AEROSPACE MAINTENANCE AND REGENERATION CENTER

Aerospace Maintenance and Regeneration Center
The Aerospace Maintenance and Regeneration Center (AMARC), Tucson, Arizona, is the [manager for the storage, reclamation, return-to-flying status, and disposition of all aircraft a· missiles that are not currently required in the DOD operational inventory. It is the largest aiT facility and parts bank in the world. Approximately 1,640 aircraft valued at more than r· stored at AMARC.

LINEAGE
Military Aircraft Storage and Disposition Center
Aerospace Maintenance and Regeneration Center

STATIONS
Davis Monthan AFB, AZ, 1 Feb 1965

ASSIGNMENTS

COMMANDERS
Maj W alter L. Harwell, 1 Apr 1946
Lt Col Robert R. Shaefer, 1 Jul 1946
Lt Col Robert F. Schirmer, 1 Sep 1946
Col Newman R. Laughinghouse, 21 Oct 1947
Maj Victor R. Myers, 1 Jun 1951

Maj George V. Newman, 18 Mar 1952
Capt Wallace R. Starwalt, 1 Sep 1952
Lt Col William D. Hombach, 29 Apr 1953
Col Allen W. Reed, 31 Mar 1955
Col Albert J. Shower, 1 Aug 1958
Lt Col Boyd F. Herman, 1 Nov 1960
Col Wirt D. Corrie, 28 Nov 1960
Col Charles L. Stafford, 1 Aug 1962
Col Irvin R. Perkin, 28 Jun 1966
Col Andrew A. Juhasz, 11 Sep 1967
Col Rupert P. Collins, 11 Oct 1967
Col Jack K. Massie, 10 Sep 1971
Col Harry L. Gronewald, 15 Mar 1974
Mr. Bertrand E. Stewart, Jr., 18 May 1975
Col Gregory O. Stanley, #1997
Col Lourdes A. Castillo, #2004
Col Anthony A. Panek, #2005

HONORS
Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

EMBLEM

MOTTO

OPERATIONS
The storage mission began when the conclusion of World War II brought about an immediate need for the storage of surplus aircraft, especially B-29s and C-47s. The low residual acidic content of the soil, meager annual rainfall, and dry climate made Tucson an ideal area for such operations. Additionally, the soil consisted of an extremely hard mineral composition called caliche which made it possible to simply park aircraft in the desert without having to construct steel or concrete parking ramps. The preservative effects of a desert climate were well known.

An unexpected confirmation of the ultimate capabilities of desert storage was provided in 1959 when an oil drilling team in Libya came across the B-24 Liberator LADY BE GOOD which had been abandoned by its crew of nine after a forced landing in 1943. The bomber had been preserved over the years in an almost unbelievable state. Tests proved that the servo motors and hydraulic pumps still operated, the radio worked, and even the fuel and oil were usable.

Davis-Monthan became officially involved with aircraft storage on 15 November 1945 with the activation of the 4105th AAF Base Unit (Air Base) which was assigned responsibility for operation of the field and extended storage of Army Air Force aircraft. The new unit came under the jurisdiction of the San Antonio Air Technical Service Command (SAATSC). Soon afterwards, the SAATSC was placed under the control of the San Antonio Air Materiel Area (SAAMA). On 21 October 1946, the 4105th AAF Base Unit (Air Base) was redesignated as the 4105th AAF Base Unit (Aircraft Storage) with a mission devoted entirely to storage operations.

Initially, the unit's function included the processing of B-29s and C-47s into storage, and the subsequent maintenance arid preparation of aircraft for one-time flight to depots for overhaul and return to service.

Approximately 650 B-29s and 245 C-47s were in the storage outfit's active inventory early in 1946. An additional 18 "museum-types" were also being maintained during that same period. By the end of the year, there were 679 B-29s and 241 C-47s in the inventory and the number of museum types had grown to 30. Throughout 1946, the unit's personnel had also prepared 82 B-29s and 71 C-47s for flights to depots for overhaul.

Although the war in Europe and the Pacific had concluded in 1945, the early civilian work force assigned to the storage unit was regularly faced with its own special brand of combat. For instance, the Flying Times of 13 December 1946 revealed an insight into the types of battles fought within the confines of the storage area. It stated: Some of the hazards encountered by personnel of the 4105th in the desert storage area have been rather interesting. For instance, one worker, Richard Polk, sat down on a platform one day to fill in a report form and a bull snake bit his hand as he leaned on the platform. It was a non-poisonous variety and Mr. Polk recovered. Several days ago, workers in the area chased a lone coyote away from the storage area. One day last week a call came in from the field that there was a bobcat trapped inside the wheel of a B-29 in the storage area. When the processing crew arrived at this particular B-29, one of the crew started to walk around the airplane and inspect it and almost stepped on the bobcat which was lying under the plane just outside the shadow of the fuselage. The bobcat awoke and bounded up over the tire of the right landing gear back up into the nacelle itself. After carbon dioxide extinguishers were used and the bobcat fell to the ground in front of the tire where pop bottles, rocks and more carbon tetrachloride finally subdued it. The cat measured approximately 24 inches in length and its weight was estimated at between 15 and 20 pounds.

Wildlife hazards were a pretty regular part of the operations in the desert environment. On some occasions, when moving wooden blocks and platforms, there would be a rattler under one end and a prairie dog under the other. Jack rabbits were prevalent with several being known to drink regularly from the overflow of the large evaporative coolers outside the headquarters building. The civilian workers even went so far as to organize a sort of living desert museum consisting of live gila monsters, rattlers, rabbits, black snakes and bull snakes.

According to the Flying Times, the mini-zoo had to be disbanded ". . . due to the rise in price of chicken eggs to feed the gila monsters.

As the Cold War hostility intensified during the years following World War II, it became increasingly evident that military aircraft also had to be preserved for future emergency use. As a result, the processes of preservation became a highly specialized operation at Davis-Monthan. By June of 1953, there were 210 aircraft (B-29s and C-47s) in storage, but the total increased drastically to 981 by the end of the year as the unit began to receive its first influx of different types of planes. Specifically, it received 120 T-6s, 29 SA-16s, 13 L-20s, QB-17s, one B-24, and one museum-type JU-88 during the second half of 1953.

Aircraft parts, such as these propellers, were removed while the aircraft were in storage During the early days of aircraft storage at Davis-Monthan, planes destined for long-term retention underwent a process called cocooning. This, , was a laborious process involving the spraying on of as many as five coats of plastic cocoon material after the rem oval of engines, radios, and other equipment items. Not only was this time consuming and expensive, but it was also generally ineffective. The hot summer days and the cool desert nights combined to create condensation within the tightly sealed aircraft and created more problems than it solved. As a result, a new procedure was developed. When an aircraft first arrived for preservation and storage, all guns, explosive charges, classified material, and any pilferable items were immediately removed. The fuel was drained from the fuel lines which were then pumped full of lightweight oil and drained again; thus leaving a film of oil to preserve the fuel system. The aircraft hydraulics and tires were serviced to normal standards.

The bottom half of the aircraft was not sealed so that circulating air could assist in the prevention of condensation. Engine intakes and exhausts were covered with paper and any gaps or cracks in the upper half of the aircraft skin were tightly taped. Those areas, plus easily damaged surfaces such as fiberglass radomes, fabric control surfaces, and canopies, were then covered with a vinyl plastic compound called "Spraylat." The white Spraylat, applied by spray gun, kept the water and dust out and prevented the occasional desert sand storm from sandblasting the windows and canopies. The main purpose of Spraylat, , was temperature control.

Without Spraylat, the inside temperature of an unprotected aircraft often reached 200 degrees in the hot Arizona sun. With Spraylat, the inside temperature was only about five degrees hotter than the surrounding air; thus preventing damage to rubber parts and functional components.

Parts reclamation was also a major part of the unit's operation. While some aircraft were scheduled for temporary storage, others were regularly sold to eligible foreign countries, tax-supported organizations, state governments, and police departments. The remaining planes were stripped of parts which were subsequently returned to the supply system. Bare shells that were left were chopped into chunks and sent to a furnace to melt the aluminum which was poured into ingots. The remaining metals were also reclaimed or sold as scrap.

The increased number of aircraft that began to pour in for storage during 1953 placed a very heavy demand on available space. Consequently, a contract was let for the clearing, grading, and fencing of an additional 480 acres of land at a cost of $24,000. As a result, total available space increased to 1,290 acres. Over years, further increased in the number of planes in storage required continuing expansion and by 1967 a total of 2,822 acres were in use for that purpose.

By July of 1960, the storage inventory had increased to more than 4,000 assorted aircraft and plans were in progress for the disposal of a large number of carcasses.

All but 520 of the Air Force's B-36s were chopped up and melted as part of the reclamation program at Davis-Monthan in July and August of 1961 put an abrupt end to those plans. The phaseout of B-47 bombers and other projects in the reclamation area were either placed in abeyance or cancelled outright. Some planes were diverted back into storage status although they had already been stripped of usable parts. Over the next 12 months, reclamation projects produced 110,038 items with a monetary value of $60,400,000 which were placed back into the supply system for reuse.

Just prior to the discovery of strategic missiles in Cuba in 1961, the last of 342 B-36 bombers that had rested in the storage area went under the guillotine of the salvage operation. Only two survived. One was flown out to the Air Force Museum at Wright-Patterson AFB and the other was delivered to Offutt AFB for inclusion in the Strategic Air Command Museum.

Over the years since the storage operation was first activated, there were several changes in designations and command jurisdiction. Initially, the storage operations were handled by the 4105th AAF Base Unit (Air Base), but on 21 October 1946 the name was changed to the 4105th AAF Base Unit (Aircraft Storage). The designation was later changed to the 3040th Aircraft Storage Depot on 20 August 1948 and reclamation/salvage operations were added to the basic mission. The depot nomenclature was later dropped on 5 October 1949 and the unit was rechristened as the 3040th Aircraft Storage Squadron. Then on 1 June 1951, the 3040th was transferred from under the control of the San Antonio Air Materiel Area to the San Bernardino Air Materiel A rea (SBAMA).

Exactly five years later, the 3040th designation was discontinued and the unit was renamed the Arizona Aircraft Storage Branch and made a directorate-level component of SBAMA. It continued to operate under that title for a little more than three years until it lost its directorate-level status. On that date, 1 August 1959, it was redesignated as the 2704th Air Force Aircraft Storage and Disposition Group (AFSDG) and was placed under the direct command of the Air Materiel Command.

It was again redesignated on 1 April 1960 as the 2704th Air Force Storage and Disposition Group (AFSDG). When the Air Materiel Command was later split into two commands (Air Force Systems Command and Air Force Logistics Command) in April 1961, the 2704th AFSDG became part of the logistics portion. The most significant change, , came about on 1 February 1965

when the 2704th was redesignated as the Military Aircraft Storage and Disposition Center (MASDC). With the change came a new mission as MASDC became the single point agency for the processing, storage, reclamation, and disposal of all aircraft assigned to the Department of Defense; not just the Air Force.

It was during periods of national emergency that the work of the Center's reclamation and storage activities became most significant. For example, many of the C-47 Skytrains used during the Berlin Airlift had been cocooned in the dry desert air at Davis-Monthan for several years before being recalled to active flying duty.

Likewise, the Korean conflict necessitated the resurrection of a number of B-29 Superfortresses and P-51 Mustangs. The need for specialized aircraft suited for counterinsurgency warfare resulted in the reutilization of a number of cocooned B-26s, A-1Es, and T-28s in the skies over Vietnam. Today, the Strategic Air Command must count on MASDC to provide m any of the parts required to keep its aging B-52 fleet on alert.

USAF Unit Histories
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Sources

Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.