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THE CHANGING CHARACTER OF AIR FORCE MANPOWER

1958-1959

by

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FOREWORD

The Changing Character of Air Force Manpower, 1958-1959, is an account of the Air Force's efforts to fit its personnel to its changing weapons. This meant a search for higher quality of abilities in both its military and civilian manpower and a quest for improved manpower controls. The education for future careers in the Air Force involved new concepts in all phases of training. And the problems of the reserve forces required growing attention from the Air Force.

Prepared as a chapter for inclusion in the History of Headquarters USAF, Fiscal Year 1959, this study is being issued separately to make it more readily available throughout the Air Force. Like all the studies produced by the USAF Historical Division Liaison Office, it is presented with an invitation for suggestions from its readers.

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THE CHANGING CHARACTER OF AIR FORCE MANPOWER

1958-59

In an era of supersonic aircraft, guided missiles, and space craft the Air Force faces no more crucial problem than that of obtaining and holding personnel sufficiently skilled to man its fearfully complicated weapons and equipment. During most of the 1950's, the Air Force's principal manpower problem was how to retain qualified men in the service. Enlisted men and young officers too frequently left the Air Force for more pleasant or lucrative civilian jobs as soon as they had completed their training and served their first tour of duty. The same basic factors affected civilian employees. National prosperity and a shortage of trained manpower in the civilian economy made it difficult for the Government to hire and retain well-trained technical, scientific, and other professional personnel. Every year thousands of highly competent and responsible civilians left the Air Force to accept better-paying jobs in private industry.

In 1959 the problem remained, but it had been modified in several important respects. Changes in the national strategic concept and an ever tightening budget ceiling had caused a reduction since 1955 of almost 120,000 in military and since 1956 of nearly 35,000 in civilian personnel. New legislation had provided higher pay rates, reenlistment bonuses, better medical care, and more adequate housing. In 1958 the Air Force had been authorized to reject enlistees who were not considered intellectually or emotionally suitable and could not be properly

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trained. Consequently, fiscal year 1959 marked a transition point in the character of USAF manpower as primary concern shifted from retaining sufficient numbers of people to obtaining and keeping people with high aptitude and training. Although serious difficulties remained in accomplishing this objective, in 1959 the manpower force was more mature, stable, and career-minded than it had ever been.

The growing technological complexity of weapon systems accompanied by increasing demands for technicians, scientists, engineers, comptrollers, and other professional people to manage and supervise USAF programs, presented the Air Force with some extremely difficult training problems. Since the Air Force still had to recruit a large number of untrained or imperfectly trained individuals to fill its manpower needs--as well as "upgrade" the knowledge and ability of its experienced force--a large and complex training job was inevitable. At the same time, emphasis on funds for more rapid development of highly expensive weapon systems and related equipment seemed to require that less money be spent on manpower, particularly training. By the end of June 1959, however, it was clear that training costs were rising, principally because of the greater variety and intensity of the required schooling, and that more money would have to be allotted to training or many of the vital instructional tasks would be neglected.

In the management of its reserve forces the Air Force faced another complex problem. Predominant USAF opinion held that the greatest military threat to the United States was the possibility of a sudden, all-out attack upon the nation's strategic bases, communication centers, and great

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cities. If such an attack took place it was feared that it might not be possible to mobilize the scattered reserve units and individual trainees quickly enough for them to play any appreciable part in a conflict. A wide divergency of opinion existed within the Air Force itself, and public pressures of various sorts complicated the difficulty. By 1959, doubts concerning the utility of the existing reserve program and pressures exerted by the tight budget demanded a reassessment.

Three fundamental and related questions were intertwined in every phase of the Air Force's manpower problems during the year: What kind of force is best suited to the current strategic concepts? How can the Air Force best manage the careers of its people so as to build and maintain the force required? How much of its share of the national defense budget can the Air Force afford to spend on manpower?

Men and Costs

After the Korean War the military services made strenuous efforts to get more defensive power for less money. Operating within restrictive budget limitations, they repeatedly examined their programs for the purpose of eliminating unnecessary activities and saving money. The frequent manpower reductions of the late 1950's were largely the result of this constant search for greater economy. Nevertheless, the reductions in manpower did not produce a reduction in personnel expenses. The higher-caliber force being built in 1958-59 cost more per man than the former short-term, partially trained force.

Between 30 June 1955 and 30 June 1959 the Air Force's total military manpower strength fell from 959,946 to 840,435. At the same time the

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expenditure for military personnel rose from approximately $3.5 billion in fiscal year 1955 to almost $4 billion in fiscal year 1959. In a comparable trend, total civilian strength fell from 348,230 on June 1956 to 313,466 on 30 June 1959, but costs rose from $1.3 billion to $1.6 billion.*

Various factors, in addition to the obvious one of higher base pay, combined to increase personnel costs during the period in which the number of people was falling. As the manpower force matured and gained experience, more individuals reached higher rank and therefore received higher pay. Also a higher percentage of the men were married and had larger families than the "first-termers" who previously formed the bulk of the manpower force, making it necessary for the Air Force to spend more money on medical care, family housing, and education for the school-age children of its personnel.[1]

The other military services underwent much the same transformation as the Air Force during these five years. Within the three services the XXX military and civilian strength fell from a total of 4,121,687 on 30 June 1955 to 3,582,405 on 30 June 1959. Nevertheless, personnel costs rose from about $15.5 billion in fiscal year 1955 to about $16.3 billion in fiscal year 1959. Military strength for the same period declined from 2,935,107 to 2,504,310, and costs dropped slightly from $10.7 billion to $10.5 billion. Civilian personnel costs rose from $4.8 billion in fiscal year 1955 to $5.8 billion in fiscal year 1959, although the number of

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*For personnel strengths and expenditures, see Appendix.

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civilians employed fell from 1,186,580 to 1,078,095.* Only in the Army was there an absolute decline in military manpower costs, and this was because the Army cut in personnel was so large--a total of more than 247,300. XXXX In civilians, even though the Army dropped more than 56,000 people, costs rose from $1.8 billion in fiscal year 1955 to $2 billion in fiscal year 1959.[2]

The constant rise in the amount of money spent by the armed forces for manpower was not surprising when viewed in the light of recent economic trends in the United States--especially the rising cost of labor and professional services. If, as some studies seem to indicate, the rise has been a bit greater in the armed services than in the nation as a whole, it is because the revolution in technology has had a greater effect on military operations than on most civilian activities. Complicated machines require skilled men to operate and service them, and skilled men demand higher pay than the unskilled.

Although the military services have spent increasing amounts for manpower during the past five years, the expenditures for this purpose have actually become a smaller percentage of the total military budget. Between fiscal year 1955 and fiscal year 1959, this percentage declined in the Department of Defense from 40 to 37; in the Army from 67 to 56; in the Navy (including the Marine Corps) from 49 to 44; and in the Air Force the percentage remained close to 29.

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*For purposes of this discussion, foreigners hired through contracts or agreements with other governments have been excluded. Inclusion of these would make no significant difference in the trend, although their number shrank even more rapidly.

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The Air Force spent a smaller proportion of its funds for manpower than the other services for two reasons. First, it had the largest total expenditures.* Second, manpower ceilings did not permit the use of the larger USAF budget for the expansion of Air Force strength. Accordingly, the Air Force used a greater share of its money developing and operating very expensive weapon systems. Although the Air Force had the smallest number of people in fiscal year 1959, it spent more on its manpower than either of the other services.† A substantial portion of this difference resulted from the extra pay the Air Force provided for its large number of flying personnel. Also since the Air Force had so much heavy, complicated, and expensive materiel and equipment, it kept in its ranks a larger proportion of highly trained technicians. The Air Force spent less than either the Army or the Navy for civilian employees, largely because it had fewer of them.[3]

Congressional pressure and criticism, much of it conflicting, frequently complicated manpower management. Throughout 1958-59, charges were made that the Air Force was employing subterfuge in carrying out its personnel reductions by shifting work from civilian employees to military personnel without achieving real manpower economy. At the same time the Air Force was charged with using civilians in operational activities which should have been manned by military technicians.[4]

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*In fiscal year 1959 the Air Force spent a total of $19.1 billion as compared to $11.7 billion for the Navy and $9.5 billion for the Army.

†See Appendix. During fiscal year 1959 the Army, with a total of 1,267,812 military personnel and civilians, spent $5.4 billion on manpower; the Navy, with a total of 1,159,019 (including the Marine Corps) spent $5.2 billion; and the Air Force with a total of 1,153,901, spent $5.6 billion.

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Actually both the military and the civilian manpower forces continued to shrink. Gen. Thomas D. White, Chief of Staff, indicated alarm at the situation, insisting that the steady reduction of military and civilian personnel beginning in 1957 had been made possible only by eliminating "combat and support elements." In December 1958, when it became evident that further reductions in manpower expenditures would be necessary by fiscal year 1960, Secretary of the Air Force James H. Douglas and General White agreed to cut the military objective for June 1959 to 845,000--5,000 below the authorized strength. At the same time they obtained an understanding with Secretary of Defense Neil McElroy that, in the event of further reductions, the Air Force would cut from the authorized 850,000; not from 845,000. By 30 June 1959, Air Force military strength had been cut to 840,435, and there were indications that within another year the strength would be below the 825,000 figure White considered a bare minimum.[5]

The Search for Quality

From the end of the Korean War until about 1958, USAF commanders and staff agencies viewed with extreme alarm the disparity between the complexity of new weapon systems and the relatively unskilled personnel available to man them. There was reason for this alarm since, during a good portion of the time, more than 75 percent of the military manpower consisted of trainees.

During this period the Air Force's chief manpower problem could be summed up in the word "retention"--persuading the people who had obtained some training and experience to reenlist and, preferably, to become career

men. Only by retaining trained people, military and civilian, could the Air Force maintain and operate such weapon systems as the B-52, B-58, F-10[illegible] and the even more intricate missiles. No less difficult to man were the warning systems, such as the DEW Line stations and the SAGE centers. These systems not only required men with intensive training in electronics and other technical skills but, since they were often located in isolated areas and harsh climates, called for a highly developed sense of responsibility and dedication.[6]

Other modern developments produced similar problems. The tasks of managing the complex, varied, and large establishment of the modern Air Force meant that an increasing number of people had to be assigned to comptroller and administrative jobs, which required training and experience. The march of technology and increasing automation demanded that a constantly growing number of men and women be employed in research and development and related types of work. Additionally, the Air Force found it necessary to assign more officers to joint staff, interdepartmental, and MAAG positions, none of which could be filled satisfactorily by inexperienced people.[7]

Until shortly before the beginning of fiscal year 1959, therefore, the Air Force waged a desperate struggle to keep enough trained men and women to operate and maintain the establishment in being. The training program was barely able to school enough personnel to replace the losses of trained men to the civilian economy. In fact, there were times in the mid-1950's when the Air Force did not buy all the equipment it needed because of the lack of trained technicians. It is not surprising that the question often arose between 1953 and 1958 as to whether the Air Force would be able to

manage and support the weapons and strategic concepts that were developing in the minds of the planners and policy makers.[8]

During 1958, however, this picture changed for the better. The Air Force could start an intensive drive to improve quality instead of concentrating on mass retention. Two developments made this possible. First, the Administration's decision to cut total Air Force personnel strength by more than 106,000 during fiscal years 1958-59 enabled Headquarters USAF to cull out ineffective personnel. Second, Congress had responded to USAF needs by passing a substantial amount of military personnel legislation. Such items as the Armed Forces Regular Officer Augmentation Act of 1956, Survivor Benefits Act, Dependents' Medical Care Act, and the Military Pay Act of 1958--all adopted after mid-1956--brought about a significant improvement in the reenlistment of experienced personnel. In 1958, Congress also provided a 10 percent pay increase for classified government workers, enabling the Air Force to pay its technical and professional employees salaries more comparable to those in private industry.[9]

Airman Quality Control

A clearer understanding of the change that occurred in the character of USAF manpower may be obtained by examining the trend as it affected airmen. Between June 1955 and June 1959 the reenlistment rate for first-term airmen rose from approximately 14 percent to nearly 46 percent. As a result, by the end of June 1959 the enlisted force was composed of about 60 percent career airmen--individuals who had reenlisted for their second or subsequent terms. This rise from about 25 percent career men four or five years earlier was all the more remarkable since it occurred during a period of tightening reenlistment requirements.[10]

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In order to reenlist under the new regulations, beginning early in 1958, an airman had to meet certain mental aptitude requirements and demonstrate an ability to advance in his specialty. If he had not reached the grade of airman 2d class (pay grade E-3) by the end of his original four-year enlistment, he was declared ineligible, unless he volunteered immediately for his old position. Airmen considered marginal or of low potential, who were released early during a period when the Air Force was reducing personnel, could not reenlist, nor could individuals judged unfit or separated with a discharge other than under honorable conditions. Indicative of the increasing strictness of regulations was the stipulation that an airman could not reenlist without a special waiver from his base commander if he had lost more than five days from duty as a result of his own misconduct. Previously he could have lost as many as 30 days.[11]

This tightening of quality standards naturally eliminated large numbers of unfit or untrainable airmen from the USAF establishment. In fiscal year 1955, for example, the Air Force discharged about 570 men per month who were considered unsuitable; by August 1958 the figure had reached 1,900 per month. During fiscal years 1957-59 about 175,000 airmen had been found ineligible to reenlist. In terms of percentage, the proportion of airmen declared ineligible for reenlistment increased from about 15 percent in 1955 to about 35 percent in 1959.[12]

This was a very high percentage, and there were two factors which largely accounted for it. The new complex weapon systems called for an ever increasing ratio of men with mental and emotional aptitudes fitting them for progressively intensified training. Second, during the period when most

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of these men originally enlisted, a requirement by the Secretary of Defense obliged the Air Force to accept 27 percent of its new enlistments from the Category IV mental aptitude group, which contained men possessing a low aptitude for military service and training. This problem diminished in importance as OSD gradually reduced this requirement to the point where the Air Force had to accept less than 10 percent of its new enlistments from the low-aptitude group.

Beginning in April 1958 the Air Force adopted a system of preenlistment aptitude testing to insure that few individuals would be accepted who could not learn to perform some required job satisfactorily. This Airman Qualifying Examination, administered at recruiting stations, gave much more satisfactory results than the previous system under which tests were not administered until the airman had enlisted and reached the Military Training Center at Lackland AFB, Texas.[13]

The cumulative effect of these procedures was to obtain airmen who were able to make satisfactory progress as they gained training and experience. The Air Force expected that by 1961 or early 1962 all the men coming up for reenlistment would be able to meet high-performance standards. By 1962 the Air Force would be dealing only with men who had passed through a stringent screening process. With a high ratio of capable career airmen the Air Force could then turn its attention to training people in more of the technical specialties needed for the advanced weapon systems. With the reenlistment rate achieved by the end of June 1959 it would be possible to expand the force of high-quality manpower should a new situation require it.[14]

Nevertheless, some of the specialties and career fields still failed--by a considerable margin--to hold the number of skilled men required. Although

these specialties were better manned than ever before, and personnel planners thought they could cope with the remaining problems, manning of Air Force units continued to be a matter for concern. As the Air Force shifts to more advanced missile and electronic warning systems, the proportion of men needed in the highly technical specialties increases. For example, 52.3 percent of the airmen in a B-52 unit must have technical training, while in the SM-65 (Atlas) the percentage is 63.1. In a B-47 unit, 51.5 percent require technical training as compared to 64.5 percent in SM-75 (Thor) units. In 1959 the Air Force still could not be sure of its ability to fill its skilled manpower needs.[15]

Moreover, there was no assurance that the Air Force could continue to be as selective in recruiting as it had been in 1958 and 1959 or could afford to reject as many men who wanted to reenlist. Volunteers were plentiful during these two years, but some personnel experts thought the abundance had resulted from the business recession of 1958 and might not continue. Additionally, the elimination of ineffective personnel had been made possible to a large extent by the manpower reductions beginning in 1957, which could not continue and might have to be reversed.[16]

Officer Quality

Improving the officer corps posed problems just as crucial as those encountered in managing the airman group, although improvements came about more slowly and reform measures usually had to take effect gradually. Consequently, several actions initiated in 1959 or earlier had not yet produced measurable results by the end of June 1959.

The immediate problem, of course, was to hold enough trained men to operate and maintain the complex USAF weapon systems and their related

equipment. These included research and development officers, aircraft controllers, electronics officers, and navigators, as well as pilots. The key to the officer retention problem was to convince enough of the high-quality young men who were on short, specified tours to choose an Air Force career.

Actually, the Air Force began its current program as early as 1956. Initiated by Lt. Gen. Emmett O'Donnell, Jr., DCS/Personnel, this program required commanders to interview and counsel young officers and point out the advantages of a USAF career. Most of these young officers had had little experience in civilian life and many found that an honest comparison between their opportunities in the service and outside was more favorable to the Air Force than they had formerly believed. Nevertheless, the least favorable aspect of the USAF personnel picture concerned junior officers. In spite of all efforts, there did not appear to be enough well-educated young applicants for commissions. Recruiters continued to seek ways to meet this problem.[17]

In 1957, Headquarters USAF decided that longer periods of service should be required of its "short-tour" rated officers. By the time these men had obtained sufficient training to be effective pilots or navigators they had only a few months of active duty left. In August 1957 the Air Force began requiring volunteers for flying training to commit themselves to four years of service after they completed training--in effect, to five years of active duty. This measure substantially increased the operational usefulness of rated officers, enhanced the readiness of the combat commands, and reduced the amount of flying training, thus lowering training costs in proportion to operational costs. This action, it was believed, would have an indirect effect on the retention rate, since the longer an officer spent in the service

the more likely he was to choose a USAF career. In addition, the five-year requirement tended to freeze out at the beginning the individuals who had a strong disinclination toward a service career. Headquarters USAF expected the retention ratio of rated officers to go up from 35 percent to 65 percent, but at the end of June 1959 it was still too early to tell what the exact effect would be.[18]

By the end of June 1959, officials at Headquarters USAF responsible for meeting manpower requirements believed that, as a result of the quality control program and despite all the difficulties, the Air Force was in a better position to contend with the complexities of new technological developments than it had been at any time since the Korean War.[19]

The Struggle for Efficiency

Hand-in-hand with the drive to raise the general competence of USAF manpower went a concerted effort to make the most effective use of that manpower. This was a complicated administrative task because of the size of the manpower force, the worldwide distribution of units, and the vast number and varied types of jobs that had to be filled. In addition, as technological change altered the character of weapons and equipment, the kinds of jobs and skills continued to change, sometimes with bewildering rapidity. The rigid restrictions on total manpower kept the Air Force under constant pressure to make the best possible distribution of personnel resources among the various functions and activities. Consequently the Air Force tried to maintain a continuing check and control over the use of men at every echelon of command.

Manpower Controls

In March 1958 the Air Force completed a study providing information on which to base an improved manpower management program. In a number of manpower surveys, representatives of the Inspector General interviewed unit commanders, ordered a review of the work habits of personnel, and emphasized the elimination of unnecessary levels of supervision. These surveys enabled the Air Force to squeeze out about 35,500 spaces in fiscal year 1959 and helped it keep under its manpower ceiling. Moreover, about 520 manpower spaces were eliminated by extending the use of electronic data-processing equipment, and more than 1,000 additional spaces were scheduled to become available for other purposes during fiscal year 1960 as more equipment was installed.[20]

In July 1958, after study of the methods of the Army, Navy, other federal agencies, and such industrial firms as Ford Motor Company, Headquarters USAF established what it termed the USAF Manpower Validation Program. By considering historical experience and by using professionally accepted procedures--work measurement, work sampling, statistical correlation, and manpower surveys--Headquarters USAF refined its standards for determining the number of men with the proper rank and specialties required to perform each necessary Air Force function. The Directorate of Manpower and Organization then prepared a manual to assist the commands in establishing proper standards by which to measure their manpower requirements.[21]

In April 1959, as a result of questions raised during congressional hearings, OSD posed two questions concerning civilian employees, particularly contractor personnel, which had long been troubling the Air Force.

First, could civilian and contractor personnel engaged in operational activities be classified as combatants, and if so, were they covered by the Geneva Conventions? Second, did the use of civilian and contractor personnel to man the DEW Line and SAGE jeopardize national security, since the Air Force would lack control over them in an acute emergency or war?

The Air Force decided that the first point did not pose a problem, since civilians were considered to be adequately covered by the prisoner-of-war provisions in the Geneva Conventions. There was, however, real concern over the second question. Adequate control could not be exercised over civilian and contract employees, and their use would be very risky as a permanent arrangement, constituting a weakness in the air defense system.

Representative Daniel J. Flood of the DOD subcommittee of the House Committee on Appropriations believed that this was a grave new problem confronting U.S. defense officials and that it had received far too little attention from the Department of Defense. Whether contract civilians had been used to save money, to help private business, or because of political pressure did not concern him at the moment, but he thought the problem had to be dealt with at the highest level of the Department of Defense.

Lewis S. Thompson, the Air Force Special Assistant for Manpower, Personnel, and Reserve Forces, pointed out in June that contract personnel had been used in order to get DEW Line and SAGE facilities operating as quickly as possible at a time when insufficient technicians were available in the Air Force. He recognized the danger of the situation and suggested legislation to give the Air Force firmer control over civilian employees, thereby providing latitude in choosing among military, civilian, or contract

technicians, whichever seemed preferable at any given time. Thompson disclosed that the Air Force was preparing to test the manning of the Aleutian segment of the DEW Line with military personnel and indicated that further action would have to await completion of a study by the Mitre Corporation. Since the shortage of properly trained military personnel continued, it appeared likely that the temporary solution would constitute practice, at least as long as the current manpower limitation remained in effect.[22]

Three months later the House Subcommittee on Utilization of Military Manpower asked the Air Force for comments on an allegation that only 10 percent of the functions performed by military personnel had any relationship to combat and that 90 percent of the jobs in the Air Force could be manned by civilians. In reply, James P. Goode, Deputy for Manpower, Personnel, and Organization, insisted that, although the proper mixture of military and civilian personnel presented a long-term problem, the Air Force was constantly improving its utilization of military manpower. In fiscal year 1955, 56.9 percent of total military personnel had been in operating units; by fiscal year 1959 the percentage had risen to 66.5. The percentage in training and support forces had fallen from 28.3 in 1955 to 17.6 in 1959.[23]

Dangers of a Manpower Shortage

In 1959, examination of foreseeable strategic requirements suggested that manpower reductions had perhaps gone so far as to imperil continued effective operation. This was particularly true in view of the further cuts planned for fiscal year 1960. The Air Force was under continuous pressure to keep under a rigid manpower ceiling, while at the same time it had to

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make manpower available for additional high-priority activities. Although the total number of military personnel authorized for fiscal year 1960 was only 845,000 and further civilian reductions were deemed necessary, the Air Force had requirements for increases in critical activities extending through fiscal year 1963. These would be chiefly for SAC dispersal and alert, tanker squadrons, air defense warning systems, and the various missile programs.[24]

To prepare to assume these new functions, the Air Force had to give many men training in new specialties or "upgrade" the training they had already received. By June 1959, however, Headquarters USAF was receiving increasing complaints from the commands that were asked to release men from their current duties and send them to school or to on-the-job training courses. Commanders insisted that they were short of manpower already and could not dispense with their men without impairing unit operations. Also, since these men were to be trained for critical and difficult jobs which only intelligent men could handle, the commands lost some of their best people, for whom replacements of any kind were difficult to get.[25]

New operational concepts called for dispersal of the major bases. The Air Force was placing less reliance on large air bases and breaking up into smaller units scattered throughout rural and isolated regions. Increased requirements for the best-trained personnel to man radar and missile sites tended to eat up a part of the gains obtained by better retention. The fact that these sites required operation 24 hours a day necessitated the assignment of multiple crews and made heavier demands on high-caliber manpower than the Air Force had heretofore experienced in peacetime.[26]

In October 1958, and again about a year later, General White declared emphatically that current budget estimates undergoing review in Headquarters

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USAF and OSD could not be considered statements of Air Force requirements, but only the best possible compromises within limitations set by higher authority. He emphasized that many necessary and feasible improvements, particularly in personnel and training, "must either be stretched out or foregone altogether." The military and civilian personnel reductions since 1957, he said, had been made possible only by eliminating combat and support elements. He believed that training forces had been cut far too drastically and the 825,000 military personnel ceiling being considered for fiscal year 1961 provided no manpower for an airborne alert.[27]

Manpower shortages played a significant part in the Air Force's failure to expand the B-52 airborne alert. On 12 February 1959, Gen. Curtis E. LeMay, Vice Chief of Staff, directed SAC to develop an airborne alert capability, but the joint plan developed by SAC and AMC was disapproved largely because of the requirement for more than 48,600 additional people. A second proposal, keeping one-fourth of the B-52 force on alert, would have required 9,953 new military personnel spaces for SAC and 25,500 new civilians for AMC. Secretary of the Air Force Douglas approved this plan, but on 2 December 1959 it was disapproved by the Secretary of Defense. Only a continuation of the airborne alert indoctrination training, which called for no increase in personnel authorization, met with approval.[28]

The handicaps under which the Air Force had to operate as a result of manpower restrictions caused alarm throughout the headquarters. The Chief of Staff believed that during fiscal year 1960 the Air Force would have to analyze the effects of the large manpower cuts made since 1956 and that the operating commands in particular would need to evaluate the impact of these

cuts on combat capability. He thought "readjustments" might be necessary in order to maintain the effectiveness of the combat forces.[29]

The Quest for Professionalism

The Air Force's emphasis on selectivity and high-quality standards led to attempts to improve the career prospects of individual airmen, officers, and civilian employees. Conversely, the attempts to insure more satisfying and permanent careers for individuals were directed toward enhancing the general competence of USAF manpower.[30]

Airman Career Incentives

One of the most significant new developments permitted airmen in about 30 critical technical specialties to draw "proficiency pay," as authorized in the Military Pay Act of 1958. The proficiency pay plan went into effect on 1 November 1958, with more than 6,000 airmen receiving an extra $30 per month above their base pay, and by the end of June 1959 about 19,000 airmen were getting extra pay benefits. The Air Force intended to put the plan into effect over a four-year period, at the end of which approximately 107,000 airmen would benefit from its provisions.[31]

In order to qualify for proficiency pay an airman had to: (1) be serving in his second or subsequent enlistment or have completed at least four years of active military service, (2) be serving in pay grade E-4 (A1C), (3) have demonstrated proficiency in one of the skills contributing most to USAF effectiveness, and (4) possess good character and a high sense of responsibility. This action added a new step to the traditional military pay structure and constituted another feature in the formation of a solid corps of capable, technically qualified personnel.[32]

To further enhance opportunities for advancement, the Air Force created two new pay grades at the top of the airman structure. Spaces for these E-8 and E-9 pay grades, senior and chief master sergeant, came out of the authorization of 56,000 master sergeants. Although the total number of spaces remained unchanged, the Air Force could now differentiate among degrees of responsibility within the master sergeant group. By the end of June 1959, about 5,000 master sergeants had been appointed to senior master sergeant, and the first promotions to chief master sergeant were scheduled for December. Headquarters USAF planned to appoint eventually 14,000 senior master sergeants and 7,000 chief master sergeants.[33]

Since the Air Force would employ a senior or chief master sergeant to supervise other highly skilled technicians in two or more career specialties, he was considered a superintendent. The Air Force stipulated minimum active service of 10 years for promotion to senior master sergeants and 11 years for promotion to chief, but it appeared likely that their average service would far exceed these established minimums. In addition, senior master sergeants would have to demonstrate their abilities before being eligible for promotion to chief master sergeant.[34]

Neither the two new pay grades nor proficiency pay relieved possibly the most serious airman difficulty: the danger of promotion stagnation in the grades from AlC through master sergeant. In 1956 the Secretary of Defense had restricted the number of airmen in the six top grades to 55 percent of the total enlisted force. Until 1959 this caused no great difficulty because turnover in these grades had been high enough to permit normal advancement. In fiscal year 1959, however, vacancies in the upper grades

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were only about half as numerous as the year before, and they were expected to be even fewer in fiscal year 1960.

The Air Force was concerned because, while the increasing complexity of weapons and equipment called for more skilled people in the higher enlisted grades, the decline in overall strength strictly limited the number of spaces in these grades. David S. Smith, Assistant Secretary of the Air Force (Manpower, Personnel, and Reserve Forces), said in September 1958 that this was one of the Air Force's most pressing needs, since many airmen were being denied an opportunity to advance to the pay grades commensurate with their abilities. He thought about 65 percent of the airman positions should be in pay grades E-4 and above, and he asked the Secretary of Defense for a release from the 55 percent restriction. Nevertheless, when SAC asked for more E-4 spaces a year later the restriction was still in effect, and it was informed that no relief could be expected until OSD modified the 55 percent ceiling.[35]

Officer Career Problems

Planning a suitable career pattern for the officer corps became progressively more complicated. Accepting the manpower plans in effect at the end of June 1959, the Air Force needed 126,000 officers on active duty to man the force that would be maintained for the foreseeable future. By the Regular Officer Augmentation Act of 1956, Congress set a limit of 69,425 on the number of Regular Air Force officers, 48,271 of whom had received their commissions by the end of fiscal year 1959.* Only a few officers, the Academy graduates for example, came into the Air Force as Regulars.

*The Air Force had imposed an administrative ceiling on Regular officers of about 55,500.

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Consequently, about one-third of the 9,000 reserve officers who began active duty during fiscal year 1959 could look forward to Regular commissions and a relatively secure USAF career. During their first five years of service the 9,000 would compete among themselves for approximately 2,700 Regular spaces. Headquarters USAF believed that in this manner it could guarantee to the largest possible number of officers in the active establishment the 28/30-year career envisaged under the Regular Officer Augmentation Act.[36]

The Air Force encountered an almost insurmountable problem because of the contradictions between the Regular Officer Augmentation Act of 1956 and the Officer Grade Limitation Act (OGLA) of 1954, which imposed a pattern of organization on the whole Air Force and severely limited the total number of field-grade officers. The Augmentation Act assumed that a properly organized Regular officer corps of 69,425 would contain 5,554 colonels, 9,719 lieutenant colonels, and 13,190 majors. But for a force of 126,000 officers the OGLA had authorized 5,172 colonels, 10,457 lieutenant colonels, and 22,803 majors--fewer colonels, actually, than the Augmentation Act allowed for the Regulars alone. If, then, the upper-range field-grade officers in the Regular establishment were given their promotions on schedule, the authorization for the whole force would virtually be filled, and there would be no promotion opportunity for those officers not on Regular status.

Mathematically, the Air Force had only two reasonable choices—it could keep the Regular corps small and retain and promote more reservists, or it could give a greater share of the officers the added security of Regular commissions. Following the latter course, as the Air Force did,

was unfortunate for officers who did not win Regular status. Nevertheless, the Air Force still needed 126,000 officers and had been searching desperately for a way to keep a larger number of reservists. The problem was how to give them adequate service incentives and rewards to take the place of the full career status that the Air Force was unable to offer.[37]

During fiscal year 1959 the Air Force attempted to work out a substitute career for those reservists who could not be given Regular commissions. Under HR 5132, the Reserve Officers' Incentive Act of 1959, which passed the House of Representatives on 20 March, the Air Force could grant reserve officers Term Retention Contracts. Such contracts would provide retirement after 20 years of active service and substantial compensations in case the Government broke the contract. In addition, the officers would be promoted in the reserve forces. Reserve promotions would not serve any practical purpose while the officer was on active duty, but they would permit the individual to remain in the active force and enhance his retirement pay.

The Reserve Officers' Incentive Act, however, did not pass the Senate, and prospects for its passage in the near future looked dim. Until some such law could be enacted, the Air Force expected to continue to lose a sizable number of its junior officers on active service to the reserve forces and to civilian jobs. A certain amount of this loss was normal and desirable, for the active force supplied officers for the reserve forces. To avoid excessive losses of capable officers and undue injury to individuals, Headquarters USAF tried to limit the size of the officer corps by

restricting appointments, granting early releases to the officers who did not desire a career, and retiring those who had earned retirement.[38]

The Air Force's problem resulted in part from a strong reluctance in Congress to permit any increase in the ratio of officers to total military strength. In late 1958 and early 1959 the DOD subcommittee of the House Committee on Appropriations sharply criticised the Air Force for having too many officers, and it appeared highly unlikely that any substantial loosening of grade limitations could be obtained. Nevertheless, Douglas, Goode, and Lyle S. Garlock, Assistant Secretary of the Air Force (Financial Management), tried to demonstrate a need for more field-grade officers, and in February 1959 Garlock sent the committee a comprehensive report on the subject.

Garlock maintained that the number of officers ought to be based on the need for professional positions, not on any arbitrary percentage of the manpower force. He pointed out that complex weapon systems and the growing demand for officers to serve outside the Air Force--in JCS, MAAG's, NATO, SEATO, etc.--increased the demand for technically qualified, highly trained, and mature people. In these jobs the requirement for officers continued to rise in something like a geometric ratio. Expansion of industrial contracting in research and development, construction, and manufacturing further increased the need for officers in management and supervisory jobs. This increasing requirement for military personnel at the professional level followed a similar trend that had been transforming American industry since World War II.[39]

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Douglas and Goode also insisted that the OGLA of 1954 had discriminated against the Air Force. Because of the youth of the Air Force, its officer corps had contained a relatively low proportion of high grades, and OGLA froze the existing pattern. Douglas believed that the act would have to be changed soon, or the Air Force would experience growing difficulty in attracting and retaining enough capable young officers to man a combat-ready force. He maintained that many young reserve officers would be unable to rise above the grade of captain while serving on active duty.

It must be emphasized that Douglas, in this instance, was commenting on relative rank within the officer corps, not the officer-airman ratio. Actually, during the years from 1955 to 1959, the Air Force had more officers and a substantially higher ratio of officers to enlisted men than either the Army or the Navy. This appeared to support the congressional criticism.[40]

Soon after the close of the fiscal year, Congress granted the Air Force some relief from its officer career difficulties by permitting it to appoint 3,000 additional temporary majors, about a third of the number Goode thought necessary. Lt. Gen. Truman H. Landon, DCS/Personnel after 1 August 1959, stated in September that these spaces would be used to reward officers of long service, primarily reservists, who otherwise would have had little opportunity for promotion. Landon still hoped that OGLA might be revised in such a way as to increase promotion opportunities.[41]

The limitation on officer spaces brought to a crisis the long-standing conflict between Headquarters USAF and the Strategic Air Command over

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temporary promotions, and "spot promotions"* in particular. There had been disagreement on this policy between Headquarters and SAC for about three years, with the former contending that spot promotions had to be eliminated because the number of officer spaces was rapidly approaching the legal ceiling. Nevertheless, in 1958 and 1959, Gen. Thomas S. Power, Commander-in-Chief SAC, redoubled his efforts to convince Headquarters USAF--and the public--that SAC not only needed the spaces for these spot promotions but that their number should be increased.[42]

Headquarters USAF and OSAF contended that (1) any extension of spot promotions would have to be made at the expense of the general temporary promotion program, (2) most combat commands could qualify for spot promotions using the same arguments that had justified SAC's position, and (3) the Air Force could not support spot promotions after 1960. Headquarters first decided that SAC would have to give up its surplus grades by January 1960 but later extended the date to June 1960.

In October 1958, when the subject of special alert pay for SAC crews became a topic for discussion, General LeMay approved a recommendation of the DCS/Personnel that responsibility pay† be substituted for spot promotions

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*These are temporary promotions of key officers made by a combat or theater commander. An officer reverts to his former rank when he leaves the zone in which promoted unless he has otherwise received a regular promotion.

†The Military Pay Act of 1958 included a provision whereby officers (captain through colonel) occupying positions of unusual responsibility could draw extra pay, under regulations prescribed by the Secretary of Defense. The pay would vary from $50 to $150 per month, depending on the grade. Not more than 10 percent of majors, lieutenant colonels, and colonels or more than 5 percent of captains could draw this additional pay at one time. This provision of the pay act had not yet been put into effect.

and alert pay. All major commanders accepted this substitute except for General Power, who argued that SAC needed alert pay, responsibility pay, and continuation of spot promotions. Power continued to insist strongly that SAC's ability to give spot promotions had played a significant role in developing his bomber crews into the highly professional force they had become and that, since SAC had grown in recent years, the number of promotions should be increased rather than cut.[43]

Power believed that SAC crews were particularly deserving of responsibility pay, and he deplored the Air Force's failure to provide such pay after it had been authorized by Congress. After much disagreement within the Air Force, a board of seven senior officers, representing as many major commands, on 3 October 1958 approved a general responsibility pay plan for presentation to the Secretary of the Air Force. On 24 October, Douglas sent this plan to the Secretary of Defense, but at the close of fiscal year 1959 it seemed highly unlikely that such a plan would be adopted within the foreseeable future. On 1 April 1959, Headquarters USAF recommended that permission be obtained from OSD to put responsibility pay into effect for aircrews on combat alert, but Douglas rejected the proposal, indicating that he wanted further study before sending a recommendation to OSD.[44]

A related pay problem involved the men who operated and serviced remote and isolated missile and missile-warning stations scattered over the Western Hemisphere. In a country largely urban, morale problems naturally arose among young men serving in rural and isolated regions, often under quite primitive circumstances. The Air Force desired to secure extra

pay for men serving in these remote posts, especially those in the frozen wastelands of the Arctic.[45]

In June 1959, no satisfactory solution to the problems of promotion and pay was in sight. Tight budgets made it difficult to find the money to put responsibility and extra pay programs into effect. SAC's need for spot promotions could not be met unless Congress relaxed the grade limitation act or more spaces were taken away from other commands. When Power reopened the subject in the summer of 1959 by appealing directly to the Secretary of Defense, OSAF held firmly to its earlier position, pointing out that the Air Force would reach the limit of its field-grade officer positions by 30 June 1960 and that spot promotions could be continued only by curtailing temporary promotions--possibly stopping them altogether.[46]

Housing and Dependent Schooling

The DCS/Personnel believed that adequate living quarters for men and their families constituted one of the requisites to developing satisfactory careers for officers and airmen and building an effective professional force. He was convinced, furthermore, that the improvements in housing achieved between 1955 and 1959 had been the most significant factor in raising retention rates, even more important than the pay raise of 1958. In addition to family housing, which had given the Air Force the most trouble over the years, barracks, bachelor officer quarters, and dining halls fell appreciably below the standards the Air Force liked to maintain for its personnel. Some of the dormitories and dining halls at DEW Line sites, for example, became so dilapidated that they constituted fire hazards,

thus threatening to lower morale and actually jeopardize effective operation of the warning facilities.[47]

In December 1959 the Office of the Chief of Staff estimated that the Air Force had a deficit of approximately 107,000 units, including housing for 7,300 essential civilians. However, because of budget ceilings, the Department of Defense would not allow the Air Force to program for its total housing requirement for officers and high-ranking airmen or for any housing for lower-grade airmen, except in very unusual cases.[48]

Nevertheless, during fiscal year 1959, progress was made. Nearly 20,000 new housing units were completed in the United States and overseas, and 26,714 additional units were started. At the end of June 1959 the Air Force had 98,726 units of family housing completed, 31,745 units under construction, and 22,163 programmed. In addition, there were more than 14,500 inadequate but usable units and about 2,700 trailers.[49]

Most of the construction and planning activity during 1959 occurred in the Capehart (Title VIII) projects and the Wherry rehabilitation and improvement program. Since the law stipulated that the Air Force must own the land on which Capehart houses were built, they were limited to bases within the United States, except for one project on Guam and one in Hawaii. In accordance with a law passed in August 1956, the Air Force acquired about 30,000 of the old Wherry housing units for rehabilitation. Because of the type of construction, failure of the sponsors to maintain them adequately, and rising rents and maintenance costs, many of these units had fallen below USAF standards of quality. Many of the quarters were in such bad condition that it would not have been economically feasible to

improve them, but without them the airmen would have had to occupy even worse housing and pay higher rents and greater transportation costs. In addition, their families frequently would have to live too far away to use the base facilities. The rehabilitation program had gotten under way by the end of June 1959 but had been severely hampered--stopped at times--because of a shortage of funds.[50] A new housing problem emerged with the multiplication of isolated duty stations, associated in particular with missile and missile-warning units. This dispersal of units added still further to a housing requirement that the Air Force could not fill.[51]

Providing services to families of USAF personnel stationed overseas assumed greater consequences as periodic tours of duty in foreign countries became a normal military function. When families accompanied the men abroad, one of the primary considerations was the education of their school-age children. In spite of sizable manpower reductions and the closing of several bases in recent years, enrollments in Air Force dependent schools rose steadily.* Barring further substantial manpower cuts or limitations on numbers of dependents overseas, this trend appeared likely to continue well into the 1960's, and if the Air Force provided adequate educational opportunities for the children, greater financial assistance would be needed. Congress, however, failed to raise the inadequate statutory limit on per-pupil expenditure, and funds were becoming increasingly scarce by the end of the fiscal year.[52]

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*Approximately 34,500 pupils attended Air Force schools overseas in fiscal year 1957, 42,500 by the beginning of the 1958-59 school term, and well over 50,000 were expected in fiscal year 1960. At the end of June 1959 the Air Force was operating 91 elementary and 23 high schools overseas.

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Civilian Career Problems

The Air Force continued to encounter a number of problems that made it difficult to compete with industry for technical, scientific, and other professional workers. Serious inequities resulted from classified employee salaries being prescribed by Congress on a nationwide basis while laborers were compensated at hourly rates paid by local industry for similar work. Because the government nationwide rates were relatively inflexible, clerical employees in some localities were overpaid while salaries of scientists, engineers, and other professional people lagged behind industrial salaries. The Federal Employee Compensation Act of 1958, which granted a pay raise of about 10 percent, failed to correct the inequities.

Headquarters believed that the situation could be corrected only by legislation prescribing one system for all civilian employees. Under this system lower-grade employees would be paid on a parity with local industrial workers, and higher-grade employees would be paid on a nationwide scale but with a greater range between low and high levels within the grades. The Air Force placed its hope for reform in the President's proposal of 15 July 1958 to Congress urging a review of federal pay systems, but although the President made the same plea again later, no action was forthcoming.[53]

In addition to restrictions imposed by the budget and the overall strength ceilings, the Air Force had to contend with a ceiling on the number of classified or graded civilian employees. Since most of the scientific and professional people fell in this category, the limitation

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made for inefficient manpower management. Like industry, the Air Force needed an increasingly higher proportion of "white collar" workers in order to manage its difficult technical programs. As one example, Gen. Samuel E. Anderson, commander of the Air Material Command, found that the grade ceiling caused almost insurmountable difficulty in filling positions in technical fields associated with atomic weapons, electronics, radar, and armament systems. In June 1959 the House of Representatives finally agreed to abolish the grade ceiling, and it was expected that the Senate would go along.[54]

The Air Force employed approximately 8,200 civilian scientists and engineers, about half of whom worked for the Air Research and Development Command. The Air Force generally succeeded in recruiting its fair share of scientists and engineers, but it usually took too long to fill vacant positions, and most applicants met only the minimum qualifications. The situation improved somewhat in 1959, but Headquarters USAF feared that this might be only temporary.[55]

The Air Force employed 145 of its scientists and professional personnel in pay grades above the regular Civil Service scale--in Public Law 313 and "supergrade" positions. It contended that it needed at least 204 persons in this bracket in order to adequately direct its complex scientific and administrative activities. Nothing had been accomplished toward obtaining more of these high-grade positions by the end of June 1959, but prospects looked bright for getting some of them within a year or two.[56]

The Air Force also sought legislation that would authorize the military services to grant reemployment rights to career civilians assigned

overseas. The desired legislation would entitle a returning employee to the position he held before his assignment abroad or, if no such position is vacant, to an equal or higher grade in the same geographical area. If neither of these solutions is possible, he could be placed elsewhere in the department for which he formerly worked. Experience in the military departments had demonstrated the great advantage of exchanging personnel between positions in the United States and overseas. Under prevailing practices, however, the best civilian employees could not be persuaded to accept assignments abroad without assurance that when they returned to the United States they would have jobs comparable to the ones they left. In January 1959 the Bureau of the Budget cleared the Air Force's legislative proposal, but at the end of June 1959 it had not yet been introduced into Congress.[57]

Training Problems

The Air Force's training program provided the most effective means of insuring that the available manpower could manage and use the instruments of military strength. In a status report on personnel in September 1959 the DCS/Personnel, General Landon, stated that the USAF training establishment would be able to prepare men and women for the complex tasks accompanying the "accelerating pace of aerospace developments."[58] Nevertheless, the task remained complicated and difficult.

Technical and Flying Training

One of the big jobs confronting the Air Force in 1958-59 was that of

retraining, cross-training, and upgrade training.* Because of the rapid changes in strategy and technology, several of the traditional specialties became overcrowded while in some of the newer specialties there was a critical shortage of qualified people. Many competent airmen--people the Air Force could not afford to waste--found themselves unable to advance because they were in one of the crowded fields. It was to the advantage of both the Air Force and the men to retrain them in other specialties.[59]

It also proved necessary to cross-train noncommissioned officers to enable them to serve in higher supervisory positions. The growing complexity of weapons and equipment, demanding a higher degree of knowledge and skill on the part of technicians, provided a continuing need for upgrade training.[60] This trend, so typical of the past two years, required a shift to the high-grade, intensive, and most expensive types of training--expensive in both time and training equipment.

These programs met with considerable success. For example, approximately 1,000 men received advanced schooling in the critical and highly technical radio-radar field. The major commands made 9,000 surplus noncommissioned officers available for retraining by 30 April 1959, and another quota, for 2,700 surplus noncommissioned officers, was levied on 15 May 1959. The Air Force planned to retrain and cross-train about 30,000 men by the end of June 1960, but the program appeared overly ambitious

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*Retraining usually referred to schooling an airman in a new job specialty. Cross-training schooled an airman in a specialty closely related to his own; and upgrade training increased his competence in his primary specialty.

since much of the new instruction would be at the discretion of the major commands. Air Force requests for personnel for training were not mandatory, and the commands were finding it increasingly difficult to spare men from their assigned duties to send them back to school.[61]

Training men to operate and service missiles constituted not only one of the Air Force's most crucial tasks but also one of the most difficult. The task was highly complicated--56 different courses were necessary in Atlas training and 42 in Titan training. Achieving proper timing so that men would graduate from their training courses near the time the missiles became operational proved equally troublesome. Acceleration of several of the missile programs during 1958-59 made it difficult to have the military specialists trained on time. This required more factory training and manning by contract personnel than otherwise could have been necessary, and certainly more than the Air Force thought desirable.[62]

A more frustrating situation developed in the Jupiter program. Members of the 864th Strategic Missile Squadron, designated to man the first Jupiter unit in Italy, completed their training in March 1959, but the site had not been completed by that date. Meantime, it appeared that the Italians being trained in the United States for the second squadron would complete their schooling in time to man the first squadron. This meant that the USAF personnel of the 864th Squadron would waste their training, suffer in morale, and have their careers damaged unless some solution could be found. At the end of June 1959 it seemed likely that the 864th Squadron would be disbanded and its personnel used by Air Training Command for Jupiter field training and Thor instructor positions or sent to SAC

for use in other missile programs. At any rate, the Air Force had suffered a manpower waste it could little afford.[63]

Finding sufficient training equipment frequently posed a supply problem because of the competition between the training schools and the operating commands for very scarce materiel. This lack of equipment prompted the Inspector General to report that individual training in the ballistic missile program had fallen below standard. Inadequate and out-of-date equipment often had to be used until production items were available. In those cases where an "operational capability date" was near at hand, the Air Force Ballistic Missile Division insisted that individual training be sacrificed if necessary to meet the capability date.[64]

Providing combat training firings for missile crews posed a problem. To provide confidence in the operational capability of missiles, obtain quality control and reliability data, and to increase crew morale and esprit de corps, the Air Force decided that such firings by ICBM, IRBM, Snark, Goose, Quail, and Hound Dog units would be necessary. OSD and USAF studies concluded that existing missile ranges could not carry out this mission without interfering with research and development programs. Therefore, during fiscal year 1959 the Air Force began setting up centralized launching facilities for combat training at Vandenberg AFB, Calif., on the Pacific Missile Range; at Patrick AFB, Fla., on the Atlantic Missile Range; and at the Eglin Missile Test Range, Fla. There also appeared to be a need for training firings overseas for the IRBM's.[65]

The number of officers and airmen who received schooling and the funds budgeted for training purposes were reduced substantially between

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1 July 1957 and 30 June 1959. Flying training totals dropped from 5,858 in fiscal year 1957 to 2,698 in fiscal year 1959, and technical training from 103,499 in fiscal year 1957 to 66,496 in fiscal year 1959. Since the Air Force was in the process of reducing from 137 wings to 105 wings between 1957 and 1959, these training reductions could be absorbed. By the end of June 1959, however, it seemed clear that manpower cuts would soon end, even though some further reduction in total strength was planned for the following year, and training requirements would increase.[66]

In meeting the expanding technical training requirement, the Air Force faced the basic problems of declining manpower and funds with which to carry out the job. Despite the decline in the number of people coming into the Air Force and the reduction in training money since 1957, the relative cost and essentiality of training had increased, particularly in the high-grade skills where all trainees required formal schooling. Lack of money to buy equipment and pay instructors and supervisors seriously hampered the training system. For example, at installations conducting base engineer training, the Secretary's office found poor, out-of-date equipment, poor management, slips in schedules, and other similar defects. In commenting on this criticism, the Assistant Vice Chief of Staff, Maj. Gen. Jacob E. Smart, declared that the Air Force was making every effort to improve and modernize training but was hampered by the budget limitations on the Air Training Command.[67]

As Headquarters USAF looked a few years ahead it could see its problems growing even more critical, for not only would the requirements for skilled airmen grow greater in fiscal years 1960 and 1961 but the number

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of new recruits would increase as more experienced airmen reached retirement age. In fiscal year 1959 about 62,000 new airmen were recruited; in fiscal year 1960, 84,000 were expected, and in fiscal year 1961, 88,000. At the end of June 1959 the problem of how to furnish more technical training at less cost remained critical.[68]

The procurement of suitable aircraft for primary and basic flying training also presented difficulties. In January 1959, T-33's replaced the last B-25's in basic training, and T-38's in turn were expected to replace T-33's by fiscal year 1964. T-37's were scheduled to replace T-28's for primary flying training by March 1961. A severe shortage of aircraft procurement funds during the latter half of fiscal year 1959 threatened the purchasing program for T-37 and T-38 trainers and endangered the Air Staff's plan to modernize flying training. However, on 17 June the USAF Weapons Board approved the modernization and voted to continue to purchase T-37's and T-38's.[69]

A more serious problem existed regarding navigator trainers. As tactical aircraft continued to attain greater speed and altitude, the old navigator trainers in use--such as the F-89, TC-54, and the T-29D--became increasingly outmoded. As a result, the combat commands had to give new navigators a great deal of training in modern jet aircraft. Because this not only increased training costs but detracted from operational capability, Headquarters USAF established a priority requirement for new planes. The UTX (T-39) and UCX (T-40) were deemed the most practicable replacements, but budget restrictions again proved to be a stumbling block. A final solution had not been found at the end of June 1959, although it

seemed likely that the UTX would begin entering the training inventory about the fourth quarter of 1961 while the UCX would not be bought for training purposes.[70]

Academic Training

Although many USAF officers receive the foundations of professional education before they enter the Air Force, much additional specialized training becomes necessary as they move along the paths of career advancement. Obtaining young officers and directing their career patterns posed a difficult problem, in view of the Air Force's desire to obtain an officer corps made up entirely of college graduates.[71]

During fiscal years 1958 and 1959 the Air Force depended upon the AFROTC as the primary source of college-educated officers. The ROTC did not, however, meet the full need. Although the Air Force hoped to commission about 5,000 AFROTC graduates per year during fiscal years 1958 and 1959, it fell substantially short of this goal, obtaining 4,237 in 1958 and 4,307 in 1959.[72]

The Officer Training School, approved in October 1958 and designed to give military training to college graduates before awarding commissions, was looked upon as a means of supplementing the output of ROTC and of meeting fluctuating requirements for active-duty officers. It provided officers quickly--and cheaply--who had already received college training in the specialties needed by the Air Force. Whereas it takes two or three years to get ROTC graduates, many young men and women who meet all the requirements except military training could be commissioned by way of the Officer Training School in a few months. The first candidates began their 12-week course in the fall of 1959, and about 300 men

and 125 women were expected to graduate by the end of June 1960. There was some feeling in Headquarters USAF that, as ROTC became more expensive and less popular in the universities, the Officer Training School could gradually assume much of the function heretofore performed by ROTC.[73]

A temporary expansion of flying training in the fall of 1958 stimulated Headquarters to redouble its efforts to correct the long-recognized deficiency in the academic standing of the officer corps. Only 6 percent of the pilot and 3 percent of the navigator students possessed college degrees, and only 16 percent of the aviation cadets had as much as two years of college education. This tended to lower the general educational level of officers and impeded the Air Force's drive to achieve an officer corps composed entirely of college graduates.[74]

It appeared that the best solution, in addition to ROTC and the Officer Training School, would be to augment "in-service" educational programs and subsidize college education for graduates of flying courses. In October 1958, General LeMay also approved a plan, starting in February 1960, to give as much as two years of college education, officer training, and commissions to a limited number of carefully selected airmen. General LeMay expected Headquarters to increase the emphasis on undergraduate training for officers who might later enter graduate study.[75]

These moves were designed to counteract the tendency of the aviation cadet program to dilute the educational standing of the officer corps, but again budget restrictions constituted a stubborn obstacle. During the budget squeeze of 1958-59, the less immediately essential activities, such as education, suffered the heaviest cuts. The budget restrictions of

fiscal year 1958 prompted some of the major commands to reduce severely or eliminate entirely their support of educational programs, bringing about a sharp decline in the number of individuals enrolling in off-duty courses. Worldwide enrollment in off-duty study registered some gains the following fiscal year, but the decline continued in those commands that withheld a portion of the funds authorized for educational services.* This occurred despite the Chief of Staff's insistance that operation and support of the Air Force's modern weapon systems required maximum development of every individual, especially during periods of severe manpower and budget restrictions.[76]

Besides the undergraduate program, the Air Force encourages certain of its officers to participate in graduate training. With the approval of Headquarters USAF, Air University continued its attempts to obtain approval of a $7.4 million appropriation for badly needed permanent facilities for the Air Force Institute of Technology (AFIT) at Wright-Patterson AFB, Ohio.† The House Committee on Appropriations questioned the expansion of the institute and refused the request.[77]

The Air Force also started a program to prepare its officers for work with advanced space vehicles. Companies holding research and development

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*Section 623 of the DOD Appropriation Act of 1959 and Section 621 of the DOD Appropriation Act of 1960 authorized payment of a maximum of 75 percent of tuition cost for off-duty education. A DOD memorandum limited this to a maximum of $7.50 per semester hour.

†AFIT is the principal agency through which USAF officers obtain graduate training in science, engineering, and management. AFIT sends the majority of its students to civilian colleges and universities, but many go to its Resident College at Wright-Patterson AFB, Ohio. A subsidiary of Air University, AFIT operates chiefly as a graduate and undergraduate school for officers, but on occasion special courses are provided for airmen, and a few civilians attend if space is available.

or production contracts for space vehicle systems were to provide carefully selected officers with instruction in design, development, production, and testing of the vehicles.[78]

Civilian Training

To enhance the effectiveness of its civilian employees and prepare them for new jobs, the Air Force used a variety of schemes, most of which involved training of one sort or another. To the maximum extent, the Air Force utilized its own resources for instruction, including the technical schools, AFIT, and apprenticeship training at AMC bases. Since these means had not been sufficient in recent years, as the need for both intensive and broad training increased, the Air Force resorted to outside agencies.[79]

In July 1958, Congress passed the Government Employees Training Act in order to regularize training programs and stimulate improvement in civilian personnel management throughout the Federal Government. The act not only authorized training but directed each department head to assess the needs within his department and set up training programs. Under provisions of the new act he could send employees to government training programs outside his own department and to nongovernment facilities when government facilities were not reasonably available, pay expenses of employees attending professional meetings, and permit them to accept nongovernment contributions and awards. Training could be full time or part time, on duty or off, day or evening, or any combination of these. Although the Air Force, through special legislation, had already been authorized to conduct many comparable training programs, Headquarters USAF and OSAF

welcomed this congressional sanction. By May 1959 Headquarters was developing regulations to put the new law into effect throughout the Air Force.[80]

The five principal types of civilian schooling included (1) factory training, in which technicians learned to operate and service equipment the Air Force had purchased from the factory; (2) general management training, in which civilian supervisors studied managerial methods, usually at a college or university; (3) the graduate Study Center Program, consisting of a study center on or near an Air Force base at which instructors from a nearby college or university conducted the training; (4) short, specialized, scientific and technical courses of less than one academic quarter's duration; (5) "long-term, full-time graduate study and research," in which an employee pursued as much as a year of graduate study at a college or university.

The Air Force made maximum use of the facilities of the other military services, especially the Army Ordnance Management Engineering Training Agency, Rock Island, Ill., where about 650 USAF civilians received instruction in fiscal year 1959. Altogether, during the year, about 4,200 civilians received training outside the Air Force. More than 760 of these were important management officials, and 62 pursued full-time graduate study and research in science or engineering.[81]

The Dilemma of the Reserve Forces

The Air Force required, in addition to its active establishment, trained units and individuals in a state of readiness and available for active duty in the event of war or a national emergency. The reserve components,

including the Air National Guard (ANG) and the Air Force Reserve (AFRes), provided these units and individuals. For practical purposes the reserves were divided into Ready and Standby categories. The entire ANG was rated Ready. Of the 552,768 AFRes, only 225,819 were classified in this category. While all members assigned to established units were Ready, a large portion of individual reservists—those not attached to units—could not meet the necessary standards.[82]

Developments in 1957-59

The reserve program had as its primary objective the maintenance of combat readiness in accordance with mobilization goals established by Headquarters USAF. Since September 1957 the Air Force had been engaged in a reorganization of the reserve components designed to improve their training and, consequently, their combat effectiveness. In an effort to streamline the reserve forces the Air Force reduced the number of wings and support squadrons of both the ANG and the AFRes and cut the number of drill pay spaces from 165,000 to 135,000. The Continental Air Command (ConAC), in charge of all reserve training, reorganized the reserve center training structure to provide for more economical operation and centralized control of the AFRes. Under the new plan, the reserve training wings each had three to seven air reserve centers and were staffed with active-duty officers and airmen. Individual reservists were organized into air reserve groups and squadrons and administered by these air reserve centers. This reorganization made for a substantial improvement in supervision and the quality of training.[83]

During fiscal years 1958 and 1959, the Air Force Reserve also instituted an Air Reserve Technician (ART) Program, patterned after a similar

scheme adopted by the ANG a few years earlier. Under this program the AFRes flying wings employed civilian technicians to provide full-time maintenance and training support to the wings. These civilian employees were also reservist members of the units they worked for. The ART program improved the training and readiness of the reserve troop carrier wings and encouraged more active participation by reserve personnel.[84]

By the end of June 1959, both the ANG and the AFRes had reached a degree of readiness never before achieved in peacetime. All units had been assigned mobilization tasks and many knew the specific mission they would perform immediately after a mobilization. The ART program had been adopted at all troop carrier bases, and the AFRes troop carrier wings had been reorganized to conform to Tactical Air Command (TAC) standards of strength and structure. The increase in mobility and effectiveness was clearly demonstrated during Army-Air Force exercises held in May and June of 1959. In the ANG, fuller use of the technicians resulted in better aircraft maintenance and better supervision over flying operations. ANG units flew more than 465,000 hours during fiscal year 1959, pilot proficiency improved, and more than 14,000 members completed courses in USAF service and technical schools. The ANG stabilized its manpower, modernized its equipment, and gave advanced training to all of its basic pilot graduates.[85]

Air Force Reserve mobilization requirements have been calculated annually to support the current USAF war plans. Requirements for fiscal year 1958 totaled 183,800 personnel, 36,800 in units and 147,000 individuals. For fiscal year 1959 they totaled 221,800, 42,600 in units and 179,200

individuals. On 21 May 1958, Headquarters USAF furnished the major commands the latest AFRes mobilization requirements and instructed them to match individuals in the Ready reserve with mobilization positions. Men possessing skills and grades which could not be matched with requirements were put in the Standby reserve.

Experienced personnel separating from active duty provided a large pool from which to recruit individuals to fill mobilization positions. Participation in an AFRes unit is normally voluntary, but men with statutory military obligations who do not volunteer to participate are assigned to positions and informed that they will be called to duty in the event of a mobilization.[86]

Despite substantial improvement by the reserve components since 1957, much doubt remained as to whether they contributed enough to the national defense to justify their very considerable cost. Under Secretary of the Air Force Malcolm A. MacIntyre made note of this feeling when, early in 1959, he denied a request of the Chief of Staff for 10,000 new drill pay spaces above the 135,000 limit, which had been established in June 1958. MacIntyre believed that there was not sufficient justification for the increase, particularly in view of the "serious doubt and divided opinions within the Air Force regarding support for certain Reserve programs." He asked for a "complete and searching review" of the entire reserve structure with the objective in mind of fully justifying each segment of the program in terms of actual support of the active Air Force's mission rather than "intangible suppositions of moral obligation or /fear of/ public relations deterioration." MacIntyre thought it most important

that each element of the reserve program be considered in the light of manpower and dollars expended and the value received from such expenditure. Pending a new study of the whole reserve program, he asked that all of the 135,000 drill pay spaces be filled and kept filled, if this could be done, in programs really useful to the Air Force mission.[87]

Doubts about the strategic utility of certain segments of the reserve program, particularly for the future, remained so prevalent that the Chief of Staff felt constrained to restate USAF policy on the subject. In September 1959, General White had a message sent to all major commands and to the Air Staff stating that the ANG and the AFRes constituted valuable parts of "our overall aerospace power" and that the Air Force would continue to take advantage of their inherent potential. The Chief of Staff declared that the Air Force not only intended to continue to support the reserve components but hoped to find new missions that would make them more useful. Meanwhile, about the end of December 1958, a study by the Directorate of Plans led to the submission to the Air Staff of a proposed new concept* for employment of the reserve forces.[88]

The New Plan

During the remainder of fiscal year 1959, the new "concept for future development and employment of the Air Reserve Forces" was studied and

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*The original proposal of much that went into the new concept seems to have been made by Lt. Col. C. V. Murdock (AFRes) of Pocatello, Idaho. In March, May, and June 1957, Colonel Murdock had written letters to his congressman and to Headquarters USAF suggesting substantial changes in the reserve program. The Directorate of Plans had access to his correspondence and incorporated several of his ideas into its proposal. (Interview with Lt Col James M. Dyer, OSAF, and Col. Gordon E. Doolittle, D/Plans, 1 Feb 61.)

revised by the various staff agencies throughout Headquarters USAF, especially by the Office of the Assistant Chief of Staff for Reserve Forces, the Directorate of Plans, and the Directorate of Personnel Planning. The Secretary of the Air Force received a briefing on 22 June.[89]

Certain general premises conditioned the thinking in Headquarters as this plan underwent scrutiny. It was acknowledged that the reserve programs needed to be revised in the light of current strategic concepts and that, since the combat potential and operational readiness of the reserve units ought to be made comparable to that of the regular force, their training should be equivalent. Secondly, the air reserve forces should be closely controlled by Headquarters USAF through the Assistant Chief of Staff for Reserve Forces. In addition, the commands should have control over the reserve units, which in the event of mobilization would come under their authority. It was assumed, also, that the Air Force would soon try to obtain legislation creating a single air reserve force.

Aside from the relatively high costs involved in supporting the reserve program, there was validity to the doubt that had been growing within the Air Force and the Department of Defense, and perhaps in Congress as well. While there was a valid wartime requirement for reservists, it seemed unrealistic to base war planning on the assumption that all of these individuals, whether assigned to units or not, would actually be available during the initial phase of a general war.[90] Organized units and those men who lived near their mobilization units could be used immediately, but it would probably take weeks for those individuals who neither lived near their mobilization units nor trained with them to get

to their assigned organizations at a time when communication and transportation facilities would probably be disrupted.[91]

USAF operations during the first and subsequent phases of a war would have to be closely correlated. In addition to providing air defense and offensive nuclear attacks on the enemy, the ability of the Air Force to alleviate the effects of the first enemy attacks and reconstitute effective forces quickly, it was assumed, would largely determine the length of the conflict and the final outcome.[92]

Furthermore, during the first phase of a nuclear war the reconstruction needs of the military forces would often conflict with the emergency survival needs of the civilian population. Therefore, a coordinated military-civilian defense effort would be needed in order to preserve a national will--and a military capability--to continue resistance. Those members of the air reserve forces not available immediately for specific combat and combat support tasks would be ideally situated to give the Air Force this much-needed ability to recover from a nuclear attack. The decision to use for this critical function (1) reservists in the individual training program and (2) those unable to reach their assigned units formed the heart of the new plan for the reserve forces. These men would be organized into units close to their homes and trained in specific recovery function.[93]

In planning the force structure of the reserves under the new plan, the Air Force did not expect to make many important changes in the organized units. The AFRes flying units would remain at 15 wings (50 squadrons) through 1970. Strategic airlift was considered a feasible role for these

units if, as hoped, they could be furnished with the proper modern equipment as recommended by the Reserve Forces Policy Committee in May 1959. The ANG's 24 flying wings (92 squadrons) would also remain intact through 1970, but their equipment would be considerably modernized. F-100C, F-101B, F-102, and F-104 aircraft would enter the ANG units between 1960 and 1966, while the F-86H, F-100A, and RB-57A aircraft would be eliminated. ANG ground support units would gain several GEEIA (nuclear detection) squadrons, and AFRes ground support units would add air terminal (traffic control) squadrons.[94]

The principal change in the force structure would occur in the individual training program. By 1961, units specifically designed for post-attack recovery purposes would be organized. The reservists manning these units would be those currently assigned to various elements of the individual training program and whose utility was heretofore the most uncertain. Headquarters USAF believed that by setting up these recovery units it could insure that the reservists would be available for control by the active establishment in an emergency, be better trained and organized than they had been in the past, serve a vital need in case of a general war, and still be available for individual placement after the first phase of such a war. For such a program to be effective, participating personnel would need to have full inactive-duty drill pay status. The Chief of Staff expected to increase the number of drill pay spaces above the 135,000 currently authorized as soon as he could clearly demonstrate a requirement for them, but this would occur at some indefinite time in the future.[95]

The plan for managing the reserve forces under the new concept would involve a substantial reduction of ConAC, a part of whose function would be transferred to those commands with organized reserve units and Part I* individuals assigned to them for wartime mobilization. ConAC would retain its basic responsibility for directing the activities of the AFRes and providing logistical, budgetary, and administrative support. ConAC would also recruit, process, and assign personnel, and continue to train those units not attached to other commands and those individuals designated for replacement and special functions.[96]

Major air commands that would use and control mobilized units in an emergency or a war would assume ConAC's responsibility for supervising the training and inspection of AFRes and ANG units. Each command would furnish advisers and training liaison personnel, provide training material, and conduct operational readiness and annual inspections. This close training supervision by the commands was expected to create greater responsiveness to the wartime needs of the commands.[97]

Because of the loss of much of its training responsibility, ConAC's numbered air forces would be abolished. The ConAC record center, the reserve wings, and the training centers would be retained but would be operated entirely by reservists, expecting only a few active USAF personnel for training liaison. To take over the budgetary and administrative functions formerly handled by numbered air forces, the new plan created six reserve regions.[98]

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*Those reservists required to augment major air command active force units in wartime.

This new plan for the reserve forces, based on the Directorate of Plan's staff study of December 1958, constituted the chief result of the long-standing criticisms, inside the Air Force and outside, of the previous reserve force system. Although several months would elapse beyond the end of June 1959 before it could be approved, and many revisions would be made, the acceptance of its basic provisions seemed assured. Whether its adoption would silence the criticism and create a more effective reserve force only the future could determine.

[redacted]

FOOTNOTES

1. For more details, consult the Semiannual Report of the Secretary of Defense, containing semiannual reports of the Secretary of the Army, the Secretary of the Navy, and the Secretary of the Air Force, fiscal years 1955-59. Summaries of expenditures are grouped in Table 2 of Appendix. Cost data on Air Force civilian personnel furnished by Frederick C. Moore, Plans & Review Gp, D/Budget, 2 Mar 60.

2. FY 1959 manpower data for the Army and the Navy (including Marine Corps) supplied by George S. Herfurth, Jr, D/Stat Svs, OSD Comp. Material on personnel costs furnished by Carl M. Detwyler of same office. Miss Doris Leath, Rqmt Div of Army DCS/Pers, furnished information on Army civilian personnel costs, and Wm. K. Bassett, Civ Manpower Div, Navy Comp, furnished it for the Navy. Interviews with Herfurth, 7 Mar 60; Detwyler, 8 & 11 Mar; Miss Leath, 9 Mar; Bassett, 11 Mar.

3. Presentation by Lt Gen Emmett O'Donnell, Jr, before the Chief of Staff's Reserve Forces Seminar, 7 Nov 58, in D/Pers Planning files.

4. Ltr, Rep August E. Johansen to David S. Smith, Asst SAF(MP&R), 12 Jan 59; ltr, Rep James C. Davis, Chmn/Subcmte on Manpower and Dept Pers Mgt, Cmte on PO & Civ Sv to SOD Neil McElroy, 15 Jun 59.

5. Memo (S) for SAF from Gen Thomas D. White, C/S USAF, subj: Transmittal of the FY 1960 Budget Estimate, 1 Oct 58; Remarks (S) by Gen Thomas D. White, USAF, Concerning FY 1961 Budget Estimates, made before SOD McElroy, 27 Oct 59, pp 22-25, in OSAF, Budget file; Memo (S) for Record by SAF James H. Douglas, subj: Military Manpower Reduction, 16 Dec 58.

6. Alfred Goldberg, ed, A History of the United States Air Force, 1907-1957 (Princeton, 1957), pp 166-68; Presentation by Lt Gen Truman H. Landon, DCS/P, before the Second Annual C/S's Reserve Forces Seminar, 24 Sep 59, Status Report on the Aerospace Personnel System, pp 2-6, in D/Pers Plang files.

7. Chief of Staff's Policy Book, 1959, Item 270, 12 Dec 58.

8. Goldberg, History of USAF, p 166; O'Donnell presentation, p 1.

9. O'Donnell, pp 1-2; Hist, D/Pers Plang, Jan-Jun 59, pp 3-22, passim.

10. Landon presentation, pp 4-7.

11. DCS/P Back-up Book of Reference Material, rev to 11 Jan 60, compiled by Maj J. H. Mouth, D/Pers Plang, Item 81; C/S Policy Book, 1959, Item 254, 12 Dec 58.

[redacted]

12. O'Donnell, pp 7-8; Landon, pp 5-6; intvw with Maj J. H. Mouth, D/Pers Plang, 8 Apr 60.

13. DCS/P Back-up Book, Item 76; Landon, pp 6-7.

14. Landon, p 7.

15. O'Donnell, pp 1-2; Landon, pp 9-10; Hist, D/Pers Procurement & Training, Jan-Jun 59, p 46.

16. C/S Policy Book, 1959, Item 221, 12 Dec 58.

17. O'Donnell, pp 2-4; Hist, D/PP&T, Jul-Dec 58, pp iii-iv, & Jan-Jun 59, p 46.

18. O'Donnell, pp 2-4.

19. Landon, pp 11-13; Hist, D/PP&T, Jan-Jun 59, p 46.

20. C/S Policy Book, 1959, Items 245 & 403, 12 Dec 58 & 15 Dec 59; Annual Rpt of SOD, 1959, pp 302-4.

21. C/S Policy Book, 1959, Items 403 & 404, 15 Dec 59; Hist, D/Manpower & Organization, Jul-Dec 58, pp 106-10, & Jan-Jun 59, pp 57-59.

22. Hist, D/M&O, Jan-Jun 59, pp 25-26; memo for SA, SN, SAF from Asst SOD (MP&R) C. F. Finucane, 27 Apr 59, and Excerpts from Testimony before House Subcmte on DOD Appro, 4 Mar 59; memo for Asst SOD(MP&R) from Lewis S. Thompson, AF Sp Asst(MP&R), subj: Use of Civilians in Operational Activities, 30 Jun 59, in OSAF, Civ Manpower file.

23. Atch to memo for Asst SOD(MP&R) from James P. Goode, AF Dep/MP&O, subj: Info for Price Subcommittee, 2 Jul 59.

24. Annual Rpt of SOD, 1959, pp 302-3; C/S Policy Book, 1959, Item 270, 12 Dec 58.

25. DCS/P Back-up Book, Item 72.

26. O'Donnell, pp 9-10; Landon, p 10.

27. White memo and remarks as cited in n 5.

28. DCS/P Back-up Book, Item 27 (S).

29. C/S Policy Book, 1959, Item 221 (C), 12 Dec 58.

30. O'Donnell, pp 6-7.

31. DCS/P Back-up Book, Item 73; C/S Policy Book, 1959, Item 276, 12 Dec 58; Annual Rpt of SOD, 1959, pp 303-4.

32. DCS/P Back-up Book, Item 73; AFR 39-45, 1 Mar 60.

33. C/S Policy Book, 1959, Item 275, 12 Dec 58; Annual Rpt of SOD, 1959, pp 303-4.

34. E-8 and E-9 Promotion Briefing, Tab W in Back-up Material to Hist, D/Pers Plang, Jul-Dec 58.

35. Memo for SOD from David S. Smith, Asst SAF(MP&R), subj: Requirements for Airmen in Pay Grades E-4 and above, 11 Sep 58; memo for Asst SOD (MP&R) from Lewis S. Thompson, AF Sp Asst(MP&R), subj: Additional E-4 Spaces & Spot Promotions for SAC, 6 Oct 59.

36. O'Donnell, pp 1-5; Landon, pp 14-17.

37. Landon, pp 16-18.

38. Ibid., pp 17-22.

39. Ltr, Lyle S. Garlock, Asst SAF(FM) to Chmn/DOD Subcmte, House Cmte on Appro, 2 Feb 59, & atch, Final Report on Officer-Airman Ratio, 8 Jan 59.

40. Memo for Asst SOD(MP&R) from SAF James H. Douglas, subj: Officer-Airman Ratio, 2 Mar 59; Semiannual Rpt of SOD, 1955, p 295; 1956, p 343; 1957, p 385; 1958, p 372; Annual Rpt of SOD, 1959, p 382.

41. Landon, pp 19-21; Hist, D/Pers Plang, Jan-Jun 59, pp 55-63; memo for SOD from James P. Goode, AF Dep/MP&O, subj: Requirement for 3,000 Additional Majors, 29 Jan 59.

42. Hist, D/Pers Plang, Jan-Jun 59, pp 55-56.

43. Ibid., pp 56-58; C/S Policy Book, 1960, Item 411, 19 Jun 60.

44. Hist, D/Pers Plang, Jan-Jun 59, pp 44-54; Hist, SAC, Jun 58-Jul 59 (Hist Study 76), Vols I & II, pp 376-80, 391-99; intvw with Maj J. H. Mouth, 18 May 60.

45. Thompson memo as cited in n 35.

46. O'Donnell, pp 8-10; Landon, p 10; Mouth intvw, 18 May 60.

47. O'Donnell, pp 9-10; DCS/P Back-up Book, Item 40; Mouth intvw, 18 May 60; memo for Asst SOD(P&I) from John M. Ferry, AF Sp Asst/Instls, subj: Erection of Prefabricated Buildings, 26 Mar 59.

48. C/S Policy Book, 1959, Item 260, 12 Dec 58; 1960, Item 420, 15 Dec 59.

49. Annual Rpt of SOD, 1959, pp 329-30.

50. C/S Policy Book, 1959, Items 260 & 262, 12 Dec 58; 1960, Items 420 & 421, 15 Dec 59; DCS/P Back-up Book, Items 39-42.

51. O'Donnell, pp 8-10; Landon, p 10; C/S Policy Book, 1959, Item 231, 12 Dec 58.

52. C/S Policy Book, 1960, Item 418, 15 Dec 59; Hist, D/Mil Pers, Jul-Dec 58, Pers Svs Div, pp 2-3, & Jan-Jun 59, pp 35-37.

53. DCS/P Back-up Book, Item 124.

54. Memo for Asst SOD(MP&R) from Goode, subj: Request to Remove Ceiling on Graded Civilian Employees, 18 Dec 58; ltr, Gen S. E. Anderson, COMAMC to Hq USAF (AFCCS), 10 Jun 59; memo for Thompson, AF Sp Asst (MP&R) from Maj Gen H. R. Maddux, D/M&O, 18 Jun 59.

55. C/S Policy Book, 1959, Item 231, 12 Dec 58; DCS/P Back-up Book, Item 124.

56. C/S Policy Book, 1959, Item 278, 12 Dec 58; intvw with Robert L. Atwood, D/Civ Pers, 20 May 60.

57. C/S Policy Book, 1960, Item 407, 15 Dec 59; Atwood intvw.

58. Landon, p 14.

59. Annual Rpt of SOD, 1959, p 310; Hist, D/PP&T, Jul-Dec 58, pp 80-85, & Jan-Jun 59, pp 61-68.

60. Hist, D/PP&T, Jan-Jun 1959, pp 69-85, passim.

61. Ibid., pp 29-30; DCS/P Back-up Book, Items 72 & 79.

62. Hist, D/PP&T, Jan-Jun 59, pp 78-80, & Jul-Dec 58, pp 85-87; Hist, D/M&O, Jan-Jun 59, pp 24-26. For a detailed description of the problems of training men to operate and maintain missiles, see Hist, D/PP&T, Jul-Dec 58, pp 85-97, & Jan-Jun 59, pp 70-86.

63. Hist, D/PP&T, Jan-Jun 59, pp 73-78.

64. Ibid., pp 81-83.

65. C/S Policy Book, 1959, Item 238, 12 Dec 58.

66. Semiannual Rpt of SOD, 1958, pp 290-91, 296-99; Annual Rpt of SOD, 1959, pp 308-10.

67. Memo for C/S USAF from John M. Ferry, AF Sp Asst/Instls, subj: Base Engr Tng by ATC, 14 May 59; memo for AF Sp Asst/Instls from Maj Gen

Jacob E. Smart, Asst VC/S, same subj, 19 May 59.

68. C/S Policy Book, 1959, Items 237 & 232, 12 Dec 58 & 26 Jan 59.

69. Hist, D/PP&T, Jan-Jun 59, pp 11-12; Annual Rpt of SOD, 1959, p 308.

70. Annual Rpt of SOD, 1959, p 309; DCS/P Back-up Book, Item 98, Jet Aircraft in support of Advanced Navigation Training.

71. Hist, D/PP&T, Jul-Dec 58, pp iii-iv.

72. C/S Policy Book, 1959, Item 226, 12 Dec 58; Semiannual Rpt of SOD, 1958, p 302; Annual Rpt of SOD, 1959, pp 310-11.

73. C/S Policy Book, 1959, Item 227, 12 Dec 58; Annual Rpt of SOD, 1959, pp 311-12; Mouth intvw, 8 Apr 60; Hist, D/PP&T, Jan-Jun 59, pp 1-2.

74. Hist, D/PP&T, Jul-Dec 58, pp iii-iv, & Jan-Jun 59, p 46.

75. Ibid., Jul-Dec 58, pp iii-iv, & Jan-Jun 59, pp 2-3.

76. C/S Policy Book, 1959, Items 239 & 423, 12 Dec 58 & 15 Dec 59.

77. Hist, D/PP&T, Jan-Jun 59, pp 7-8; intvw with Maj Carolyn G. Knight, Prof Ed Div, D/PP&T, 2 May 60.

78. Annual Rpt of SOD, 1959, p 312.

79. Hist, D/Civ Pers, Jan-Jun 59, pp ii-iv.

80. Ltr, Warren B. Irons, Exec D/Civil Service Comm to David S. Smith, Asst SAF(MP&R) 8 Apr 59; ltr, Lewis S. Thompson, AF Sp Asst(MP&R) to Warren B. Irons, 4 May 59.

81. Intvw with Dr. L. L. Standley, D/Civ Pers, 3 May 60.

82. AFR 45-1, 27 Jun 56; AFR 45-4, 22 May 59; Annual Rpt of DOD, 1959, pp 312-16.

83. Semiannual Rpt of SOD, 1958, pp 299-301; Annual Rpt of SOD, 1959, p 314; Report by Off Asst C/S(RF), Air Reserve Force Activities, 1 July 1958 through 30 June 1959, pp 7-12.

84. Semiannual Rpt of SOD, 1958, pp 299-301; Annual Rpt of SOD, 1959, pp 312-14; ARF Activities through June 59, pp 2-7, 9-12.

85. Annual Rpt of SOD, 1959, p 314; Hist, Asst C/S(RF), Jan-Jun 59, pp 8-18 especially & 2-30 passim; ARF Activities through Jun 59, pp 7-12.

86. C/S Policy Book, 1959, Item 229, 12 Dec 58.

87. Memo for C/S from Malcolm A. MacIntrye, Under SAF, subj: Air Force

Reserve Manpower Ceiling, 1 Jun 59.

88. Memo for Deps et al. from Maj Gen R. M. Montgomery, Asst VC/S, subj: Air Force Policy Regarding Air Reserve Forces, 21 Sep 59; ltr, Gen White to ALMAJCOM, same subj, date, and content; intvws with Capt E. C. Stewart, Off Asst C/S(RF), 8-9 Apr & 24-25 May 60; Hist, D/Plans, Jul-Dec 58, p 28.

89. Stewart intvw, 24-25 May 60; Hist, Asst C/S(RF), Jan-Jun 59, p 1; Hist, D/Pers Plang, Jul-Dec 58, pp 67-68, 70, 72, & Jan-Jun 59, pp 81, 87, 93; Hist, D/Plans, Jan-Jun 59, p 10.

90. C/S Decision, AFC 13/5A, subj: Concept and Objective Force, Air Reserve Forces, 4 Feb 60. This document is divided into three main parts: New Concept for Reserve Utilization; Objective Force, 1960-1970; and Plan for Management of the Air Reserve Forces.

91. Ibid., New Concept for Reserve Utilization.

92. Ibid.

93. Ibid.

94. Ibid., Objective Force, 1960-1970; A Summary of the Recommendations and Air Staff Comments resulting from the 28th Meeting of the Air Reserve Forces Policy Committee, 4-6 May 1959, p 4, in Off Asst C/S(RF).

95. AFC 13/5A, Objective Force, 1960-1970, & New Concept for Reserve Utilization.

96. Ibid., Plan for Management of Air Reserve Forces.

97. Ibid.

98. Ibid.; Stewart intvw, 6 Jun 60.

G L O S S A R Y

AFC	Air Force Council
AFCCS	Office of Chief of Staff, USAF
AFIT	Air Force Institute of Technology
AFRes	Air Force Reserve
ANG	Air National Guard
ART	Air Reserve Technician
COMAMC	Commander Air Materiel Command
Comp	Comptroller
ConAC	Continental Air Command
DOD	Department of Defense
Engr	Engineering
FM	Financial Management
GEEIA	Ground Electronics Engineering Installation Agency
Instls	Installations
intvw	interview
Mgt	Management
M&O	Manpower & Organization
MP&O	Manpower, Personnel, & Organization
MP&R	Manpower, Personnel, & Reserve
OGLA	Officer Grade Limitation Act
OSAF	Office Secretary of Air Force
P&I	Properties & Installations
Plang	Planning
PP&T	Personnel Procurement & Training
RF	Reserve Forces
SA	Secretary of Army
SAF	Secretary of Air Force
SN	Secretary of Navy
SOD	Secretary of Defense
Svs	Services
Tng	Training

Appendix

Table 1. Personnel Strength and Expenitures, Fiscal Years 1955-59

		Military Personnel		Civilian Personnel*		TOTAL	
	End FY	Number	Cost	Number	Cost	Number	Cost
ARMY	1955	1,109,296	$4.2 bil	461,986	$1.8 bil	1,571,282	$ 6.0 bil
	1956	1,025,778	3.8 bil	434,691	1.86 bil	1,460,469	5.7 bil
	1957	997,994	3.6 bil	429,217	1.9 bil	1,427,211	5.5 bil
	1958	898,925	3.6 bil	415,914	1.9 bil	1,314,839	5.5 bil
	1959	861,964	3.4 bil	405,848	2.0 bil	1,267,812	5.4 bil
NAVY & MARINES	1955	865,865	$3.0 bil	410,564	$1.8 bil	1,276,429	$ 4.8 bil
	1956	870,705	3.1 bil	394,669	1.9 bil	1,265,374	5.0 bil
	1957	877,979	3.1 bil	389,717	1.9 bil	1,267,696	5.0 bil
	1958	830,500	3.1 bil	363,729	1.9 bil	1,194,229	5.0 bil
	1959	801,911	3.2 bil	357,108	2.0 bil	1,159,019	5.2 bil
AIR FORCE	1955	959,946	$3.5 bil	312,076	$1.2 bil	1,272,022	$4.7 bil
	1956	909,958	3.8 bil	348,230	1.3 bil	1,258,188	5.1 bil
	1957	919,835	3.7 bil	340,326	1.5 bil	1,260,161	5.2 bil
	1958	871,156	3.8 bil	315,806	1.5 bil	1,186,962	5.3 bil
	1959	840,435	3.97 bil	313,466	1.6 bil	1,153,901	5.6 bil
DOD	1955	2,935,107	$10.7 bil	1,186,580	$4.8 bil	4,121,687	$15.5 bil
	1956	2,806,441	10.7 bil	1,179,489	5.2 bil	3,985,930	15.9 bil
	1957	2,795,798	10.6 bil	1,160,915	5.4 bil	3,956,713	16.0 bil
	1958	2,600,581	10.5 bil	1,097,095	5.4 bil	3,697,676	15.9 bil
	1959	2,504,310	10.5 bil	1,078,095	5.8 bil	3,582,405	16.3 bil

* The total number of civilians cited under DOD is slightly higher than the combined totals of the Army, Navy and Marines, and Air Force because of the civilian strength in the OSD.

Table 2. Percentage of Expenditures for Manpower 1955-1959

Fiscal Year	% of USAF Expenditures	% of Navy Expenditures	% of Army Expenditures	% of DOD Expenditures
1955	29%	49%	67%	40%
1956	31	52	66	40
1957	28	48	61	38
1958	29	45	60	37
1959	29	44	56	37