



The Strategic Air Command

OVER cold Alaskan mountains, across the Atlantic and Pacific, above palm trees, rice paddies, and Mediterranean beaches, the Strategic Air Command deployed its global air operations during the past twelve months. At the same time, SAC men kept a quiet vigil beneath the prairies and mountains of the west in concrete-and-steel missile launch-control centers—the product of ten years of Air Force missile and space development.

In its eighteenth year as the free world's primary strategic deterrent, SAC worked to extend and perfect its characteristic flexibility. The mixed force is the raw material for this flexibility, and the experienced men of the command make it work.

Open conflict could suddenly break out at any one or more of a dozen global trouble spots. Or a quick switch in enemy strategy, or a weapon-system breakthrough, could tip the balance of power. The spectrum of possible conflict is so broad today that only a force with unprecedented flexibility and versatility can perform a deterrent mission. SAC's operations are planned and exercised with that principle in mind.

SAC Status

The flexibility and resourcefulness of SAC men were amply demonstrated during the past twelve months. SAC combat aircraft continued on fifty-percent ground alert and continued airborne-alert training. The scheduled phaseout of the B-47 bomber proceeded during 1964, with current B-47 strength standing at about 500 aircraft. In addition, approximately 600 B-52s and eighty B-58s are operational today.

On April 2, 1964, the number of intercontinental ballistic missiles on alert equaled the number of bombers on alert. And, from this point on, the missile alert force will be in the numerical majority. As of June 1964, SAC had more than 800 operational ICBMs.

It would be an error, however, to equate the essential strike power of missile and bomber forces. Each missile carries only a single nuclear weapon. A single SAC bomber, on the other hand, normally carries several nuclear weapons, one or more of which could



SAC's Commander in Chief, Gen. Thomas S. Power, has been a military aviator for more than thirty-five years. An air-combat veteran of World War II, he took command of the Air Research and Development Command (now AFSC) in 1954. He has headed SAC since 1957. Since 1960 he has also been Director, Joint Strategic Target Planning Staff.

be many times more powerful than a missile warhead. Most of SAC's striking power is still carried in bomb bays.

SAC Flexibility

During the past year SAC repeatedly demonstrated the flexibility inherent in manned aircraft operated by dedicated professionals.

One such demonstration was a record-breaking supersonic flight from Tokyo to London by a B-58 Hustler. Another was a dramatic photo reconnaissance in March of the Alaskan earthquake damage area. Another was a special exercise of SAC's capability to respond against global targets with precise skill and certainty.

In the first-named, Operation Greased Lightning, a SAC B-58 crew claimed an international supersonic-speed distance record on October 16, 1963, completing a flight of 8,028 statute miles from Tokyo to London in an elapsed time of eight hours, thirty-five minutes, with an average ground speed for the flight of 938 mph.

The supersonic Hustler streaked through the starting gate at Tokyo, after taking off from Okinawa, and passed over Japan, Alaska, Northern Canada, Greenland, and Iceland before flashing over London and landing at RAF Station Greenham Common, fifty-five miles northwest. Five aerial refuelings by SAC KC-135 tankers were accomplished along the route.

Alaskan Earthquake Reconnaissance

At approximately 9:30 p.m., Omaha time, Friday, March 27, 1964, the SAC Command Post lost its wire circuits to Alaska. An immediate radio check with SAC units near Fairbanks gave the SAC duty controller first word of the Alaskan earthquake. Despite the disaster, SAC aircraft in Alaska were safe and capable of flying their missions. SAC quickly started to assess its damage and to assist its distressed people in the quake area.

The next morning SAC headquarters received a wired message from Hq. USAF directing SAC to accomplish, on a priority basis, aerial reconnaissance of Alaskan disaster areas.

SAC used two 43d Bomb Wing B-58 aircraft from Carswell AFB, Tex. Within an hour and forty-five minutes their mission was planned, special pod cameras were loaded, and the aircraft were inspected. Two hours from the order to go the two camera-equipped B-58s were airborne.

Five other SAC aircraft were also assigned to cover the quake areas—three U-2s from Davis-Monthan AFB, Ariz., and two RB-47K aircraft from Forbes AFB, Kan. All but the B-58s were to photograph from high altitude.

At 4:30 p.m., Alaska time, about twenty-four hours after the earthquake shattered Anchorage, the two B-58s were photographing the city's broken streets. They made five photo runs at 500 feet, under a heavy overcast. Their automatic cameras worked perfectly.

It was a difficult mission. Mountains ringed the photo targets, and the overcast made precision navigation a critical factor.

At about 1:30 a.m., Omaha time, five hours later, both B-58s landed at Offutt AFB, Neb.



SAC's vital aerial reconnaissance capability made major contribution during last March's Alaskan earthquake disaster. Special camera installations such as one shown above on B-58 detachable pod were used to quickly assess damage from the air. SAC U-2s and RB-47Ks also provided photos.

Just fourteen hours and thirty-eight minutes from the time the mission was given to SAC, processed photographs were available in Washington.

On this remarkable flight the SAC B-58s flew a total of ten hours and twenty minutes, covering a round-trip distance of 5,751 miles.

The next day, two more B-58s from Carswell flew the entire mission over again, covering all seven targets.

Operation Order Blank

On April 23, 1964, eight Air Force bombers passed
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STRATEGIC AIR COMMAND

Headquarters, Offutt AFB, Neb.

Commander in Chief
Gen. Thomas S. Power



almost simultaneously over six simulated global targets in Europe, Africa, and Asia. Some were at high altitude, some low; all took sharp photographs of their simulated targets. They had taken off at carefully planned intervals from bases in the US and overseas to photograph their targets at exactly 0730 Greenwich Mean Time. Permission for the aircraft to fly over other nations and to take photography had been obtained in advance from all the countries concerned.

The mission was an outstanding success. All aircraft were over their targets within three minutes of planned strike time.

These B-52 and B-58 bombers were armed with



SAC's KC-135 in-flight refueling capability is crucial not only to its own mission but also to Tactical Air Command's. As the Air Force's single manager for jet tanker in-flight refueling, SAC played important role in such exercises as last year's Big Lift to Europe and this year's Desert Strike.

cameras to prove that they were over their simulated targets precisely as planned. But, although they did not explode any bombs, they may have exploded a misconception. They demonstrated again that SAC is not a "doomsday" weapon, cocked to destroy the world. They showed that flexibility and precision of manned aircraft can be applied against an enemy with great finesse at any level of conflict.

SAC aircraft on alert and supported by prepositioned global facilities can respond to Department of Defense orders in minutes. USAF strategic forces can deliver a wide variety of weapons, both conventional and nuclear, perform reconnaissance, or simply fly over—all within short hours of initial orders. Order Blank demonstrated this capability.

Tanker Single Manager

SAC tankers continued to support Air Force refueling requirements during the past twelve months.

In October 1963, SAC KC-135 jet Stratotankers played a key role in Exercise Big Lift by supporting a composite air strike force of 116 aircraft being deployed to European bases as part of the massive exercise.

SAC supplied fifty-three KC-135s to refuel jet

fighters and reconnaissance aircraft of the Tactical Air Command composite strike force, which flew nonstop to European bases.

As the single manager of the Air Force tanker fleet, SAC has been refueling TAC fighters and reconnaissance aircraft for some time.

Through standardized training and refueling procedures, SAC KC-135 crews participating in Big Lift needed only the particulars on their part of the massive exercise. Procedures they used have been perfected over years of operations supporting SAC's training flights.

For example, during the twelve-month period ending in June 1964, SAC tankers completed approximately 6,500 hookups per month. The average fuel transferred for each hookup with a SAC bomber totaled 4,600 gallons or .8 of a tank car of fuel.

In the spring of 1964, tankers supported TAC participation in Desert Strike, a combined Army-Air Force exercise in the southwestern US. Approximately 1,500 fighter aircraft sorties were refueled by SAC tankers during the operation.

SAC Aircraft

To sustain SAC's overseas close-range bomber strength, B-58 supersonic bombers began operations last summer in both Spain and the Far East. Both Glass Brick (missions to Far East bases) and Alarm Bell (missions to Europe) programs were begun to give B-58 Hustler crews operational experience overseas and train overseas support people in the techniques of handling the free world's first supersonic bomber.

Alarm Bell and Glass Brick missions formed the basic pattern for the record-breaking B-58 flight from Tokyo to London.

B-52 bombers replaced the B-47 on reflex duty at Andersen AFB, Guam, during the past six months. This is the first time the B-52 has been dispersed regularly outside the US.

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Command and control is a constantly developing operation at Offutt AFB, Neb., SAC headquarters, and around the world. Newest data-processing techniques, such as these computerized consoles, are fast replacing manual displays.

Aircraft from Biggs AFB, Tex., and March AFB, Calif., began alternating on Pacific reflex duty. While on Guam, crews stand flight-line alert, ready to take off in minutes.

SAC has a similar reflex of B-47 bombers to England, Spain, and Alaska at this time. Tankers are also reflexed to forward bases.

Phase down of B-47s from the SAC mixed force continued during the past year. Early last summer when the last B-47 left McConnell AFB, Kan., the B-47 fleet went beyond the approximate midpoint in its phase out from the SAC strike force. Five B-47 wings were inactivated during the fiscal year. It was also announced in the fall of 1963 that two SAC bases in England—those at Fairford and Greenham Common—would revert to the Royal Air Force. These bases were used primarily as B-47 reflex bases, and, complying with the turnover schedule, both bases were returned to the RAF in June 1964.

More Minuteman Wings Operational

On the missile side of the ledger, SAC forged further ahead of the enemy ICBM threat by declaring operational its second, third, and fourth full wings of solid-fueled "instant ICBM" Minuteman missiles. In addition to Malmstrom AFB, Mont., the original Minuteman base, operational wings are now located at Ellsworth AFB, S. D., Minot AFB, N. D., and Whiteman AFB, Mo.

On February 29, 1964, missile combat crews from Minuteman wings at Malmstrom and Ellsworth fired solid-fuel missiles only minutes apart from Vandenberg AFB, Calif., over the Pacific Missile Range. This was the first demonstration of SAC's "ripple" launch capability in which two or more Minuteman ICBMs are launched from underground silos in sequence.

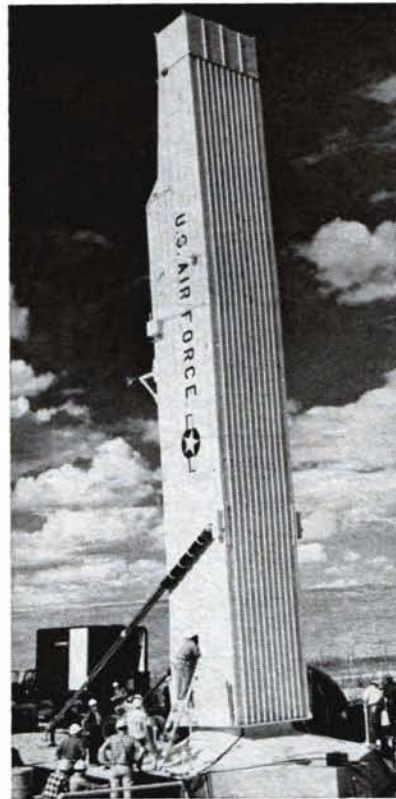
The two crews who fired the missiles were on simulated combat alert. Such launches are part of SAC's continuing extensive missile-test program. SAC missile launches furnish performance data on the weapon system, give the crew invaluable proficiency training, and assist in basic missile research.

To date SAC has launched more than 100 missiles of various types from Vandenberg AFB and is programmed to launch hundreds more in the future.

Titan and Atlas

December 1963 saw the end of the Titan ICBM construction program as the last of eighteen Titan II missiles at McConnell AFB, Kan., became operational. This milestone gave SAC a total of fifty-four Titan I and fifty-four Titan II ICBMs.

Meanwhile SAC's first ICBM, the Atlas D, began to pass into obsolescence. Its "soft" above-ground launchers make the Atlas D too vulnerable to surprise attack. It was announced during the first half of 1964 that these early Atlas missiles would begin to phase out of the SAC force. Later-model Atlas missiles, protected by steel-and-concrete silos, will continue on alert. The Atlas has been operational in the command



SAC's Minuteman strength expanded significantly during the past year as well as ability to run sequenced multiple launches from silos. Left, encased in its specially designed transporter-erector, a Minuteman is moved to its combat post. The special rig is largest ever designed for highway-borne delivery.

since September 8, 1959, and approximately 120 are operational today.

Command and Control

Command and control continued to keep pace with the evolution of the SAC mixed strike force during the past twelve months.

The SAC airborne command post logged an additional 8,720 hours during this time, while on the ground new tools and facilities were being developed to match the changing challenge of modern weapons.

Progress on the 465L system continued as data processors and communications-control equipment were installed at SAC bases and at numbered air force headquarters, with completion now scheduled in 1965. The 465L will give SAC commanders faster access to the hundreds of thousands of facts and the wealth of data needed for command decisions in the jetomic age.

Installation of data-display consoles and equipment have given the SAC command post a new look, as projected displays have completely replaced the old manually posted display panels.

Early in the summer of 1964 SAC took delivery of the first of a new series of command-and-control aircraft—the KC-135B. Externally similar to the familiar KC-135, long a mainstay of the SAC jet-tanker fleet, the KC-135B is an entirely new aircraft with greater range and advanced performance characteristics. It is equipped with the latest communications equipment, and, while it is configured as a jet tanker, it also has the unusual capability to refuel in flight from other tanker aircraft. It is equipped with turbofan engines and will be used to expand and improve the capability of SAC's airborne command post.—END