
A MINORITY OF ONE

Major General
Gordon P. Saville

by Lt. Kenneth Schaffel



Major General Gordon P. Saville, April 7, 1950. (U.S. Army Photo)

In December 1935, the United States Army's recently established combat air arm, the GHQ Air Force, assembled in southern Florida for a large-scale exercise, designed to test its men and equipment in simulated war maneuvers. Under the overall command of Brigadier General Frank M. Andrews, GHQAF's offensive forces included Martin B-10 and B-12 bombers along with Curtiss A-12 attack planes. The defensive forces were composed of Boeing P-26 pursuit planes, and were assigned to the 2nd Wing, commanded by Brigadier General Henry Conger Pratt.

A few weeks prior to the exercises, General Pratt had been presented with an unusual request by a 33-year-old pursuit instructor at the Air Corps Tactical School, Captain Gordon P. Saville. Captain Saville had asked Pratt to incorporate an untested ground control intercept system into the war game planning. According to Saville's plan, a ground control officer at the command post would receive information of approaching bombers from ground observers stationed in forward positions. The controller would then quickly direct pursuit pilots on alert to take off and fly toward the invaders.

Once in the air, the controller would continue to direct the pursuit craft toward their prey by radio, basing his calculations on telephone reports received from ground observers.

In most respects, Saville's plan was hardly revolutionary. By 1935, Air Corps pursuit leaders had become accustomed to using radio communication in combat exercises. Ground observers and surveillance aircraft would relay reports of "enemy" sightings to coordinators, who would then alert the pursuit leaders. The leaders could then use the information supplied them to maneuver their formations as they saw fit. Formation commanders were completely in charge, a technique dating from World War I when formation flying in aerial combat developed. The use of radio and observers had not relieved the leaders of pursuit units of the responsibility to find and attack the enemy. Thus, a virtual shift in command from the cockpit to the ground, as Saville suggested, was bound to arouse strong opposition among pilots, even in an experimental situation.

Nevertheless, General Pratt believed that Saville's idea had merit and agreed to the experiment. Not surprisingly, many

of the pilots who were supposed to obey orders from the ground were unhappy. One of the most disgruntled was Colonel Ralph Royce, who commanded a pursuit squadron. Royce received *orders* from the ground that divided his formation and sent aircraft off in various directions to intercept oncoming bombers. Even though the mission was deemed a success, Royce continued to object to the new method during the post-mission critique and demanded to know who had been responsible for implementing the new procedure. Saville, who actually ran the operation, was in an uncomfortable situation, confronted by an angry senior officer. Pratt, however, completely supported Saville, informing Royce that the orders were his and ending the argument. For the remainder of the exercise, Royce and the other pursuit leaders understood that the general sanctioned, even though he did not directly transmit, any orders they received through their headsets.

In the overall post-exercise critique, General Pratt made clear that in the future pilots would have to realize that instructions radioed from the ground to aid in pursuit interception constituted commands rather than advice. In the jargon of the day, the ground controllers exercised "air command, not air liaison." The controllers, Pratt reasoned, had information not available to the pursuit leaders and were therefore in a superior position to direct aerial interceptions. "The entire system," concluded General Pratt, "is predicated on ground control at all times. When that command is interrupted or assumed by others—the system is immediately susceptible to failure."¹

In his advocacy of a ground-controlled interception system in the Florida exercises, Saville exhibited a characteristic he would display throughout his career in the Air Force: he never hesitated to champion ideas or policies that he truly believed in, even if they were unpopular with most of his superiors. This earned him many enemies, but he also gained the respect and admiration of a few influential officers, like General Pratt, who were willing to place Saville in positions where he could test his ideas.

Gordon P. Saville was born in Macon, Ga., in 1902, the son of a regular Army officer. His older brother graduated from West Point and it was expected that he also would choose a military career. In fact, Saville was offered an appointment to the United States Naval Academy but spurned the opportunity because he was unwilling to subject himself to what he perceived as the rigors of a midshipman's life. Instead, he studied engineering at various colleges and accepted a reserve commission in the Army. But Saville soon grew disenchanted with Army life: "I didn't like the ground Army . . . it was too damn disciplined, it was too regimented." In fulfilling his reserve commitments, however, Saville was assigned to Crissy Field, Calif., which was also utilized by the Army's air service. He was soon determined to become a

pilot and decided to remain in the Army if afforded the chance to fly. His attitude was, in short, that "if I can go the flying route, I am in, if I can't I am out, because I am sure not going to end up in the military without this flying part." As the situation developed, Saville became a flying cadet in 1926 and proved an adept pilot. The following year he was rewarded with a regular commission in the Air Corps.²

Saville's first duty station was at Mitchel Field, Long Island, N.Y., whose commanding officer was Lieutenant Colonel Benjamin D. Foulois. Saville served as Foulois' adjutant and performed his tasks credibly—when he was around. Unfortunately, Saville's girlfriend and future wife lived in Connecticut which meant long train trips and equally long weekends away from Mitchel. Happily, Foulois' wife solved the problem by graciously inviting the girl to stay with her and the post commander at their home on weekends, allowing Saville to be at his desk promptly on Monday mornings. When the couple got married in 1928, Foulois, who had just been chosen as Assistant Chief of the Air Corps, asked Saville what he wanted as a wedding present. The lieutenant requested a transfer back to Crissy Field in California, and his wish was granted. This would not be the last favor Foulois would perform for his young protege.³

With perhaps the brief exception when he was courting his future wife, Saville was a hard-working, dedicated officer. He was eager to learn all aspects of his profession, and was constantly questioning his more experienced superiors. His rule was that "you've got to be an expert at what you are doing."⁴

From Crissy, Saville transferred to Mather Field, Calif., where he became the adjutant for the 20th Pursuit Group under Major Clarence Tinker. In 1932, many of the Air Corps' most prominent officers, including Major General Foulois, now Chief of the Air Corps, gathered at Mather to participate in and observe extensive exercises. As adjutant, Saville found himself deluged in administrative details in preparations for the maneuvers. He performed his various "housekeeping" chores in outstanding fashion, and earned the praise of Lieutenant Colonel Henry H. Arnold. Arnold congratulated Saville in the presence of General Foulois, who told Saville if he ever needed anything to let him know. Never shy, Saville immediately asked to attend the Air Corps Tactical School, and Foulois agreed.⁵

Located at Maxwell Field in Montgomery, Ala., the Tactical School was the fountain head of Air Corps theory and doctrine. By the 1930s most of the officers studying and lecturing at the school (the majority were junior officers) were coming to believe that bombardment aircraft were developing to the point where they would be able to dominate the wartime skies. This view corresponded with the ideas of well-known air power theorists like the Britisher Hugh Trenchard, the Italian Giulio Douhet, and retired American Brigadier General William (Billy) Mitchell. The most outspoken oppo-

nent of the theory of bomber dominance at the Tactical School was Captain Claire L. Chennault, a pursuit instructor. Chennault felt that pursuit was underrated as a weapon of attack, and could also be effective in air defense against bombers, if provided adequate early warning.⁶

When Saville attended the Tactical School in 1933, the proponents of bomber supremacy were in the majority, but other views were not suppressed. Saville was soon participating actively in the wide-ranging debate that enabled Air Corps officers to express and develop their ideas. Although he recognized the potential value of the heavy bomber in future conflict, he did not join the bandwagon that proclaimed the strategic bomber to be the embodiment of air power. Since coming into the Air Corps, Saville had been involved more or less consistently with pursuit operations, and this was the area that most interested him. Specifically, he was engrossed in air defense. During his tours in California, Saville had participated in exercises designed to test the prospects of attacking bombers against defensive pursuit. While the results had been at best ambiguous, Saville felt that improved methods and techniques in air defense could be developed that would pose serious challenges to invading raiders.⁷

After graduating first in his class, Saville remained at the Tactical School as a pursuit instructor and, in 1935, was assigned to the Air Corps Board (also located at Maxwell Field) where he contributed to writing and revising Air Corps doctrine. During his tour on the Air Corps Board, Saville occasionally served as a "guest lecturer" at the Tactical School where he often discussed concepts involving early warning and control procedures in air defense.⁸

In the fall of 1938 Saville finally left Montgomery to attend the Army Command and General Staff College. He graduated near the top of his class and in July 1939 was ready for reassignment. Still a captain, the 36-year-old officer was ordered to Washington to work in the War Plans Division in the Office of the Chief of the Air Corps. Saville was disturbed about moving to Washington since he was supporting three children and was afraid he could not afford to live in the nation's capital. But though he might have had problems making ends meet, Saville had few complaints about the nature of his work. The Air Corps' leadership recognized him as its air defense expert, and he was permitted to concentrate on continental air defense needs in the plans division.⁹

In 1940, as the likelihood of American involvement in the World War increased, Saville vigorously advocated the establishment of an air defense command to organize and administer all air defense activities in the United States. The Chief of the Air Corps, General H.H. Arnold, agreed that the development of defensive aviation in the United States had been allowed to fall seriously behind. On Arnold's urging, Army Chief of Staff General George C. Marshall established an Air Defense Command at Mitchel Field on February 26,



Captain Gordon P. Saville, December 16, 1939. (U.S. Army Photo)

1940. The command's mission included employing and testing the elements that comprised air defense systems. The command was also charged with formulating air defense doctrine and submitting recommendations to the Chief of the Air Corps. Captain Saville was transferred to Mitchel to serve as plans and training officer. He undertook that task with the will and energy of one whose dream had come true. He felt, at last, that he was in a position where he could develop, refine, and put into practice the principles of air defense he had worked out at the Tactical School and as a member of the Air Corps Board.¹⁰

As Saville began his work at Air Defense Command, in Europe the Battle of Britain was passing through its most crucial stages. The Royal Air Force Fighter Command's victory in that supreme test was attributable largely to the success of British radar and ground control systems. In the United States, although radar was known to scientists doing research for military agencies and Army Signal Corps technicians before the war, there was no sense of urgency to develop radar for military functions, such as air defense, as had been the case in Britain.¹¹ Even Saville, the Air Corps' air defense authority, had little idea of radar's full potential when he was ordered to Britain in October 1940 to study

Fighter Command's techniques and equipment. He soon realized that in radar technology for air defense, Britain was years ahead of the United States. As he later recalled his impression: "Their equipment was operational; it hadn't been made by a bunch of inventors in a vacuum. It had been made with technical people and operational people working together to produce an operational result."¹²

The British concealed nothing from Saville. He conferred with Air Marshal Hugh Dowding, the head of Fighter Command, about the command and control arrangements for air defense the British had put into action. Saville was permitted to visit all the command and radar posts, fly day and night in British interceptors, and perform ground control intercept exercises. While impressed by all he saw and heard in Britain, Saville was also "vastly discouraged coming back with our own very large and unwieldy mishmash."¹³

When he returned home, Saville made best use of the knowledge he had gained in Britain in American air defense operations. One of his major suggestions was to procure or design equipment of the British type, and he was backed in this by General Arnold. Furthermore, as it appeared ever more likely that the United States would enter the war, the Air Corps began to give continental air defense more priority. Accordingly, the Air Defense Command, which was actually a planning, inspection and test agency, was inactivated and its experienced staff was scattered to various interceptor groups around the country.¹⁴ Saville, now promoted to major, was assigned as executive officer to Brigadier General John C. McDonnell, commanding general of 1 Interceptor Command, focal point of air defense operations in the United States in the summer and fall of 1941.

Meanwhile, continental air defense requirements assumed a much greater importance after the Japanese attack on Pearl Harbor on December 7, 1941. Accordingly, the air defense forces in the United States were put on alert and prepared for any eventuality. General Arnold made a key move when he brought a close friend of Saville's from the Tactical School, Brigadier General Muir S. Fairchild, to Washington as Assistant Chief of the Air Corps (he was named Director of Military Requirements in March 1942). One of the first actions Fairchild took upon arriving in Washington was to bring Saville back from Britain where he had returned to obtain the most recent information on late developments which might benefit American air defense efforts. Fairchild immediately had Saville promoted to lieutenant colonel, and gave him a free hand to coordinate air defense matters.¹⁵

Upon his return to Washington, Saville accompanied the noted British air defense technician, Sir Robert Watson-Watt, on an inspection of West Coast air defenses. Watson-Watt found the defenses to be generally deplorable. The greatest problem—and no surprise to Saville—was the poor quality of American-made radar and communications equipment.

Saville urged that steps be taken to speed up the purchase and design of superior equipment. Just as important as the equipment, Saville believed, were the skills of the radar operators and technicians. Saville was determined to reduce the flow of experienced air defense personnel to overseas stations. He was able to do so by arranging to use them as instructors in an operational training unit set up in Orlando, Fla. This ensured that there would be trained air defense personnel deployed both in the United States and worldwide.¹⁶

In March 1942, Fairchild selected Saville to be Director of Air Defense. Now a full colonel, Saville assembled a staff of highly competent officers from the Army Air Forces, the anti-aircraft artillery, and the Signal Corps for his Washington office. It was up to the Directorate of Air Defense to plan and coordinate all air defense measures taken in the United States.¹⁷

Knowing the dire consequence of unpreparedness, Saville fought for all the manpower and equipment he could muster. But as the risk of air attack diminished in the latter half of 1942, military planners had to weigh the diminishing possibilities of an attack upon the United States against the need to deploy units stationed within the U.S. overseas.¹⁸ By May 1943, General Arnold was arguing strongly for a decrease in the air defense establishment. Saville, now a brigadier general, was not altogether certain that the threat was past. In any case, he reasoned that the air defense forces should be kept at full force for psychological reasons alone. In rejecting that argument, Arnold stated:

*I can't see any excuse for maintaining these establishments [the air defense systems] just to meet the fears of a lot of people who are carried away by a feeling that something may happen. We are hard at war now, and the people of the United States have got to admit it.*¹⁹

Soon thereafter, air defense lost its status as a directorate in the Air Staff. By the end of 1943, the Air Staff had determined that the possibility of air attack against the United States was negligible.²⁰ Continental air defense had clearly become, in the absence of an imminent threat, one of the lowest priorities for which the Army Air Forces was responsible.

In the light of this new policy, General Saville was assigned to the tactical air forces in Europe. Given the opportunity to test himself as a combat commander, Saville served with distinction at the head of XII Tactical Air Command in southern France. After the war he became Deputy Commander of the Air Transport Command and was then sent to Rio de Janeiro, Brazil, as Chief of the Air Section of the Joint-Brazil-United States Military Commission.²¹

Saville had welcomed the chance to diversify, but air defense remained his primary professional interest, and he felt that he could best serve the Air Force's needs in that area. In the absence of a likely threat, however, air defense had not

been a major concern after the war. This attitude began to change in 1948 when, despite the United States' sole possession of the atomic bomb, the Soviet Union carried on a belligerent policy in Europe, marked by the Communist coup in Czechoslovakia in March 1948. These events worried the Air Force's new Vice Chief of Staff, General Muir Fairchild. Fairchild feared that if the Soviets acquired an atomic capability sooner than predicted, they might also build planes to carry their deadly cargo on one-way missions over the United States. With no functioning air defenses to speak of, the nation would be helpless to ward off such an assault. Fairchild decided that there was no time to lose in preparing air defenses to meet the possible danger. To initiate the process, he took the logical step of calling on his friend and the Air Force's preeminent air defense expert, General Saville.

Now a major general, Saville was delighted to be working once again on air defense. The nature of his assignment was, in many ways, unique. Although his official station would be Air Defense Command Headquarters at Mitchel Field where he would act as "Special Projects Officer," he was also assigned to the Air Staff as head of a new "Air Defense Division." At the Pentagon, Saville was to report to Major General Samuel E. Anderson, Director of Plans and Operations. In truth, General Fairchild made clear that he was giving Saville *carte blanche* in air defense matters.²²

At both Mitchel Field and the Pentagon, Saville assembled groups of officers who had worked for him on the wartime continental defenses, or who were air defense veterans from other theaters.²³ One of the officers who collaborated closely with Saville was Colonel Bruce K. Holloway, who had served with Claire Chennault in China during the war, and would later rise to the command of SAC and USAF Vice Chief of Staff. Holloway described working with Saville during this hectic period:

*... kind of like living with a bomb . . . he was a real goer, a dynamo . . . three steps ahead of most other Air Force officers in operational and technical know-how. . . . He was a highly intelligent guy, innovative and very articulate.*²⁴

The first thing Saville did was to make a complete survey of the entire postwar air defense situation. His staffs at Mitchel and the Pentagon reviewed all Air Force actions regarding air defense since World War II. The reviews produced the conclusion that immediate action was required on the establishment of at least a minimum air defense in being, that could be expanded as the situation warranted.²⁵

In the course of the review and subsequent planning effort, Saville advanced his plans and reports to the highest authorities without sending them through the chain of command for approval. As he later explained, "I wasn't going to stand in line and wait. Time was pressing here." He was only able to proceed in this unorthodox manner, of course, because he was assured the backing of General Fairchild.²⁶

After working long hours for nearly two months, Saville presented his ideas to Fairchild and USAF Chief of Staff Hoyt S. Vandenberg. He suggested an "interim" radar plan that would rely heavily on World War II-type radars, though a few select stations in strategically located areas would receive new

and improved radars. According to Saville, this interim plan would constitute the first phase of any expanded air defense program that might finally be implemented.²⁷

Vandenberg and Fairchild approved Saville's plan. On September 9, 1948, he briefed Secretary of Defense James V. Forrestal and Secretary of the Air Force Stuart Symington. He told them that the few existing radar installations were totally inadequate and the overall picture for continental air defense was "certainly shocking." Saville admitted that his plan would hardly provide the United States with an invulnerable air defense system, but would afford the foundation for a stronger system that could be reinforced and improved. It was, said the general, "a great deal better than nothing." In summing up, Saville reminded Forrestal and Symington that "this matter is one of great urgency and requires immediate action . . . we must get on with it."²⁸ Forrestal and Symington were impressed with Saville's arguments and promised their support. The following year, Saville's testimony before Congress in appropriations hearings proved crucial in having funds earmarked for the buildup of radar stations.²⁹

Meanwhile, Saville and his deputy, Colonel Holloway, also studied the need for fighter-interceptors in air defense systems. They decided that the minimum requirement for an air defense fighter was to "take off on a runway when the ceiling was zero-zero, go and make the interception and get back on the runway." Saville and Holloway felt that in the future the technology would exist to make it possible for an interceptor "whose pilot only had to take the aircraft off, maintain proper tailpipe temperatures, and land the aircraft." In between these procedures, "the interception will be controlled from the ground by radar which will automatically guide the aircraft to the target, the interceptor's radars and computers will make the final interception, fire the weapons, and the aircraft will be returned to the airdrome automatically."³⁰ Although these concepts were derided by some USAF officers as unrealistic, they were to be remarkably similar to interception procedures under the Semi-Automated Ground Environment (SAGE) which the Air Force instituted in 1958.

Another officer who worked closely with Saville in this period was Colonel Jacob E. Smart, a Deputy for Operations on the Air Staff involved in air defense planning. Smart conceded that some of Saville's future-oriented ideas and his practice of bypassing the chain of command by using his connections with General Fairchild made him a "thorn in the side to many people. Nevertheless," said Smart, "he has produced the only tangible results toward building an air defense system that has [sic] been produced since the end of the war. Moreover, his actions, however unorthodox they may appear, have been taken with the tacit consent of General Vandenberg and General Fairchild. He has undoubtedly had to 'play by ear' in many instances and has irked many important and would-be important people, but he has got away with it all and has got things done."³¹

After having made a beginning on the postwar air defenses, General Fairchild appointed Saville the Director of Military Requirements. Shortly thereafter, he was named Deputy Chief of Staff for Development. In this position, Saville was

able to use his interest and knowledge in the future technological needs of the Air Force, particularly in air defense. Of particular importance, he was able to recruit civilian scientists with the expertise needed to solve air defense problems. One of these scientists was Ivan A. Getting, who worked with Saville in the 1949-1950 period. Many years later, Getting commented on his association with Saville:

General Saville was . . . a very remarkable man. He thoroughly believed in the application of modern science and technology to the problems of the Air Force and strongly felt the need of bringing about much more positive thinking in combining military problems with advancing science and technology.

Saville and Getting, along with another esteemed scientist, Louis Ridenour, influenced the Massachusetts Institute of Technology to establish the so-called Lincoln Laboratory. The laboratory mobilized leading scientists to examine how new fields of technology could be put to use in air defense. Lincoln's principal contribution to air defense turned out to be the SAGE system, which largely automated the air defense ground environment through the use of digital computers.³²

In March 1950, Saville's career received a devastating blow when General Fairchild died of a heart attack. When Fairchild died, lamented Saville, "my heart went flat, I was through." Saville felt that with Fairchild gone, he had lost his only patron on the Air Staff who realized fully the importance of air defense. He began to plan for his retirement, though he remained at his post as Deputy Chief of Staff for Development until June 1951. But because of Fairchild's death, he was no longer in a position to influence the course of overall air defense policy.³³

In an address given at the Air War College a few weeks before the start of the Korean War in June 1950, Saville referred to himself as a "minority of one."³⁴ Indeed, throughout the course of his career, Saville had championed a cause that was either ignored or denigrated by the majority of Air Force officers: air defense. By becoming an advocate for air defense, he showed himself willing to devote his considerable intellect and energies to a concept that was never likely to capture the imagination of offense-minded airmen. Nevertheless, when the administration of President Dwight D. Eisenhower decided to construct an extensive continental air defense network in 1954, many of the methods, techniques, hardware and technologies of the system had been partly conceived or advocated by Saville. Although their utility and worth were often questioned, the anti-bomber defenses built in the 1950s were, in large measure, Saville's legacy.

Along with his unpopular views, Saville's hard-charging approach and brusque to-the-point personality earned him enemies. There seems little question that without Fairchild's support and the timely assistance of Generals Pratt and Foulois early in his career, Saville would not have been given such important responsibilities and eventually advanced to two-star rank. With Fairchild's death in March 1950, he was isolated on the Air Staff and felt compelled to retire. In the final analysis, Saville can perhaps be best described as the quintessential military maverick who, when backed by power-

ful supporters, is able to instigate new concepts and reforms.

Postscript: General Saville died on January 31, 1984, at the Air Force Retirement Village, San Antonio, Texas.

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