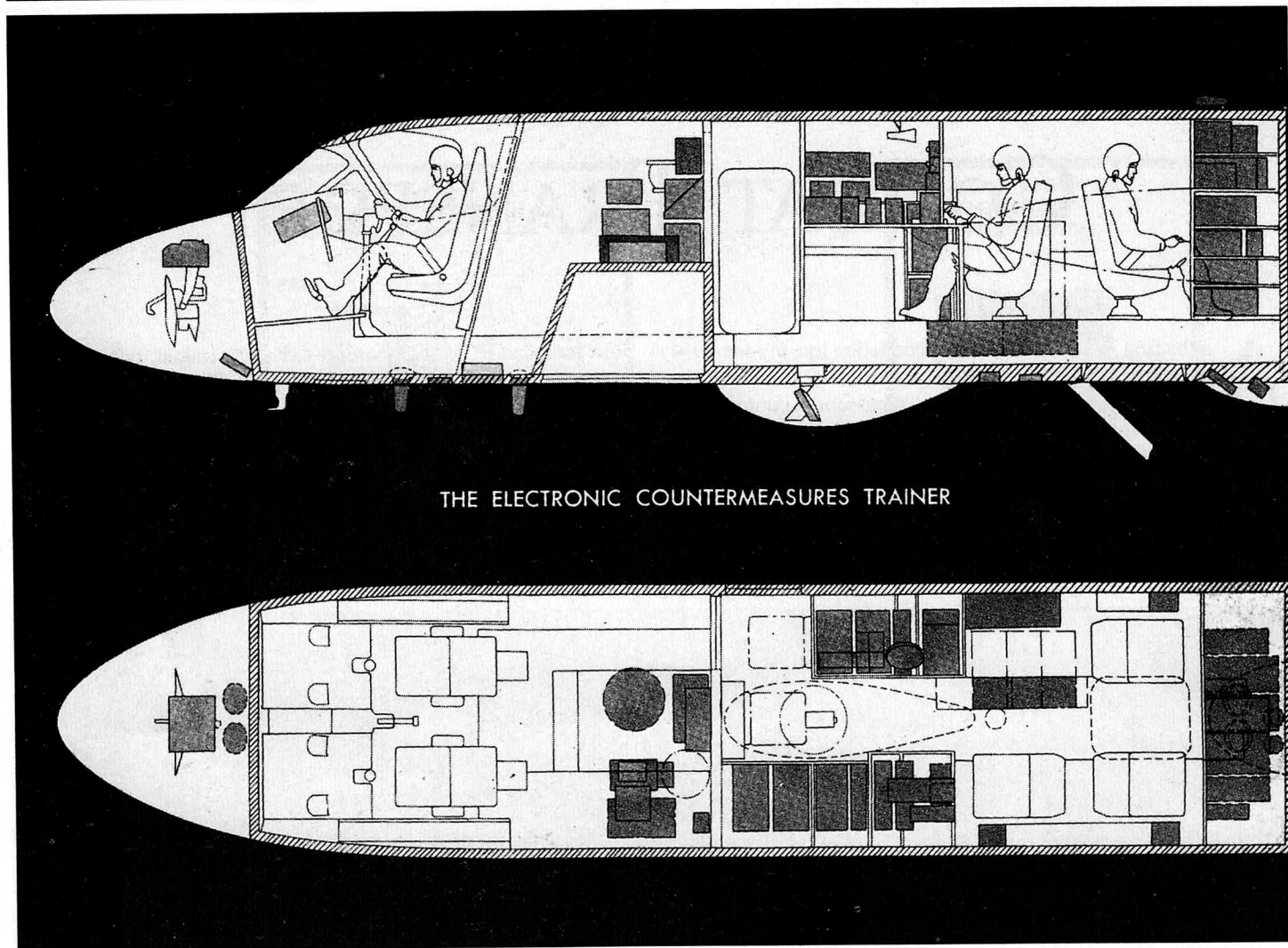
COMBAT TRANSPORT

As the first B-57s came off the production line in June 1954, Martin proposed to the Air Force a *Utility Courier* based on the basic Canberra airframe. A passenger compartment seating 6-11 extended forward from the main wing spar and added 24in to the length of the nose. Larger capacity center line wing tip tanks of 600gal each, fuselage tanks behind the wing spar of 915gal and additional tanks in the wings totalled 3,580gal (23,270lb), 140gal (910lb) more than a B-57B with ferry tank. Cabin pressurization of 8,000ft would be maintained to 40,000ft. Other interior configura-

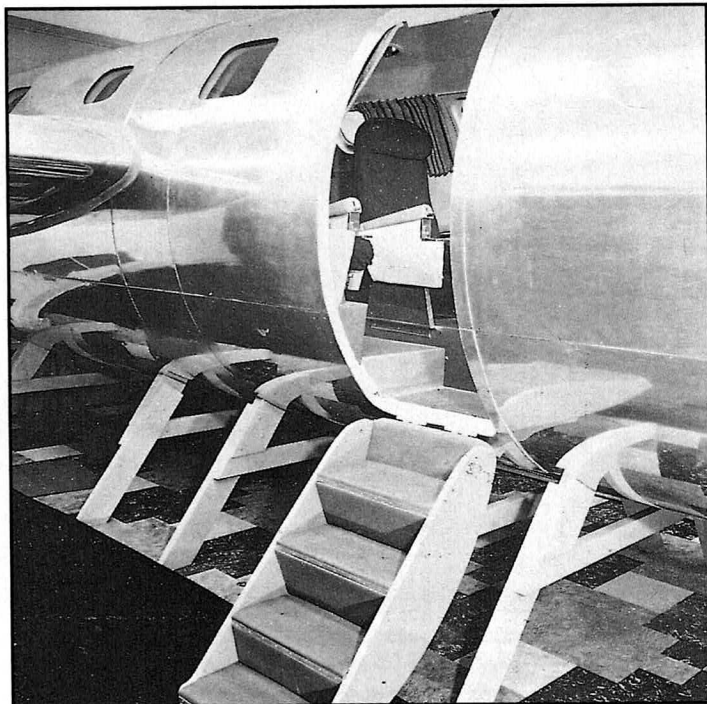
tions included ECM, bombardier-navigator trainer, photographic-reconnaissance trainer, cargo courier and facilities for litter patients. This proposal did not develop beyond the mock-up stage. Ahead of its time as we now know corporate jets, it was offered to the wrong market; military and not civilian. It would have been a large and expensive airplane in many aspects for the few passenger seats it could provide, but for those that ventured into this field, it would have been the first in the corporate class of jet transport.



Side-by-side pilot seating in a modified cockpit arrangement was part of the transport version proposal. Engines could have been upgraded from the standard J65s to J79s. The 600 US gallon centerline tip tanks shown here were seriously considered for the B-57B but never adopted.



Above: Interior of this mock-up has four seats and two bunks. When configured with bench seats facing aisle, 11 passengers could be carried. A lavatory was opposite entrance doorway, and ample baggage space was in aft fuselage. Headroom in aisle measured 5ft 8in. (Martin)



Right: This mock-up of the B-57 transport shows cabin access just forward of the starboard wing. Movement of SAC alert crews from one site to another was big selling feature from Martin at the time. (Martin)

APPENDICES

APPENDIX 1

PERFORMANCE COMPARISON

Model	B-26	AJ-1	B-45	Canberra	B-51	A2J-1
Gross Weight lbs.	36,300	51,023	95,960	48,421	64,154	56,000
Crew No.	3	3	3	2	2	3
Engine Model	R-2800-79	R-2800-447 J33-A-23	YJ65-W-1	YJ65-W-1	YJ65-W-1	XT40-A-6
Engine Rating	2000 BHP	2300 BHP 4600lb.	7220lb.	7220lb.	7220lb.	5035 BHP
Fuel Weight lb (Internal Tanks Only*)	6,978*	10,902*	36,100	17,973	24,700*	15,720*
T/O Ground Roll ft.	4,820	1,357	3,850	2,880	4,980	1,200
T/O Over 50' Obstacle ft.	5,710	2,400	5,300	3,600	6,350	1,560
Wing Loading lb/ft ²	66.7	59.0	81.4	50.4	116.5	65.8
Load Factor	3.67	4.9	3.88	5.20	6.3	2.67
Combat Radius nm	800	800	845	990	800	995
Cruising Speed kts	199	199	400	412	458	363
Maximum Speed at Altitude kts	319	374	520	550	620	420
Max. Speed at Combat	319	374	472*	434	595	400
Altitude beginning at S.L. (Limited by Gusts*)						
Combat Altitude	S.L.	S.L.	S.L.	S.L.	S.L.	S.L.
Service Ceiling ft.	27,730	41,000	47,700	51,400	47,800	44,300
Radius of Turn & Speed at 3.5G	1000'-200kn	1065'-172kn	1150'-208kn	950'-175kn	2670'-297kn	See L/G
Approach Speed (120% Stall) kts	97	102	115	88	121	94
Stalling Speed at Landing Wt. kts.	81	85	88	73	105	79
Footprint Pressure psi	Main 69 Nose 70	Main 101 Nose 118	Main 167 Nose 160	Main 100 Nose 74	Front 65 Rear 78	Main 119* Nose 120
Landing Weight lb.	26,380	35,062	53,935	29,241	37,168	38,852
Landing Distance, Ground Roll ft. (Wheel brakes only)	2,000	1,742	2,860	1,300 max. brake	2,665	
Mission Time	8.22	8.32	4.17	4.98	3.65	5.74
Reserve at Long Range Speed	108	160	323	200	264	298
Target Action (minutes at long range at altitude)	44	50	30	38	47	24
Takeoff Rate of Climb fpm	1,300	2,530	7,750	5,700	6,700	4,250

APPENDIX 2

FACTS & FIGURES

Designer and Manufacturer: Basic design by English Electric Co, and The Glenn L. Martin Co, produced the American models.

Wingspan: 64ft.

Length: 65ft 6in.

Wing area: 960sq ft.

Weight: Empty weight about 27,000lb.

Fueled for takeoff about 45,000lb. Maximum weight 55,000lb.

Max speed: 444kts IAS with tip tanks 513kts IAS without tip tanks but not to exceed .78 Mach with tip tanks; .82 to .85 Mach is buffet area.

Normal cruise: About 420kts TAS, or .74 Mach.

Service ceiling: Above 53,000ft.

Propulsion: Two J65-W-5 or J65-BW-5 engines, each 7,220lb st at sea level.

Armament: Eight M3 .50cal machine guns with 300 rounds up to 52-1575. Four M39 20mm cannon with 290 rounds each from 52-1576 on.

Example of Stores Capability: *Internal* Four 1,000lb bombs, nine 500lb bombs, 21 260lb bombs, or two Mk 9 1,500lb Special Weapons.

On wing pylons Four 750lb stores or less.

Rockets Eight 5in HVAR, or 28 2.75in FFAR. Double if wing bomb pylons are utilized.

Ferry Range: More than 2,000nm with reserves using ferry tank, zero-wind.

Fuel (usable):

		<i>U.S. Gal</i>	<i>Pounds</i>
Fus Main	1	1,010	6,565
Fus Aux	1	662	4,303
Wg Outboard	2	580	3,770
Wg Drop	2	<u>640</u>	<u>4,160</u>
Total		2,892	18,798
Ferry tank		548	3,562

APPENDIX 3

PRODUCTION

Model	Serial Numbers	Quantity
<i>Contract AF33(038)-22617</i>		
Canberra	51-17352 (B2 WD940)	(1)
Canberra	51-17387 (B2 WD932)	(1)
B-57A	52-1418 to 52-1425	8
RB-57A	52-1426 to 52-1492	67
B-57B	52-1493 to 52-1594	102
<i>Contract AF33(600)-22208</i>		
B-57C	53-3825 to 53-3858	34
B-57B	53-3859 to 53-3935	77
B-57C	53-3936	1
B-57B	53-3937 to 53-3939	3
B-57C	53-3940	1
B-57B	53-3941 to 53-3943	3
B-57C	53-3944	1
B-57B	53-3945 to 53-3947	3
B-57C	53-3948	1
B-57B	53-3949 to 53-3962	14
<i>Contract AF33(600)-25825</i>		
RB-57D	53-3963 to 53-3982	20
<i>Contract AF33(600)-29645</i>		
B-57E	55-4234 to 55-4301	68

Total: 403

APPENDIX 4

RB-57D VARIATIONS

Group	Serial	Model	IFR*	Crew
A	53-3977 to 53-3982	RB-57D	No	1
B	53-3970 to 53-3976	RB-57D	Yes	1
C	53-3964 to 53-3969	RB-57D-2	Yes	2
	53-3963	RB-57D-1	Yes	1

*In-Flight Refuelling

APPENDIX 5

GENERAL DYNAMICS RB-57F PRODUCTION RECORD

Serial	Constructed from	Model
63-13286	52-1559	B-57B
63-13287	53-3864	B-57B
63-13288	52-1539	B-57B
63-13289	52-1527	B-57B
63-13290	52-1562	B-57B
63-13291	52-1574	B-57B
63-13292	52-1594	B-57B
63-13293	52-1583	B-57B
63-13294	53-3935	B-57B
63-13295	53-3918	B-57B
63-13296	53-3897	B-57B
63-13297	53-3900	B-57B
63-13298	52-1536	B-57B
63-13299	52-1573	B-57B
63-13300	52-1427	RB-57A
63-13301	52-1432	RB-57A
63-13302	52-1433	RB-57A
63-13500	53-3972	RB-57D
63-13501	53-3975	RB-57D
63-13502	53-3970	RB-57D
63-13503	53-3974	RB-57D

APPENDIX 6

MARTIN B-57G CONVERSIONS

52-1578	53-3886
52-1580	53-3889
52-1582	53-3898
52-1588	53-3905
53-3860	53-3906
53-3865	53-3928
53-3877	53-3929
53-3878	53-3931

APPENDIX 7

MARTIN B-57s RECONFIGURED FOR COMBAT AT MARTIN FACTORY, LATE 1965

B-57B 52-2498	B-57E 55-4238*
52-1499	55-4248
52-1510	55-4251*
52-1550	55-4259*
52-1590	55-4265
	55-4268
B-57C 53-3827	55-4269
53-3831*	55-4270
53-3838	55-4274*
	55-4282
	55-4284
	55-4285*

*Indicates that these were not deployed to SEA

MARTIN B-57 CANBERRA • THE COMPLETE RECORD

USAF Sorties in South Vietnam only

	1967		1968		1969	
	Total sorties	Combat sorties	Total sorties	Combat sorties	Total sorties	Combat sorties
A-1	3,712	3,000	4,042	3,166	2,621	2,055
A-26	0	0	0	0	0	0
A-37	0	0	15,033	14,447	8,761	8,305
B-57	5,818	5,570	2,064	1,605	526	421
F-4	20,284	16,392	25,381	23,134	21,965	19,185
F-100	83,782	80,398	92,612	88,250	57,561	52,699
F-105	0	0	2,072	1,811	0	0
RB-57	1,153	1,017	1,073	1,021	1,110	1,058
RF-4	8,540	7,996	9,173	8,719	7,221	7,039
RF-101	2,937	2,650	3,762	3,498	2,942	2,637

USAF Aircraft Loss Rate in SEA

	In South Vietnam 1 Jan 65-31 Oct 69			In North Vietnam 7 Feb 65-31 Oct 69			In Laos 18 May 64-31 Oct 69			*Average Rate
	Losses	Sorties	*Rate	Losses	Sorties	*Rate	Losses	Sorties	*Rate	
A-1	28	26,539	10.6	18	2,612	68.9	62	39,012	15.8	15.8
A-26	0	0	—	0	75	0	10	9,567	10.5	10.4
A-37	5	27,527	1.8	0	0	—	0	978	0	1.8
B-57	15	15,488	9.7	5	3,089	16.2	11	13,225	8.3	9.7
F-4	43	72,789	5.9	135	88,973	15.2	46	93,892	4.9	8.8
F-100	127	279,398	4.5	16	3,677	43.5	20	19,609	10.2	5.4
F-105	1	2,056	4.9	274	76,858	35.6	41	54,620	7.5	23.7
RB-57	2	5,581	3.6	0	52	0	0	119	0	3.5
RF-4	6	29,004	2.1	32	16,472	19.5	12	21,088	5.7	7.5
RF-101	2	14,154	1.4	27	9,726	27.8	3	8,701	3.4	9.8

*Loss rate per 10,000 sorties

APPENDIX 11

MARTIN B-57 UNIT ASSIGNMENTS

Unit

54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78

17th DSES, Malmstrom AFB, MT
5040th RES, Alaska
5041st TOS, Alaska

Support Units

Edwards AFB, Calif
Eglin APG, Florida
Wright (A)DC, Ohio
4950th Test Wing, W-P, Ohio
6550th OS, Patrick AFB
AF Missile Range, Patrick AFB
AF Missile DC, NM
RADC, Griffiss AFB, NY
ADC HQ, Peterson Field, Col
1001st OG, Andrews AFB
FAA Flight Check
US Dept of Commerce (Wx)
NASA, Houston, Texas

Air National Guard Units

172TRS, 110TRG, Michigan ANG
162TRS, 123TRG, Kentucky ANG
149TRS, 106TRW, Virginia ANG
192TRS, 152TRG, Nevada ANG
134DSES, 158DSEG, Vermont ANG
154TRS, 189TRG, Arkansas ANG
117TRS, 190TRG, Kansas ANG
117DSES, 190DSEG, Kansas ANG

Weather Reconnaissance Squadrons (Standard Wing B-57s only)

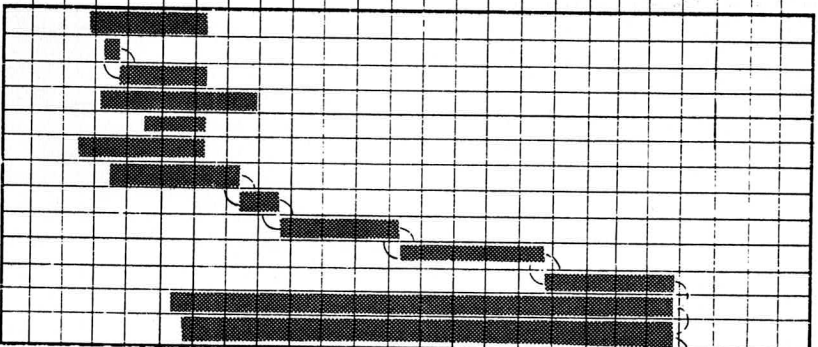
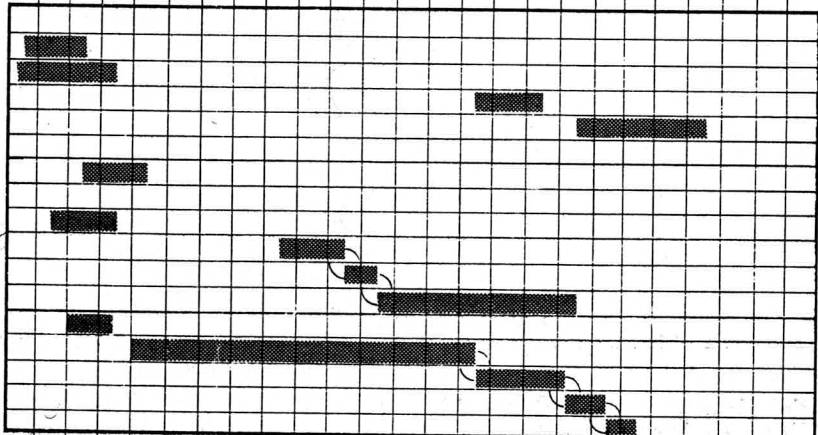
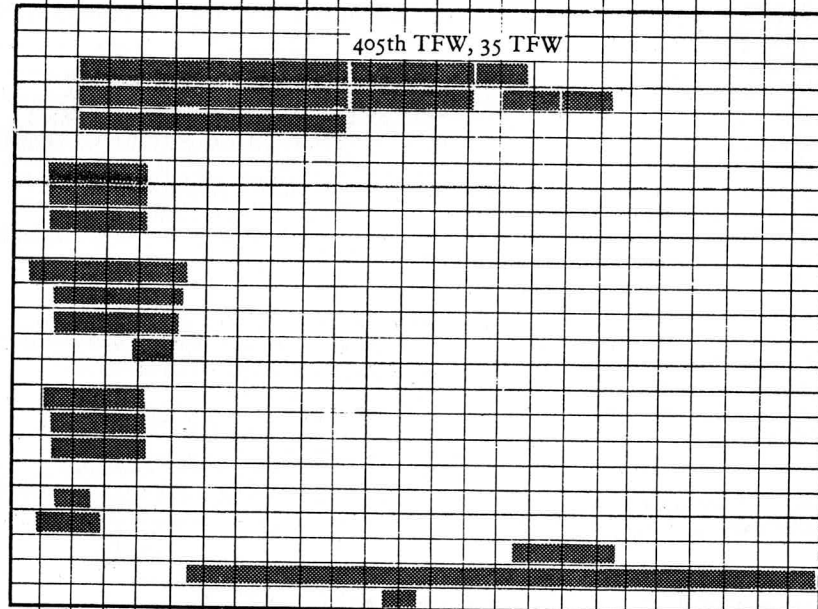
4926th Test Sqn, Kirtland AFB
1211th Test Sqn, Kirtland AFB
58th WRS, Kirtland AFB, NM
57th WRS, Avalon, Australia
55th WRS, McClelland AFB, CA
55th WRS, Det 1, Eielson, AK
54th WRS, Guam Island

Users of RB-57Ds

4028th SRS, Turner AFB, GA
4028th SRS, Laughlin AFB, TX
4028th SRS, Det, Yokota AB
4028th SRS, Det, Rhine Main
7407th Support Sqn, Rhine Main
1211th Test Sqn, Kirtland AFB
58th WRS, Kirtland AFB, NM
4677th DSES, Hill AFB, Utah
Wright-Patterson ASD, Ohio
Nationalist Chinese Air Force

Users of RB-57Fs

7407th Support Sqn, Rhine Main
58th WRS, Kirtland AFB, NM
58th WRS, Det East Sale, Australia
58th WRS, Det Mendoza, Argentina
58th WRS, Det Eielson AFB, Alaska
58th WRS, Det Albrook AFB, Panama
6091st RS, Yokota AB, Japan
56th WRS, Yokota AB, Japan
9th WRG/W Det 3, Yokota AB, J
NASA, Houston, Texas



[illegible]

MARTIN B-57 CANBERRA • THE COMPLETE RECORD

Type	Ship No.	AF Serial	Final Comp.	Flown Away	Remarks
B-57B	258	53-3912	10-5-55	5-18-56	Unk.
B-57B	259	53-3913	10-10-55	11-17-55	90BS-L, Clark PI 4-17-64, RVN, Gr-Ex 5-16-65.
B-57B	260	53-3914	10-11-55	12-10-55	90BS-S, Clark PI 4-10-64, RVN, Mo-Ak 11-1-64.
B-57B	262	53-3915	10-14-55	11-22-55	8BS-J, Clark PI 4-17-64, Gr-Ex 5-16-65.
B-57B	263	53-3916	10-18-55	2-28-56	3 BG, Cx ferry flight 5-12-57. 0 fat.
B-57B	264	53-3917	10-19-55	6-25-56	Returned for Repair Fort Worth 7-19-56.
B-57B	266	53-3918	10-21-55	1-12-56	13BS-D, 1-11-64 to US, RB-57F 63-13295.
B-57B	267	53-3919	10-26-55	2-20-56	90BS-Z, Clark PI 4-17-64, RVN, C-Loss 8-6-65. 0 fat.
B-57B	268	53-3920	10-27-55	7-19-56	NV ANG, RVN 4-65, 8-BS C-Loss 10-20-65. 0 fat.
B-57B	270	53-3921	10-31-55	7-19-56	Cx Stewart 10-1-59.
B-57B	271	53-3922	11-3-55	3-5-56	Unk.
B-57B	272	53-3923	11-7-55	7-19-56	345 GB, Cx A.P. Hill 5-14-57. 2 fat.
B-57B	274	53-3924	11-9-55	10-1-56	13BS-X, Clark PI 4-20-64, RVN, Mo-Ex 11-1-64.
B-57B	275	53-3925	11-11-55	1-6-56	13BS-G, Clark PI 5-11-64, Cx 4-14-65. 0 fat.
B-57B	276	53-3926	11-15-55	2-20-56	8BS-A, Clark PI 4-18-64, RVN, Cx 4-14-65, 0 fat.
B-57B	278	53-3927	11-17-55	7-18-56	345 BG, Cx 12-14-57 (lost bomb bay door). 0 fat.
B-57B	279	53-3928	11-21-55	9-5-56	Unk, SEA Conv c3-66, Clark PI 4-17-66, RVN, VNAF, B-57G 7-15-68, MacDill c69, KS ANG 72, MASDC 74 (B).
B-57B	280	53-3929	11-22-55	7-21-56	Unk, NV/KY ANG, 8-BS 5-65, VNAF, B-57G 69, Ubon 9-70 (rt wg from 282), KS ANG 72, MASDC 74 (B).
B-57B	282	53-3930	11-29-55	7-21-56	461 BG Mobile-C 'Q', 13BS-Q, Clark PI 4-10-64, RVN, Gr-Ex 5-16-65.
B-57B	283	53-3931	12-5-55	3-2-56	8BS-W/Q, 8 BS, Clark PI 4-9-64, RVN, B-57G 69, Ubon 9-70, Cx with O-2A at night over Laos 12-12-70. 0 fat.
B-57B	284	53-3932	12-9-55	3-2-56	13BS-L, Cx Japan 8-24-59
B-57B	286	53-3933	12-14-55	4-9-56	Unk.
B-57B	287	53-3934	12-16-55	3-21-56	461 BG Mobile-C 'J' 57.
B-57B	288	53-3935	12-21-55	3-30-56	8 BS-F, to US 1-11-64, RB-57F 63-13294.
B-57C	289	53-3936	8-31-55	12-4-55	345 TBG, Cx Langley 4-30-57 mid-air. 0/1 fat.
B-57B	290	53-3937	12-28-55	3-30-56	345 BG, 8/13-T, Clark PI 4-10-64, RVN, Gr-Ex 5-16-65.
B-57B	291	53-3938	12-30-55	7-19-56	Unk, Pakistan AF 1959.
B-57B	292	53-3939	1-5-56	3-31-56	Unk, Palmdale c12-61, Pakistan AF 1959.
B-57C	293	53-3940	9-8-55	1-3-57	Unk, KY ANG, 8-BS Clark PI 1-1-65, MacDill 12-68, KY ANG c12-72, MASDC (C).
B-57B	294	53-3941	1-6-56	4-9-56	Unk, Pakistan AF 1959.
B-57B	295	53-3942	1-11-56	3-31-56	Unk, Pakistan AF 1959.
B-57B	296	53-3943	12-16-55	3-31-56	461 BG Mobile-C 'L' 57, Pakistan AF 1959.
B-57C	297	53-3944	9-15-55	3-30-56	Unk, Star Flight Andrews 58-62, Wx conv, 58 WRS c9-68, MASDC c12-72.
B-57B	298	53-3945	1-20-56	3-31-56	Unk, Pakistan AF 1959.
B-57B	299	53-3946	1-23-56	4-14-56	Unk, Pakistan AF 1959.
B-57B	300	53-3947	1-26-56	4-25-56	Unk, Pakistan AF 1959.
B-57C	301	53-3948	9-27-55	8-14-56	Turner AFB, KS ANG c12-61. (was sched for Pakistan AF)
B-57B	302	53-3949	1-31-56	4-20-56	Unk, Pakistan AF 1959.
B-57B	303	53-3950	2-1-56	4-19-56	Unk, Pakistan AF 1959.
B-57B	304	53-3951	2-7-56	4-20-56	461 BG Mobile-C 'K' 57, Pakistan AF 1959.
B-57B	305	53-3952	2-8-56	4-19-56	Unk, Pakistan AF 1959.
B-57B	306	53-3953	2-14-56	5-8-56	345 BG, Cx 3-21-60.
B-57B	307	53-3954	2-23-56	7-21-56	461 Mobile-C 'W', Pakistan AF 1959.
B-57B	308	53-3955	2-24-56	5-8-56	Unk, Pakistan AF 1959.
B-57B	309	53-3956	3-2-56	4-18-56	Unk, Pakistan AF 1959.
B-57B	310	53-3957	3-12-56	4-25-56	Unk, Pakistan AF 1959.
B-57B	311	53-3958	3-13-56	5-8-56	Unk, Pakistan AF 1959.
B-57B	312	53-3959	3-16-56	7-21-56	Unk, Pakistan AF 1959.
B-57B	313	53-3960	3-26-56	12-7-56	345 BG, Pakistan AF 1959.
B-57B	314	53-3961		10-1-56	Unk, Pakistan AF 1959.
B-57B	315	53-3962	4-31-56	6-5-56	345 BG, Cx Langley 6-25-58
RB-57D	014	53-3963	10-25-56	6-13-57	4028 SRS, MASDC.
RB-57D	015	53-3964	10-18-56	6-6-57	W-ADC, 4677 DSES c9-68, MASDC c72 (A).
RB-57D	016	53-3965	10-11-56	3-8-57	4028 SRS, MASDC, 4677 DSES c9-68, MASDC c72 (A).
RB-57D	017	53-3966	11-2-56	7-15-57	4028 SRS, 4677 DSES c9-68, MASDC c72.
RB-57D	018	53-3967	12-10-56	2-10-57	4028 SRS, MASDC, 4677 DSES c9-68, MASDC c72 (A).
RB-57D	019	53-3968	12-19-56	3-13-57	4028 SRS, MASDC, 4677 DSES c9-68, MASDC c72.
RB-57D	020	53-3969	2-9-57	3-30-57	4028 SRS, MASDC, 4677 DSES c9-68, MASDC c72 (A).
RB-57D	007	53-3970	3-2-56	8-26-56	4028 SRS, MASDC, RB-57F 63-13502.
RB-57D	008	53-3971	4-6-56	6-15-56	Unk, MASDC c61, used as spares.
RB-57D	009	53-3972	3-5-56	6-1-56	4028 SRS, to RB-57F 63-13500.
RB-57D	010	53-3973	5-4-56	5-30-56	Unk, W-ADC, Cx 2-19-64 wings failed near Dayton, Ohio.

Type	Ship No.	AF Serial	Final Comp.	Flown Away	Remarks
RB-57D	011	53-3974	5-14-56	6-16-56	Unk, to RB-57F 63-13503.
RB-57D	012	53-3975	6-15-56	6-30-56	Unk, to RB-57F 63-13501.
RB-57D	013	53-3976	6-20-56	7-17-56	Unk.
RB-57D	001	53-3977	10-18-55	6-23-56	FAC 6-23 after mod, 4677 DSES c9-68, MASDC (A).
RB-57D	002	53-3978	11-18-55	2-8-56	Bailed J. Jones Cx 10-8-59.
RB-57D	003	53-3979	12-24-55	10-5-56	4028 SRS Cx Del Rio 10-2-58.
RB-57D	004	53-3980	12-28-55	6-23-56	FAC 6-23 after mod. (Martin entry), 4677 DSES c9-68, MASDC (A).
RB-57D	005	53-3981	1-13-56	5-9-56	Unk.
RB-57D	006	53-3982	2-24-56	4-29-56	Unk, 4677 DSES c9-68, Pima Air Museum Tucson, Arizona c93.
B-57E	336	55-4234	2-28-56	8-31-56	Bailed acc. 8-30-56.
B-57E	337	55-4235	3-23-56	6-9-56	7272 TTG, Eglin APG c9-68, MASDC c72 (A).
B-57E	338	55-4236	3-27-56	9-14-56	Unk.
B-57E	339	55-4237	4-18-56	9-14-56	Unk, Patricia Lynn 12-64, MASDC c72 (A).
B-57E	340	55-4238	4-24-56	10-1-56	Unk, Flagstaff Andrews 58-62 auto pilot, SEA Conv 65, 4677 DSES c9-68, Puerto Rico Educ/Scient Foundation (at Tucson, AZ c94).
B-57E	341	55-4239	4-27-56	9-14-56	Unk, MI ANG c9-68, 4713 DSES c12-72, MASDC c-76 (F).
B-57E	342	55-4240	5-1-56	9-14-56	Unk, 4713 DSES c9-68/c7-27-77, MASDC (F).
B-57E	343	55-4241	5-7-56	9-28-56	Unk, 4677 DSES c62, 4713 DSES c9-68/c7-27-77, MASDC (F).
B-57E	344	55-4242	5-9-56	10-5-56	Unk, 4677 DSES c9-68/c7-27-77, MASDC (F).
B-57E	345	55-4243	5-11-56	9-21-56	Unk, Star Flight Andrews 56-61, 58 WRS 61, Patricia Lynn 5-6-63, C-Loss 8-5-65 0 fat.
B-57E	346	55-4244	5-15-56	9-21-56	Unk, Eglin (AFSC) c9-68, Strategic Aerospace Museum Bellevue Neb c93.
B-57E	347	55-4245	5-17-56	8-30-56	Unk, Star Flight 58-62, 58 WRS 62, Patricia Lynn 5-6-63, MASDC c6-71 (A).
B-57E	348	55-4246	5-21-56	8-31-56	Unk.
B-57E	349	55-4247	5-23-56	9-14-56	5040 RES/5041 TOS Alaska, 21 Comp Wg AK, Cx 6-13-69 F-102.
B-57E	350	55-4248	5-28-56	9-14-56	AR ANG, SEA Conv 65, 8-BS Clark PI 3-17-66, MacDill 11-1-69, MASDC c72(A).
B-57E	351	55-4249	5-30-56	9-28-56	Unk, Patricia Lynn 12-64, MASDC 6-71 (D).
B-57E	352	55-4250	6-4-56	9-28-56	Unk, MASDC c72.
B-57E	353	55-4251	6-5-56	9-14-56	Unk, Star Flight Andrews 58-62, 58 WRS 62, SEA Conv 65, 4713 DSES c9-68, MASDC c2-79 (E).
B-57E	354	55-4252	6-7-56	9-28-56	Unk.
B-57E	355	55-4253	6-11-56	9-28-56	Unk, 4713 DSES c9-68-c7-77, AMARC c93.
B-57E	356	55-4254	6-13-56	10-3-56	5040 RES/5041 TOS Alaska, 21 Comp Wg AK, 4677 DSES 7-76, Cx 7-16-79 Salt Lake City en route MASDC, 0 fat.
B-57E	357	55-4255	6-15-56	10-3-56	Unk.
B-57E	358	55-4256	6-20-56	10-11-56	Unk.
B-57E	359	55-4257	6-22-56	2-5-57	Unk, Flagstaff, Convair c9-68, Patricia Lynn c10-68, 4677 DSES 6-71, MASDC c79 (E).
B-57E	360	55-4258	6-27-56	10-24-56	Edwards (AFSC) 60s, NB-57E, MASDC (A).
B-57E	361	55-4259	7-11-56	10-12-56	Unk, Star Flight Andrews 58-62, 58 WRS 61, SEA Conv 65, 4677 DSES c9-68, MASDC 7-79 (E).
B-57E	362	55-4260	7-9-56	10-12-56	Unk, 4713 DSES c9-68, MASDC 7-79.
B-57E	363	55-4261	7-17-56	10-13-56	Vincent AFB, Cx Yuma 6-3-57. 0-fat.
B-57E	364	55-4262	7-20-56	11-6-56	Edwards Test Plt Scl c9-68, MASDC c12-72 (A).
B-57E	365	55-4263	8-7-56	10-8-56	Unk, 4677 DSES, MASDC (E).
B-57E	366	55-4264	8-13-56	10-15-56	7407 CSW c8-64, Patricia Lynn 11-22-65, C-loss 25 Oct 68 0-fat.
B-57E	367	55-4265	8-17-56	10-17-56	7272 AGG c1959, SEA Conv 65, 8-BS Clark PI 3-18-66, (2 wheels up ldg 1-67, 6-67) MacDill 11-1-69, 4677 c12-72, MASDC c79 (F).
B-57E	368	55-4266	8-25-56	10-8-56	Unk, 4713 DSES c9-68, MASDC c79 (F).
B-57E	369	55-4267	10-19-56	11-29-56	Edwards (AFSC).
B-57E	370	55-4268	8-29-56	10-19-56	Unk, SEA Conv 65, Clark PI 3-1-66, RVN, C-Loss 6-13-66. 2 fat.
B-57E	371	55-4269	9-4-56	10-18-56	Unk, SEA Conv 65, Clark 3-14-66, RVN, LTV Compass Sight 7-15-68, Cx 10-14-71.
B-57E	372	55-4270	9-11-56	10-19-56	Unk, SEA Conv 65, 8-BS Clark PI 3-1-66, MacDill 11-1-69, 4677/17 DSES c12-72, MASDC c10-76.
B-57E	373	55-4271	9-12-56	10-23-56	Unk, Cx 1-20-58.
B-57E	374	55-4272	11-2-56	12-6-56	Edwards, Cx 6-17-58
B-57E	375	55-4273	9-18-56	10-29-56	Unk.
B-57E	376	55-4274	9-21-56	10-25-56	Unk, SEA Conv 65, Clark PI 1-17-66, RVN, LTV Compass Sight 7-15-68, 363 TRW c12-72, MASDC c10-76, Pima Air Mu c93.
B-57E	377	55-4275	9-25-56	11-19-56	6 TTS, 8 BS/TT, 6091 RS/556 RS c9-61, 18 TFW Kadena to 8-73, MASDC c10-76(E).
B-57E	378	55-4276	9-28-56	11-19-56	6 TTS, 8 BS/TT, 6091 RS/556 RS c9-61, 18 TFW Kadena to 8-73, 4677/17 DSES c7-26-77.