

COMBAT CREW ROTATION

World War II and Korean War

by

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PREFACE

Three times in 25 years--first during World War II, then in Korea, and now in Vietnam--the U.S. Air Force has been confronted with the problems of rotating combat crews in time of war.* This study of the two earlier periods is a continuation and expansion of work which the USAF Historical Division did during 1966 and early 1967 to answer requests from Headquarters USAF, the Office of the Secretary of the Air Force, and the Department of Defense for historical information that would throw some light on, and provide a better understanding of, current problems of rotation.

The study is concerned only with flying personnel in combat crews. For the World War II period it deals with policies of the War Department and Headquarters, Army Air Forces, but at lower levels it is concerned principally with rotation policies and programs of seven numbered air forces (Fifth, Eighth, Ninth, Twelfth, Thirteenth, Fifteenth, and Twentieth) out of the twelve that were deployed outside of the continental United States for combat operations. The material presented reflects the results of research by Dr. R. F. Futrell, Mr. Donald D. Little, Mr. Gerard E. Hasselwander, and Mr. Lawrence J. Paszek. The draft was prepared by Mr. Little, revised by Dr. Maurer Maurer, Chief of the Historical Studies Branch, and edited by Dr. Albert F. Simpson, Chief of the USAF Historical Division. The study was typed by Mrs. Mary F. Hanlin.

*During World War I a few pilots and aerial observers were sent back from France to the United States to serve as instructors or for other assignments, but the U.S. Army Air Service was in combat for such a short time in 1918 that rotation did not become a problem.

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WORLD WAR II

Need for Rotation

While inspecting his units in Australia in May 1942, Lt. Gen. George H. Brett found that many of his fighter pilots and bomber crews were being "burnt out" in combat. To carry on his campaign against the enemy he needed fresh men to relieve those who had been in battle since the Japanese attack on the Philippines in December 1941. In a message to Lt. Gen. Henry H. Arnold, Commanding General of the U.S. Army Air Forces (AAF), Brett warned that "Unless replacements are available in the near future the Air Force will lose valuable personnel through excessive combat duty."¹ Thus, less than six months after the Army Air Forces entered combat in World War II, the AAF officer commanding Allied Air Forces in the Southwest Pacific Area was calling for rotation* of combat crews.**

Combat fatigue is the physical or mental tiredness or disorder resulting from the strains and stress of combat. This condition, the cause of Brett's concern, made it necessary for the AAF to exchange crews between combat theaters and the zone of interior during World War II. In fact, rotation policies during the war were designed principally to provide relief for combat-weary crewmen. Rotation was desirable, however, for another reason. Men with experience in combat overseas were needed in the United States to train new crews and develop better aircraft and equipment. General Arnold repeatedly stressed the importance of using combat-experienced men in training programs, and field commanders generally agreed that this was a good idea.² Rotation

*In this study "rotation" is used to mean the process in which personnel are exchanged between overseas areas and the zone of interior. Cf., Woodford Agee Heflin (ed.), The United States Air Force Dictionary (Air University Press, 1956), sub "rotate," "rotation."

**The word "aircrew," or simply "crew," has been commonly used in the Air Force to refer to the one or more persons who man an aircraft in flight. When used in this way, as it is in this study, the word may mean a pilot of a single-place fighter plane or, for example, a nine-man team employed on a large bomber. Heflin, Dictionary, sub "aircrew"; cf., ibid., sub "crew."

policies did not have to be designed specifically for this purpose, however, because first-hand knowledge of combat could be provided to organizations in the zone of interior by rotating war-weary crewmen who needed relief from combat.

There was also the idea that the hardships and hazards of combat flying should be spread as widely as possible among members of the AAF. In March 1944, for example, Lt. Gen. Ira C. Eaker, then commanding Mediterranean Allied Air Forces, told Arnold, "I feel very strongly that the 60% at home should be given a crack at the war."³ During World War II, however, policies for rotation were never directed primarily toward this objective,* probably because of the additional problems that would be created. The principal problem apparently was related to tables of organization, which specified the number of people authorized in each rank and grade for the various positions in AAF units. Many of the instructors and other persons in the United States who were qualified for combat crew assignments had served long enough to receive one or more promotions. When these men were sent overseas for combat duty, they filled spaces allotted for upper grades in the tables of organization and thus blocked the promotion of men already serving with the units. Since this caused trouble and lowered morale in the units, field commanders were not enthusiastic about receiving "old timers" from the States unless they had previous combat experience. Instead, commanders preferred young men of low rank who could work their way up as vacancies occurred.⁴

Combat fatigue was of concern to AAF headquarters before the problem of rotation appeared in the spring of 1942. In a bulletin published on 26 February 1942, headquarters had alerted commanders to be on the lookout for signs of physical and mental fatigue among men engaged in combat flying. If commanders and their flight surgeons failed to diagnose fatigue in its early stages, the bulletin said, "irreparable harm may be done to the individual and he may be permanently lost to the Air Forces." To prevent and offset the devastating effects of fatigue, AAF headquarters had a number of suggestions, many of which stressed the importance of rest as the best means for preventing and treating fatigue. The commander should, for example, space each man's combat

*Arnold tried to see that all regular officers served in combat theaters so they could broaden their experience and become more valuable members of the regular establishment. Most of the crewmen during the war, however, were reservists. Most of the regulars had entered the service before the war and had attained, or shortly after the beginning of the war did attain, rank sufficient to take them out of the combat crews.

missions as evenly as possible and allow crewmen short periods of leave at regular intervals.* If any man was found to be suffering from fatigue, he should be taken off flying status and sent to a hospital for treatment. He should not be allowed to remain at his station because, as the bulletin said, "the condition is infectious."⁵

Brett had this bulletin in May 1942, but some of his units were so short of men that he could not follow all of the suggestions for resting his crews.⁶ He felt that tactical requirements took precedence over measures for preventing fatigue. The correctness of this attitude (if there was any doubt) was confirmed soon afterward by a War Department circular which provided more specific instructions than those of the earlier bulletin. In this circular, published on 1 July 1942, the War Department directed that "Combat crews be relieved after 100 to 125 hours of combat operational flying and returned to a rest area for a period not to exceed 1 week" But the words "if the local situation permits" were tacked to the sentence in recognition of the fact that tactical or other conditions might prevent commanders from following the prescribed schedule.⁷ The flexibility provided by the qualifying clause was expanded by the War Department on 29 May 1943 to give theater commanders authority to determine their own policies for resting their crews.⁸

Rest camps were established for crewmen in the various theaters of operations,⁹ but some of these camps were so far from the operating bases that much time was lost in travel. Another difficulty, related to distance, was finding transportation for aircrews on leave. In December 1942, for example, Lt. Gen. Millard F. Harmon, commanding U.S. Army Forces in the South Pacific, was pleading for three C-87's "to get our combat crews down to New Zealand for a rest - God knows they need it."¹⁰

Short periods of leave in the theater helped to extend the span of a man's usefulness in combat, but they usually did not effect complete physical and mental restoration. As time went on, the man's efficiency declined until eventually it might reach such a low point that he had to be relieved from combat and sent back to the States. All through the war field commanders had authority to return men who were no longer

*The leave schedule suggested by AAF headquarters was one-half day every 3 or 4 days, 48 hours every 2 weeks, and 7 days at the "end of limit of effort," which the bulletin said should be 90-100 hours or 6 weeks for fighter pilots and 120-130 hours or 3 months for bomber crews.

fit for duty. Rehabilitation of men who were not returned until they had reached an advanced stage of fatigue was a long process, and some never recovered sufficiently to be of further use to the service. Consequently, rotation of crews was necessary to keep combat effectiveness of units at the highest possible level and to prevent the loss of men as the result of excessive fatigue. Crews relieved from combat before they reached an advanced stage of war weariness could be assigned useful tasks either in the theater or in the United States. Later, when completely restored, they would be available for another tour of combat duty. ¹¹

In order for a field commander to send crews back to the States for recuperation or rehabilitation, it was necessary, of course, to obtain replacements if his units were to have the people they needed for combat operations. Thus rotation had to compete against other demands for personnel. During 1942 and 1943 tremendous numbers of crewmen were required for the new units that had to be formed for service overseas. At the same time, the AAF had to send men to the theaters as replacements for those who were lost in combat or who became unfit for duty as a result of accidents, disease, or other "normal" causes. In the early months of the war, combat units still in training in the States had to be stripped to obtain the crews necessary to meet attrition overseas. Replacement training units were established in the United States in May 1942, but replacement training had a rather low priority until late in 1943, when the unit training program was virtually completed except for the formation of B-29 organizations. ¹² Later, a decline in the casualty rate made possible the use of a higher percentage of available replacements for the rotation program.

Since the first responsibility of a combat commander was to carry out his assigned combat duties, he had to keep his units up to strength so far as possible. Any replacements he received had to be used first to build his combat force to full strength. If any replacements were left over, he could use them to relieve war-weary crews. ¹³ The difficulty in obtaining replacements proved to be the biggest problem in rotating crews during World War II. The magnitude of the problem of replacements varied greatly, however, among the overseas commands. It was much more serious in the Southwest Pacific Area, for example, than in the European Theater of Operations because allocations of personnel were influenced greatly by Anglo-American policy which gave the war against Japan second place until the enemy in Europe had been defeated. ¹⁴

As will be seen in later sections of this study, Brett's request for replacements in May 1942 was only the first of many which AAF

headquarters received from field commanders who needed fresh crews to relieve men who were suffering from war weariness. Innumerable documents of the Army Air Forces attest to the prevalence of combat fatigue in all theaters of operations throughout World War II and reflect the vast amount of study that flight surgeons devoted to its symptoms, causes, and treatment. They also reveal the great degree to which Air Force commanders were concerned about the effect which combat fatigue had upon their ability to discharge their responsibilities to their superiors, for waging and winning the war, and to their men, for providing the greatest possible chance to survive and return home in sound body and mind. Although some measures, such as brief periods of rest, could be taken in the combat theaters to prevent or alleviate the effects of combat fatigue, the only real solution to the problem was rotation of combat crews.

One-Year Tour
(July 1942-May 1943)

The first program for rotating AAF crews during World War II was established on 1 July 1942, when the War Department directed that individual crewmen be sent back to the United States upon completion of one year of combat duty. Their replacements, to be requested by theater commanders, were to be provided by the Commanding General of the AAF, who was to see that the new men arrived in the theaters one month before those to be relieved had completed their tours. Individual crew members who showed signs of approaching the war-weary stage before the end of a year were to be sent to a rest area for one week. If this did not restore them mentally and physically, they were to be returned to the United States. Replacements for these men would be included among those sent to the theaters on the basis of estimates of expected losses from combat, sickness, and other "normal" causes.¹⁵

If this simple program could be put into effect, war weariness would not have any great impact upon a commander's ability to keep his unit at full strength and peak efficiency. Unfortunately, the program was to be applied uniformly to all kinds of crews in all theaters of operations, and consequently did not take into consideration differences in geographical conditions, tactical situations, aircraft environment, and other factors affecting the physical and mental health of combat crewmen. Further, it assumed that all of the necessary replacements would be available in the theaters when needed.

The program laid out by the War Department was of no immediate help to Brett's war-weary crews, for not one of them would be eligible for rotation under the one-year rule until 8 December 1942. When Maj. Gen. George C. Kenney arrived in the Southwest Pacific in August 1942 to succeed Brett as commander of Allied Air Forces, he found that some of the veteran crewmen were "still full of pep" but most of them were "punch drunk." Disregarding the War Department's one-year rule, Kenney informed Arnold that he was "adopting the policy of returning to the United States all combat crews which have been through the Philippines, Java or both."¹⁶

Although Kenney began sending men back to the States, he could not give his policy wide application until he could obtain replacements. He could, of course, return "punch drunk" men by determining that they were incapable of further combat service, but wholesale adoption of this method would mean that the replacements provided to cover normal attrition would not begin to take care of his losses. If he depleted his forces by relieving large numbers of combat veterans before their replacements arrived he would soon be in serious trouble, for he would not be able to carry out all of the air operations that his chief, Gen. Douglas MacArthur, expected of him during the offensive which the Allies had recently launched against the Japanese in New Guinea. The tactical situation and lack of replacements made it necessary, for example, to delay the rotation of crews of the 19th Bombardment Group, a B-17 outfit that had been in combat since the beginning of the war. Despite fatigue, the men of the 19th had to continue fighting until their replacements arrived in November 1942 in the form of a whole new bombardment group (the 90th).¹⁷

When the 19th returned to the United States in December, Arnold called some of the men to Washington to question them about their combat experience and about conditions in the theater. Lt. Col. Richard H. Carmichael, the group's commander, took exception to the War Department policy of a one-year tour: "With the way our heavy bombardment has been employed and is being employed now . . . I firmly believe they [the crews] will not last a year. Six months, if that long." During the interview Capt. J. D. Gottlieb, Flight Surgeon of Carmichael's 93d Squadron, said that his recommendation, based on his observations during 11 months of close association with the crews and on his own experience while flying 350 hours in heavy bombers, was six months of combat followed by rest and rehabilitation in the United States.¹⁸

By December 1942 commanders in other theaters were gravely concerned about rotation. On the first anniversary of the Japanese

attack on Hawaii and the Philippines, Millard Harmon in the South Pacific was pleading for replacements for men engaged in the campaign in the Solomons. "Our crews," he said, "have been going a long time. They are getting tired. We can give them no reasonable assurance as to how long they will have to carry the ball. To them there appears no end - just on and on till the Jap gets them."¹⁹

Maj. Gen. Lewis H. Brereton, commander of Ninth Air Force, had the same kind of problem. The AAF had not entered combat in the Middle East until June 1942, but after six months of campaigning in the desert Brereton had many war-weary crews. Completing a study of combat fatigue in that theater, Brig. Gen. D. N. W. Grant, the Air Surgeon of Headquarters AAF, reported to Arnold that the situation was critical and that replacements were needed to relieve the men who were worn out. Brereton wanted to set a definite tour (he was thinking of 250 hours of combat for heavy bomber crews), but he was not getting enough replacements to put such a program into effect.²⁰

War weariness had not yet become a problem in Eighth Air Force, which had begun its heavy-bomber offensive from England on 17 August 1942. Eaker, then commanding the Eighth, informed AAF headquarters at the beginning of January 1943, however, that within 60 days many of his crews would have to be taken out of combat "by reason of having completed their operational tours." By that time, he said, the Eighth would have many men who "will be tired, war weary, and punch drunk and will have to be relieved whether there are replacements or not."²¹

The combat tour to which Eaker was referring was obviously not the one-year tour prescribed by the War Department but one which he had recently established for his command. On 31 December 1942 he had ordered that all combat crews of Eighth Air Force be informed that they "will be relieved from duty upon the completion of 30 sorties and 200 hours." Some men might be relieved even sooner, for he gave the commanders of his three tactical commands authority to relieve men after 25 missions and 150 hours if circumstances warranted such action. The men were to be told that their relief from combat "will not be contingent upon the availability of replacements. If necessary, units will be operated at reduced strength until such time as replacement personnel is available."²²

Maj. Gen. James H. Doolittle established the same criteria (25-30 sorties and 150-200 hours) for rotation in his command, Twelfth Air Force, which had entered combat with the invasion of Algeria and French Morocco on 8 November 1942.²³ This program had been adopted as a

result of discussions by Eaker, Doolittle, and Maj. Gen. Carl Spaatz, Air Officer, European Theater of Operations, United States Army. After considering both AAF and British experience in Europe and North Africa, the three generals had agreed on 25-30 sorties and 150-200 hours as a reasonable basis for rotation.²⁴

Brig. Gen. Nathan F. Twining, who commanded Thirteenth Air Force after its activation in the South Pacific in January 1943, developed a system much different from that adopted by Doolittle and Eaker. In an effort to provide a program which would be "equitable to all," Twining set up an eligibility list that was kept current by reports submitted weekly by squadron surgeons. A man's position on this rotation list was based upon a score determined by a formula that took into account the number of months (A), hours of flying time (T), and number of missions (M) the man had in the South Pacific Theater of Operations. The formula for bomber pilots was: $\frac{T}{100} + \frac{M}{10} + \frac{A}{3} = \text{Score}$. That for fighter pilots was: $\frac{T}{100} + \frac{M}{30} + \frac{A}{3} = \text{Score}$. With this formula, a fighter pilot who had flown 200 hours on 30 missions during a period of 9 months in the theater would have a score of 6--the magic number that made him eligible for return to the United States.²⁵

Both AAF headquarters and the War Department apparently recognized that a uniform policy of rotation at the end of one year of combat duty was unrealistic under conditions prevailing during 1942 and early 1943. At least there is no evidence that they attempted to enforce the one-year rule which had been laid down on 1 July 1942. Instead they condoned the establishment of local policies and procedures that varied greatly among the theaters of operations.

Commanders' Choice (May 1943-February 1944)

In January 1943 the whole matter of relief and replacement of combat crews was under study in Washington, and by April 1943 the War Department was ready to legalize the existing situation by formally giving each theater commander a free hand in determining policies for rest and rehabilitation of war-weary crews.²⁶ In delegating the policy-making authority to theater commanders on 29 May 1943,* the War

*The theater commander passed the authority on to the senior AAF officer in the theater, who, in most cases, redelegate it to commanders of numbered air forces.

Department also changed procedures relating to replacements. The number to be sent to each theater to take care of both attrition and rotation was to be a percentage of aircrew strength authorized for the theater, with the percentage varying "in accordance with the theater mission and the situation." The Department was to inform each theater commander what percentage had been established for his organization, and notify him each month how many and what types of crews would be shipped to him the following month.²⁷

During the remainder of 1943 there were many changes in rotation policies and programs of overseas organizations. Many of these changes resulted from shortages of replacements or from the new procedures for handling replacements for rotation. Twining, for example, made a number of alterations in the rotation policy of Thirteenth Air Force. First, sorties (S) were substituted for missions (M) in formulas for computing scores for rotation, with the rules for crediting sorties being more liberal than those previously used for figuring missions. Second, the criteria for computing flying hours (T) and months of service (A), which formerly had taken into account only hours and months in the South Pacific Theater, were changed to add hours and months in other theaters, figured at one half of their actual value, for crewmen who arrived direct from another combat theater without intervening leave in the United States. Third, the eligibility list was divided into sections for fighter pilots, B-24 pilots, bombardiers, radio operators, and other crew positions, so that each man's score would be considered in relation to the scores of other men of the same class. Fourth, and most important, the function of the scores derived from the formulas was changed. Whereas a score of 6 had previously made a man eligible for return to the United States, the score now served only to admit him to the appropriate section of the list of men qualified for rotation. The relative positions of the various men in each section of the list determined the order in which these men were returned to the States as replacements arrived. To illustrate how this worked, the directive said that "the first aerial gunner 'rotation replacement' available will relieve the aerial gunner holding the number one position in the aerial gunner section of the Eligibility File."²⁸

Kenney, commanding Fifth Air Force in the Southwest Pacific, apparently did not think it worthwhile to establish a formal program for rotation because his units, like others engaged in the war against Japan, had such a low priority for personnel. He wanted to send back to the United States "all combat crews who reached three hundred combat hours," but he was receiving so few replacements that he could not do this "without crippling his squadrons." As he told Arnold, "I will have to wait until

they [the crews] really do burn out, regardless of the number of combat hours they fly. "29

Spaatz, who had become commander of Northwest African Air Forces, changed the rotation plan for Twelfth Air Force to provide for a "normal operational tour." Under this new plan, which differentiated between various kinds of combat duty, the tour was 150 hours and 50 sorties in medium and light bombers, reconnaissance aircraft, and fighters, and 250 hours and 50 sorties in heavy bombers. A man was considered as having completed his tour when he had been credited with both the hours and sorties specified. His relief from combat duty, however, was contingent upon the tactical situation and the availability of a replacement. 30

In establishing this new program Spaatz had been forced to lengthen the combat tour because he was not receiving sufficient replacements to meet the requirements of the shorter tour that had been prescribed earlier. He told Arnold, however, that he did not believe it would be wise to raise the number of missions above 50. 31 A continued shortage of replacements, plus the need for retaining a sufficient number of experienced men, and a feeling that automatic rotation was wasteful of manpower, brought another change in Twelfth Air Force policy when Spaatz adopted the principle of maximum effort for each crewman according to the man's abilities, disposition, and tolerance to stress. To aid commanders in administering this policy, the Twelfth set certain "check points" at which the average crewman, flying under normal combat conditions, should be evaluated to determine whether he should remain in combat. In September 1943 the check point for B-25 crews, for example, was 50 sorties, while that for P-40 pilots was 65. Since some men were not able to reach the check point, while others were able to go beyond it, this system required continuous evaluation of each crewman. 32

In Twelfth Air Force the check point tended to become a fixed point for rotation. In January 1944, for instance, the Air Surgeon of the Twelfth noted that a B-26 group had recently reported 52 fliers unfit for duty at 40 sorties, the check point for such crews. He thought it "extremely strange for so many fliers to become suddenly unfit for combat duty at precisely the same time when so many others reported between 35 and 40 sorties are still fit for operational flying." It was obvious to the Surgeon that the group was "making the removal of flying personnel at this check point a more or less automatic procedure. 33

Doolittle, who commanded Northwest African Strategic Air Force under Spaatz, reported that 50 missions was "par for the course" for his

heavy-bomber crews. With careful medical supervision some men could go longer than 50, but others had to be relieved earlier. Men relieved from combat duty before completing 50 missions were "always ostensibly taken off for some other reason such as particular suitability for some special staff job." Doolittle explained that this was done "in order not to tend to lower 'par' and adversely affect the morale of other combat crews."³⁴

In the Middle East, Brereton wanted to establish a definite tour for crews but could not because of the shortage of replacements. After he moved Ninth Air Force headquarters to England in October 1943 for the formation of a tactical air force for the invasion of northern France, he expected the replacement situation to improve, so he set 50 missions as the tour for his bomber crews and 200 hours for his fighter and reconnaissance pilots. He warned his men, however, that crews completing their tours during a period of intensive operations might have to be held on stand-by to meet an emergency, but he promised that such men would not be regularly scheduled for combat missions and would be released as soon as the threat of an emergency had passed.³⁵

In Eighth Air Force, the tour of 25-30 sorties and 150-200 hours for all crews was changed in order to provide separate criteria for different kinds of duty: 25-30 sorties in heavy bombers; 200 hours in fighters and photographic-reconnaissance aircraft. The new directive, like the old one, stated that the men would be relieved when they met the specified requirements, but Eaker added a new clause which permitted voluntary and infrequent participation in combat by men retained in the theater after they had completed their tours of combat duty.³⁶

Maximum Service (February 1944)

The actions taken by some field commanders under the authority which the War Department had delegated to them in May 1943 for establishing policies on rotation became a matter of grave concern to Arnold early in 1944. By that time the personnel situation was much better than it had been at any time during the war. With the exception of B-29 units, most of the squadrons programmed for combat had been organized, and combat losses were lower than had been anticipated. Furthermore, since the loss rate was influenced greatly by the relative strengths of the opposing air forces, the rate was expected to go down as enemy airpower continued to be reduced through combat. Taking advantage of changing conditions, Arnold was attempting to build up reserve strength in combat units

overseas for the projected invasion of northern France and for aerial offensives in progress or planned for southern Europe, Asia, and the Pacific. 37 His idea was to give the units more planes and enough extra men to provide 2 crews for each heavy bomber and 1.5 crews for each medium bomber and fighter plane in the theaters of operations. 38

Arnold found that his efforts to strengthen AAF units were jeopardized by theater policies for "returning combat personnel after an arbitrary time period, without regard for adequacy of replacements, the importance of the operation, and above all, the actual capacity of the individuals in question for continued combat." Since combat flying would become less strenuous as the enemy's airpower declined, Arnold thought that the crews would be capable of longer periods of service in combat.

Arnold had also found that rotation after a fixed number of missions had given combat crews the idea that they would not be required to serve more than one tour of combat duty. "It is beyond reason," Arnold said, "that a trained fighting man, seasoned, rested, and able, should be consigned to a permanent homeland job because he has once already been in combat." Something had to be done to get rid of the idea of "_____ missions and quit."

The Commanding General of the AAF acted on 16 February 1944 by dispatching a personal letter to the senior AAF officer in each theater and to the commander of each numbered air force. After describing the existing situation and noting the effect that the establishment of fixed tours was having on his plans for strengthening the combat units, he told the commanders that rotation "has to be a flexible proposition, for our leaders to determine, based on the time, and place, and means available, and the condition of the individual himself, and above all on the waging and winning of this war." While commanders had to have authority to relieve men as they saw fit, they had to limit their actions according to the means available to them. Arnold pointed out that "a sharp distinction must be drawn between this privately held consideration of a commander for his men and the existence of announced inflexible policies which in effect become an irrevocable pledge from the commander to his men that jeopardizes his bringing his full available strength against the enemy when and where he has a vital need to do so."

The Commanding General of the AAF directed the commanders to do two things. First, "If you have made any policies or understandings that combat personnel will be returned to the United States after fulfilling such arbitrary conditions as I have just described, those policies will be rescinded at once." Second, the impression that no man would be required

to serve more than one tour in combat was to be "unmistakably corrected." While Arnold recognized that "this radical change in personnel policy will present difficult problems, particularly insofar as morale is concerned," he had "absolute faith . . . in the intelligence and good, hard, common sense of the American fighting men in understanding the necessity for the change and accepting it." He was counting on the commanders "to put it over."³⁹

A Substitute for Rotation
(February-September 1944)

Pleading "not guilty" to the charges set forth in Arnold's letter of 16 February 1944 to the commanders, Kenney replied: "Our policy out here in regard to returning combat personnel is based entirely on combat fatigue. The number of months or years that a man has spent in the Southwest Pacific Area has nothing to do with his returning home."^{40*} Nor did Arnold's letter require any action by commanders of the other air forces, such as the Tenth and Fourteenth in the China-Burma-India Theater, who, like Kenney, had not established definite combat tours.⁴¹

In England, however, Brereton had to cancel the 50-mission tour for bomber crews and the 200-hour tour for fighter and reconnaissance pilots of Ninth Air Force.⁴² Doolittle, who had succeeded Eaker as commander of Eighth Air Force, also responded promptly by rescinding his predecessor's program, which had called for 25-30 missions in heavy bombers and 200 hours in fighter aircraft. Doolittle informed his men that their relief from combat would not be based upon a specified number of sorties or flying hours. But, at the same time, he told them that for the present they would be "eligible for relief from further combat duty" after 30 ^{Missions} ~~hours~~ in heavy bombers or 200 hours in fighter or reconnaissance aircraft, and that further change in this schedule would be determined by the need for maintaining the Eighth "at the highest possible operational level," the attrition rate, and the availability of replacements. Further, he warned his crews that relief from combat would be temporary, and that after a period of rest they would again be available for combat assignments. Later, in July 1944, Doolittle revised his directive so that crewmen would be rotated when they became fatigued to a degree that the efficiency of the unit was affected. He said, however, that a crewman of

*Kenney offered to help Arnold by taking back veterans of the Fifth Air Force who would volunteer for a second tour of combat duty. Soon afterward, Arnold notified Kenney that a call had been sent out for volunteers.

a heavy bomber would not be required to participate in more than 35 sorties, and a fighter pilot would not be required to fly more than 300 hours in combat, without a determination as to the man's condition.⁴³

Eaker, who had become commander of Mediterranean Allied Air Forces, called a conference to discuss Arnold's directive with Brig. Gen. Lauris Norstad, his director of operations, and with the chiefs of his AAF commands--Maj. Gen. John K. Cannon of Twelfth Air Force, and Twining, who had become commander of Fifteenth Air Force in Italy. After studying the problem, Eaker directed that Cannon and Twining "immediately issue orders cancelling the mission basis as the keynote to the relief policy." In telling Arnold about the action that had been taken, Eaker let the Commanding General of Army Air Forces know that he did not approve cancellation of fixed tours of combat duty:

. . . The thing that makes it most difficult to maintain morale is to have no policy, leaving clearly in the mind of the combat crewman the belief that he must go on until he cracks up and becomes a jibbering idiot or an admitted coward, or until he is killed. We are all of one mind that the effectiveness of tactical units cannot be maintained under this condition.

With the cancellation of set combat tours, Eaker thought it necessary to find some other way to give his men some relief from combat before they reached the "cracking point." As he told Arnold, "If a combat crew is worn out, they will not spring back; they are through for the war." The men needed longer periods of rest than they could be given in rest camps in the theater. Eaker suggested, therefore, that crews be sent back to the United States for 30 to 60 days for recuperation.⁴⁴

Spaatz, who had moved to England to command United States Strategic Air Force in Europe, concurred with Eaker's suggestion for giving combat crews leave in the United States. Although there was some doubt in Washington about the feasibility of this plan, both AAF headquarters and the War Department quickly gave their approval, clearing the way for Eaker and Spaatz to issue the following policy for the air forces in Europe:⁴⁵

When, in the opinion of an Air Force commander, a combat crew (or member thereof), as a result of prolonged combat duty, is so reduced in operational efficiency as to affect the efficiency of the unit, that crew (or individual thereof) will be relieved from operations either for:

- a. Assignment to non-operational duty within the Theater.
- b. Assignment to the Zone of Interior.
- c. Detached service for 30 days (exclusive of travel time) in the United States for rest and rehabilitation. (Personnel absent . . . under this category will not exceed 10% of the total authorized crew strength at any time.)

The flow of crewmen across the Atlantic under this program began at the end of April 1944, with the first group arriving on 2 May at Atlantic City, where they were given leave to go home for 30 days.

Nearly all of the men returning to the United States for leave had finished what had previously been considered a tour of combat duty. Most of the fighter pilots were still "full of go," but the bomber crews were tired. Many of the men were medically or psychologically unfit for further combat. Intelligence officers who interviewed these men reported that the majority objected to the leave plan as being both unfair and unnecessary and that nearly all of them wanted a program which would give them three to six months in the United States between tours of combat duty. The commanders overseas found that leave in the United States only whetted the crewman's desire for permanent relief from combat. Many men who had just been on leave had to be sent back to the United States permanently as war-weary personnel. ⁴⁶

In July 1944, Seventh Air Force also began to send bomber crews to the United States on leave after 30 missions, which had come to be regarded as the standard tour for bombardment operations in the Central and Western Pacific areas. After leave these men were not sent back to combat but were stationed in Hawaii as instructors for new personnel arriving in the theater. A flight surgeon found that approximately one-third of these veterans were in worse emotional condition after 30 days' leave than before. Since the men thought that they should have been permitted to stay in the United States, they were dissatisfied, and their discontent naturally spread to the new troops. ⁴⁷

In August 1944, Kenney considered the establishment of a leave program for Far East Air Forces, but AAF headquarters vetoed the idea because result from the programs of other air forces had been so

unfavorable.⁴⁸ In fact, the leave program had proved to be so unsatisfactory that it was soon terminated.*

New Objectives
(September 1944-September 1945)

By the time the experiment in using leave as a substitute for rotation had failed, the conditions which had caused Arnold to prohibit fixed tours of combat duty had changed. The Allies had made great advances in their campaigns on several fronts. France had been invaded from both the north and the south, and much of the country had been taken from the Germans. Good progress had been made in the efforts to regain Burma from the Japanese. The Twentieth Air Force had begun B-29 operations against the Japanese homeland. And in the Southwest Pacific the Far East Air Forces (FEAF), which had been formed by joining the Fifth and Thirteenth Air Forces under the command of Kenney, was preparing the way for MacArthur's return to the Philippines. The casualty rate was declining, and larger numbers of replacements were available for rotation of combat crews. In fact, some overseas commands had more crewmen than were authorized. The overages were apparently the result of Arnold's directive of 16 February, which had made some field commanders reluctant to return to the United States any crewman who had not been classified war weary.

Noting the surplus personnel in some theaters, Arnold sent out word in September 1944 that excess crews should be returned to provide combat-experienced men as instructors in replacement training units. He did not rescind his directive against fixed tours, but he did try to clarify his policy on rotation. The objectives, he said, were "to provide trained crews from U. S. in such numbers and on such schedule as will prevent necessity for rotation to be based on war weariness alone," and "to provide the greatest possible chance of survival by this method of rotation." Concerned about the large number of war-weary men who could not be rehabilitated for further duty, Arnold said that when the theater commander determined that a crewman had completed a combat tour and a replacement was available in the theater, the man should be sent back to the States.⁴⁹

*The program was retained to permit commanders to send some key personnel back to the United States on temporary duty, but before departing from the combat theater they were required to state in writing that they did not object to being returned to the theater for further duty.

As a result of changing conditions and Arnold's new objectives, many of the air forces revised their rotation policies in the autumn of 1944. The Eighth Air Force directive was amended to delete all reference to sorties or flying hours in relation to rotation. Personnel were to be relieved from combat when they became fatigued to a degree that affected the efficiency of their unit, or when the crews assigned to the unit exceeded the authorization. 50* Most of the changes that the other air forces made in their rotation policies were designed either to provide guidelines for use by commanders in deciding when crewmen should be relieved from combat, or to determine priorities for relief of crewmen. In either case, however, relief was contingent upon availability of replacements.

In September 1944, AAF headquarters in the Mediterranean theater established the following guidelines for relief of crewmen of Twelfth and Fifteenth Air Forces: heavy-bomber, photo-reconnaissance, and weather aircraft, 50 sorties; long-range fighters, 70 sorties; and short-range fighters, 100 sorties. 51 The same kind of system was established in Ninth Air Force where the guide for bomber crewmen, for example, was 65 sorties. 52†

In October 1944, Seventh Air Force adopted 40 missions in heavy bombers, 60 missions in medium bombers, and eight months of combat duty in fighter and photo-reconnaissance aircraft as guidelines for its crews in the Western Pacific. 53 About the same time, a new policy issued by Far East Air Forces stated that no crewman would be rotated until in the view of the theater commander he had completed a combat tour and his replacement was in the theater. In this statement it was noted, however, that the flow of replacements was established on the basis of the following combat hours in different kinds of aircraft: 400 hours in heavy bombers; 300 to 350 hours in fighters; 300 hours in night fighters and reconnaissance aircraft; 250 hours in medium bombers; and 200 hours in light bombers. 54 Thirteenth Air Force continued to use its point system, based upon length of service, number of sorties, and flying time, to determine individual priorities for rotation.

*Between September 1944 and April 1945 bomber crews of Eighth Air Force averaged 35 missions, while fighter pilots flew about 270 hours prior to rotation.

†Between November 1944 and May 1945, bomber crews of Ninth Air Force averaged 65 missions and fighter pilots 150-200 hours.

A shortage of replacements had previously made it necessary for bomber crews of Fifth Air Force to serve a minimum of one year in the theater, regardless of the number of missions or hours flown, but under a system adopted in September 1944 crewmen of V Bomber Command became eligible for rotation when they achieved 100 points, provided replacements were available in the theater. For each 5 combat hours, A-20 crews received 2 points, B-25 crews 1 1/2 points, and B-24 crews 1 point. The men earned additional points as follows: 1 point if flak hit at least one plane in the formation; 1 if the formation was intercepted while under fighter escort; 3 if the formation was intercepted while it had no fighter protection; 2 for each aircraft lost from the formation; and 5 points for each involvement in an aircraft accident. Under this point system, V Bomber Command figured that the average combat time was 200 hours in A-20's, 250 hours in B-25's, and 400 hours in B-24's, which matched the replacement schedule established by FEAFF. 55*

After XX Bomber Command, Twentieth Air Force, deployed B-29's to India in the spring of 1944 for strategic operations against Japan, its policy was to relieve war-weary crewmen on the recommendations of unit surgeons. Each recommendation was to include the date of graduation from flying school, the number of flying hours prior to arrival in the theater, the number of combat hours in the theater, the number of combat missions in the theater, and amount of other flying in the theater, together with a statement whether or not a replacement was available. On the basis of this information, Headquarters, XX Bomber Command made a determination on the rotation of the crewman. 56

For several months after B-29 operations began from the Marianas in November 1944, XXI Bomber Command did not issue a definite policy for crew rotation, but a tour of 35 sorties was used by the staff for planning purposes. On 5 August 1945, the day before the first atomic bomb was dropped on Japan, Twentieth Air Force published a regulation which made B-29 and F-13 crewmen eligible for consideration for rotation when they completed 35 combat sorties. 57

At the end of World War II a compilation of "Current Policies of Broad Scope Pertaining to All Personnel of the Army Air Forces," prepared at AAF headquarters, included the following statement about relief and replacement of aircrews in overseas theaters: 58

*Study of rotation statistics subsequently revealed that crewmen seldom remained in the theater more than 15 months, even during the most trying times in the Southwest Pacific.

The rest and rehabilitation policy for air combat crews in the theaters is determined by the respective overseas commander. All air crew members not properly rehabilitated by measures carried out in the theater are placed on non-combat duty or returned to the U.S. The many factors determining the requirements for rest for air crew members may vary widely from time to time in different areas and make it impracticable to lay down hard and fast rules applicable to all theaters of War. The responsibility for maintaining Air Force Units at a high degree of fighting efficiency rests with the Theater and Air Force Commander concerned. In view of the psychological reactions involved in aerial combat which have proven peculiar to air combat crews, it has been urged that recommendations of Flight Surgeons and Air Forces unit commanders be given utmost consideration. Only officers and enlisted men qualified physically and professionally to perform duties as members of combat crews will be employed for actual flying of tactical missions. A fixed number of operational missions will not necessarily constitute an entitlement for return to the continental U.S., nor will a return to the Z. I. from an operational tour constitute an exemption from reemployment in a theater of War.

Attitude of the Crewmen

To Arnold and combat commanders overseas, rotation meant the entire process of exchanging personnel between the combat theaters and the zone of interior. The crewman in combat, however, was generally interested in only one phase of this dual process of relief and replacement. What he wanted to know was when he could go back to the States. There were exceptions, of course, for among the crews there were always those men who liked to fly and fight and who wanted to stay in combat.

When Air Force chaplains were asked at the end of the war to indicate the 25 factors which had the most adverse effects on morale, the length of the tour of duty overseas was high on the list.⁵⁹ Surgeons responsible for the health of the troops and intelligence officers who interrogated combat crews found that the men wanted a fixed tour of duty with assurance that they would rotate after a specific period of time or when they had completed a specified number of missions or hours of

flying. As one fighter pilot said, "The idea is to give them something to look forward to and work for⁶⁰

When Arnold interviewed members of the 19th Bombardment Group in December 1942, Colonel Carmichael, the group's commander, stressed the importance of giving the men "something to look forward to at all times." On the same occasion Captain Gottlieb, the surgeon with one of Carmichael's squadrons, reported that when he talked with the men about the length of service in combat the general response was, "Give us a goal."

"Well, we are going to give you some leave."

"Well--leave is all right."

"What do you want?"

"Well, we will fly as many missions as you think we should fly-- but, by God, after that number of missions, or months, we want a chance to go home."⁶¹

Many such statements by combat personnel could be quoted to show the prevalence of this attitude among the troops. A B-24 pilot, for example, thought that combat crewmen "would have more 'stomach' for their tasks if a definite goal lay ahead." They would "work and fight harder and better," he said, "if they know how far and how long they have to go before coming home."⁶² A B-24 bombardier reported "considerable griping" among crews in China, where "You fly, and continue to fly, until you are told to go home." He believed that these complaints could be stopped "by establishing some sort of rule with regard to a length of tour required before rotation back to the states."⁶³ An armorergunner of a B-24 unit in the Southwest Pacific thought that most combat crewmen did not like to have the tour fixed in terms of months of service but preferred "a definite number of missions, or a positive number of combat hours," as the basis for rotation.⁶⁴

Once a tour of duty had been established, crews naturally objected to changes which increased the period of combat service. A radiomangunner of a B-26 unit of Ninth Air Force, for example, stated that "Morale of combat crew members went into a tail spin . . . when the number of missions necessary to qualify for return to . . . [the U.S.] was increased."⁶⁵ A bombardier-navigator of another B-26 unit reported that morale dropped when the set tour was eliminated in the Ninth Air Force. "As it now stands," he said, "the men have nothing to look forward to--

no incentive. "66 In the Twelfth Air Force, some crews talked of quitting when their tour of duty was lengthened. The commander of a B-17 squadron who heard this kind of talk in his unit appealed to the men's patriotism. When that failed, he threatened to bust them to privates and transfer them to ground duties if they did not fly. As the squadron's flight surgeon said, "This was drastic, but it worked. "67*

Crewmen often did not understand why changes had to be made in rotation policies. For instance, when the fixed tour was canceled in Ninth Air Force in the spring of 1944, notice of the change was to be passed down through command channels to the crews, but the news got out before it could be transmitted officially and explained to the men. The result was a sharp decline in morale, and the situation was not improved by the fact that crewmen who had completed their tours and were awaiting shipment to the United States were sent back to their units to resume combat duty. 68 Four enlisted crewmen of the Ninth said they "felt a terrible 'let-down' when they had lived up to their part of the agreement, only to learn that additional combat flying was ordered. "69/

Lack of uniformity in rotation policies in a theater, and variations in the criteria established for different kinds of duty, also created problems. At one time in Italy, for example, heavy-bomber crews of Fifteenth Air Force were relieved from combat after 50 missions, while medium-bomber crews of Twelfth Air Force normally flew about 65 missions. The Twelfth Air Force crews could not understand why they had to fly more missions when they often were engaged in the same kind of operations, and frequently were assigned the same targets, as the heavy-bomber crews. As one officer of a medium-bomber unit said, "if pilots of one group find that those of another are being rotated home, . . . the morale drops considerably. "70

On the other hand, there was a pilot of a B-17 group of Eighth Air Force who reported that morale of combat crews in England had been

*The men were further provoked by a recent increase in the requirements for the Distinguished Flying Cross. Careful inquiry into a situation of this nature might reveal other factors, such as, perhaps, dissatisfaction with the food or weaknesses in leadership, which may have contributed to the development of such an attitude among the crewmen.

/One might suspect that among themselves the men used stronger language than that which appeared in the report of their interrogation.

"adversely affected by a system now in vogue which calls for too much time off between missions." He thought "that 'keep-em-flying' would 'keep-em-happy.'"71 As someone noted in the margin of his report, "You just can't please them all."

KOREAN WAR

In the post-World War II period the U. S. Air Force set up schedules for rotation of its military personnel stationed overseas. The length of the tour in any particular region was determined largely by the environment and the nature of the duty in that area. In June 1950 the normal tour was, for example, 30 months in Japan, 24 months in Korea, and 15 months in Okinawa.72 After the Korean War began late that month, operational requirements made it necessary for Far East Air Forces to suspend the peacetime program for rotating personnel from the theater.73

Shortages of personnel made it impossible to establish a firm commitment for rotation of combat crews during the early months of the war. Recognizing the need for rotation, however, FEAF explored the possibility of intra-theater exchange of crews among the three air forces in the area: the Fifth, based in Japan and Korea; the Twentieth in the Ryukyus and Marianas; and the Thirteenth in the Philippines. FEAF wanted to move non-combat crewmen to combat positions for 90 days of temporary duty, but when the commanders of the Fifth and Twentieth objected because of problems in transition training, FEAF settled for a limited exchange of crews between the Fifth and Thirteenth Air Forces.74

Late in 1950, Lt. Gen. George E. Stratemeyer, commander of FEAF, proposed that the combat tour be fixed at 100 missions in fighters, 75 in light bombers, and 60 in medium bombers. In justification of his plan, Stratemeyer said:75

. . . These individuals have no promise of return to ZI . . . Naturally they can see only one end, namely that of eventually being killed. Crew morale is already affected and if this situation is allowed to continue will go lower. Crews lose their eagerness for combat after 30 or 40 missions unless some eventual relief is held out. Inter-theater [intra-theater] rotation is already in effect but is of little value in solving overall problem

because practically all tactical units are in combat. Replacements will have to arrive before individuals could rotate. . . .

Gen. Hoyt S. Vandenberg, USAF Chief of Staff, recognized the problem of operational fatigue and promised to send a steady flow of replacement crews. He also stressed the need for combat-experienced men for assignments to tactical and training activities throughout the Air Force. He turned down Stratemeyer's proposal, however, because the Army had not announced plans to rotate its personnel, and because he feared that rotation based upon a fixed number of missions could not be supported.⁷⁶

Unable to establish a definite tour of combat duty, FEAF developed "planning standards" early in 1951 for determining the approximate times for rotation of crews assigned to various kinds of operations: 100 missions in single-engine fighters and in air control and tactical reconnaissance aircraft; and 50 missions in light and medium bombers, twin-engine fighters, and multi-engine reconnaissance aircraft. Crewmen normally achieved these goals in about six or seven months under operating conditions existing during that period of the war.⁷⁷

Several factors made it possible for FEAF to begin rotation of combat crews in May 1951 on the schedule indicated by the planning standards. The ground fighting had stabilized, the Army had announced a 6-month tour for its combat troops in Korea, and replacements were arriving in the Far East. By that time, however, there was a backlog of crews eligible for relief from combat duty under the planning standards, and before all of these men could be rotated a second backlog was created in September 1951 when the standard tour for all Air Force personnel in Korea was shortened from 24 to 12 months, and the standard tour for other FEAF personnel unaccompanied by dependents was changed to 18 months.⁷⁸ Since crewmen could not be retained longer than the normal tour for their area, those who had served a year in Korea had to be rotated ahead of those who had been in Korea a shorter time but had flown enough missions to meet the planning standards. After personnel in the backlogs had been rotated, crewmen could rotate in less than a year if they met the planning standard and their replacements had arrived.⁷⁹

In 1952 the FEAF standards for combat crews were changed as follows: single-engine fighter and reconnaissance aircraft, 100 sorties; T-6 "Mosquito" aircraft, 100 sorties or nine months in Korea, whichever came first; all-weather fighters, 75 sorties or nine months in

Korea, whichever occurred first; light bombers, 50 sorties; medium bombers, six months of combat duty; and all others, the normal overseas tour in the area of assignment.⁸⁰ Crewmen, except F-84 and F-86 pilots, could volunteer for a second tour, but they had to sign a statement to that effect in order to prevent adverse publicity if they were lost in combat during the second tour.⁸¹

There was a shortage of B-26 crewmen in 1952, but otherwise the recall of reservists and the expansion of training programs during the war gave FEAF sufficient personnel during 1952 and 1953 for rotation of crewmen under the criteria provided by the planning standards.⁸² As Dr. R. F. Futrell said in his study of the USAF in the Korean War, "adherence to an orderly program of operations should, at least in theory, have facilitated a similarly ordered requisitioning, reception, and utilization of combat crews." He pointed out, however, that replacements had to be requested several months before they were needed, and that in the interval between the requisition and the reception of crews the sortie rates could be changed by adverse weather and other variable factors. In fact, a combination of bad weather and miscalculated personnel actions resulted in the Fifth Air Force being flooded with fighter pilots during the winter of 1952-1953. The men had to compete for aircraft and flying time, and many suffered temporary loss of flying proficiency.⁸³

In connection with the planning standards, which remained in effect until the end of the war, FEAF noted: "When the flow of [replacement] crew members was in excess of the requirements based on the manning standard, the length of combat duty could be reduced. If the flow was less than requirements, the length of duty had to be increased."⁸⁴ In other words, in Korea as in World War II, rotation of combat crews was governed largely by the availability of replacements.

SUMMARY

Air Force policies for rotating combat crews during World War II and the Korean War were designed primarily to prevent combat fatigue or alleviate its effects. The need for providing relief for crews engaged in combat had to be considered in relation to requirements for maintaining the strength and effectiveness of the forces which conducted the aerial operations against the enemy. The biggest problem which the Air Force encountered during both World War II and the Korean War in its efforts to develop workable policies and programs for rotation of crews was the scarcity of replacements.

Early in the Second World War, in July 1942, the War Department established a one-year tour of combat duty for AAF crews, but this schedule was unrealistic under conditions prevailing at that time and was never put into effect. Instead, field commanders developed their own programs, which varied greatly among the different theaters of operations, and among the different air forces in some theaters. The general trend, however, was toward the establishment of fixed tours of duty based upon numbers of missions, flying hours, time in the combat theater, the character of the operations, or some combination of these factors.

In May 1943 the War Department rescinded the one-year tour and gave field commanders authority to develop their own policies for rotation. Shortages of replacements made it necessary for some commanders to lengthen the tours of combat duty which they had established for their crews.

For a number of reasons, but principally because of the shortage of replacements, General Arnold directed in February 1944 that field commanders cancel fixed tours and redesign their policies to obtain maximum combat service from each crewman. With the approval of Air Force headquarters, some overseas commands set up programs for sending crews back to the United States for leave, but substitution of leave for rotation proved to be unsatisfactory and was soon dropped.

By that time, September 1944, sufficient replacements were becoming available to take care of most requirements for rotation, and some commands actually had more crews than were authorized. In directing that excess crews be returned to the United States, Arnold said that the objective of the AAF was to provide enough replacements so that rotation would not have to be delayed until crews succumbed to war weariness. He left it to field commanders to work out their own programs for rotation within the availability of replacements. Subsequently, the rotation policies of most overseas commands were directed toward providing guidelines for deciding when crewmen should be relieved from combat or for determining priorities for relief of crewmen from combat flying. These guidelines, however, tended to fix the tour of duty.

From its experience in World War II, the Air Force concluded that it was not practicable for officials in Washington to lay down rules to govern rotation of combat crews in time of war. Instead, the development of policies for rotation had to be left to the Air Force commanders in the various theaters of operations, but the commanders' policy-making authority had to be restricted to prevent the establishment of fixed tours of combat duty. The crewmen wanted a firm commitment as to how long

they would have to fly in combat. With the limitation imposed by Air Force headquarters, however, theater commanders could not give their crews a specific goal but could only establish general guidelines for determining when crews should be relieved from combat or for setting priorities for rotation of crews as replacements were obtained. In practice, however, such guidelines tended to become formulas that defined the tour of duty, which is what the crewmen wanted.

In the post-World War II period the Air Force developed a system for rotating personnel to and from overseas stations, but this program had to be cancelled in the Far East after the beginning of the Korean War. The Air Force commander in the theater wanted to establish a fixed tour for crews engaged in combat, but for various reasons, and especially because of a shortage of replacements, his proposal was rejected by the USAF Chief of Staff. The theater command then developed some "standards" which were supposed to be used for planning but which became the criteria used for relieving crews from combat as replacements became available. Thus, in general, rotation during the Korean War followed the pattern which had emerged from World War II.

NOTES

1. Msg, Brett to Arnold, A-831, 30 May 42.
2. See, for example, msg, CG, AAF to CG, Middle East Theater, 2574, 28 Dec 42; msg, Algiers to WD, 3084, 25 Dec 42.
3. Ltr, Eaker to Arnold, 6 Mar 44.
4. See, for example, statement by Capt Bertram A. Sill, 71st Tac Rcn Gp, 18 May 45.
5. AAF Bull 42-6, 26 Feb 42.
6. Msg, Brett to Arnold, A-831, 30 May 42.
7. WD Cir 211, Sec VI, 1 Jul 42.
8. WD Cir 127, Sec V, 29 May 43, superseded, without change, by WD Cir 372, Sec III, 13 Sep 44.
9. See, for example, Maj J. E. Crane, "Rest Leave in the South Pacific," 1944; "AAF Operation of Rest Camps in MTO, 19 Dec 42-31 Oct 45."
10. Memo, Harmon for Brig Gen T. J. Hanley, DCS, HQ AAF, 8 Dec 42.
11. See, for example, Research Branch, Special Services Div, HQ ETO, "Effects on Combat Personnel of Number and Frequency of Missions Flown," Jul 44; Lt Col J. B. Hall, and Capt F. K. Bosse, "A Study of Pilots Over a Period of 33 Months in the Theater of Combat," [1944]; and Maj David G. Wright (ed), Observations on Combat Flying Personnel (New York: Josiah Macy, Jr., Foundation, 1945).
12. W. F. Craven and J. L. Cate (eds), The Army Air Forces in World War II (Chicago: University of Chicago Press, 1948-1958, 7 vols), VI, 600-615.
13. See, for example, msg, Brereton to HQ AAF, AFSME 3700, 6 Jan 43.

14. Craven and Cate, I, 238; see also Maurice Matloff and Edwin M. Snell, Strategic Planning for Coalition Warfare, 1941-1942 (Washington: Office of the Chief of Military History, Department of the Army, 1953), 65-66, 99, 159-160, and passim.
15. WD Cir 211, Sec VI, 1 Jul 42.
16. Ltr, Kenney to Arnold, 28 Aug 42.
17. Craven and Cate, IV, 110-111, 150, 282.
18. Transcript of Interview with 19th Bombardment Group, Washington, D. C., 5 Dec 42.
19. Memo, Harmon for Hanley, 8 Dec 42.
20. Msg, Cairo to AGWAR, AMSME 3417 (to Arnold from Grant, signed Andrews), 23 Dec 42; msg, Cairo to AGWAR, AMSME 3700, 6 Jan 43.
21. Ltr, Eaker to Stratemeyer, 2 Jan 43.
22. 8AF Memo 75-1, 31 Dec 42.
23. Msg, Algiers to WAR, USFOR 3084, 25 Dec 42.
24. Ltr, Eaker to Stratemeyer, 2 Jan 43.
25. Ltr, 13 AF to CO's, All Air Corps Gps and Sqdns, Feb 43.
26. See, for example, msg, AFRDE to CG, AMSME, 2749, 7 Jan 43, and msg, WDGS, OPD, to CG, NATO, 6756, 26 Apr 43.
27. WD Cir 127, Sec V, 29 May 43.
28. Ltr, 13AF to CO's, All Combat Flying Units, 12 Jul 43.
29. Ltr, Kenney to Arnold, 28 Jul 43.
30. Ltr, NAAF to subordinate commands, 1 Jul 43. On 6 April 1943, pending receipt of a revision of War Department policy, NAAF had sent the same criteria to all commands for guidance of group commanders. MSG, NAAF to WAR, JM0092, 3 May 43.
31. Ltr, Spaatz to Arnold, 30 Jul 43.

32. 12AF, Admin Hist, 1942-1945, Vol 8, Med Hist, Aug 42-Jun 44, pp 67-68.
33. Air Surgeon, 12AF, to Surgeon 17 Bomb Gp, 12 Jan 44.
34. Ltr, Doolittle, thru Spaatz, to Bevans, 19 Nov 43.
35. 9AF Memo 35-1, 11 Dec 43.
36. 8AF Memo 75-1, 21 Oct 43.
37. Ltrs, Arnold to commanders, 16 Feb 44.
38. AAF Ltr 150-2, 31 Jan 44; ltrs, Arnold to commanders, 16 Feb 44.
39. Ltrs, Arnold to commanders, 16 Feb 44.
40. Ltr, Kenney to Arnold, 25 Mar 44.
41. Ltr, Davidson to Giles, 15 Apr 44; 14AF, Med Hist, 1943-1945.
42. IXBC, Hist, Apr 44, p 10.
43. 8AF Memo 35-1, 4 Mar 44; ibid, 6 Jul 44.
44. Ltr, Eaker to Arnold, 6 Mar 44.
45. Ltrs, AAFMTO to 12AF, 15AF, et al, 10 Apr 44; ltr, Spaatz to 8AF and 9AF, 11 Apr 44.
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47. Maj Donald W. Hastings, "Investigation of Causes of Overwater Neurosis," 16 Sep 44.
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49. Msg, Arnold to Stratemyer, WAR 28945, 12 Sep 44; ltr, FEAF to 13AF, 18 Sep 44.
50. 8AF Memo 35-1, 22 Sep 44.

51. Ltr, AAFMTO to 12AF, 15AF, et al, 9 Sep 44; 12AF Med Hist, Jun-Dec 44, p 34.
52. 9AF, Hist, 1943-1945, Vol I, P 2, pp 386-393.
53. Ltr, Douglas to AAFPOA, 29 Sep 44; memo, Maj John D. Fleming for Chief of AAFPOA, 26 Oct 44.
54. Ltr, FEAF to 13AF, 18 Sep 44.
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56. XXBC Memo 35-20, 1 Jul 44.
57. XXIBC, Command and Staff Reference Book, 1 Jul 45, p 9; 20AF Reg 35-2, 5 Aug 45.
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61. Transcript of Interview with 19th Bombardment Group, Washington, D. C., 5 Dec 42.
62. Statement by Capt Monroe Sachs, 450th Bomb Gp, 20 Jun 44.
63. Statement by 1st Lt Raymond A. Tondreau, 308th Bomb Gp, 5 May 44.
64. Statement by S/Sgt Norman W. Williams, 43d Bomb Gp, 16 Jun 44.
65. Statement by T/Sgt Herbert Tanner, 386th Bomb Gp, 7 Sep 44.
66. Statement by 1st Lt Darrell J. High, 387th Bomb Gp, 23 Jun 44.
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70. Statement by Lt Col Bailey C. Cook, 321st Bomb Gp, 17 Apr 44.
71. Statement by Capt H. E. Wright, 95th Bomb Gp, 8 Sep 44.
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