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# THE ROLE OF THE CHINESE PEOPLE'S LIBERATION ARMY IN THE LAST DECADE 

Dr. Kenneth R. Whiting



In the People's Repuhlic of China everyhody is a soldier.

M1O TSE-TUNG'S famous aphorisın, quoted ad nauseam in the last quarter of a century, that power Hows from the barrel of a gun but that the party must control the gun, seemed more or less reversed in the last part of Cultural Revolution and its immediate aftermath. Even today, after the Tenth Party Congress in August 1973, the extent of the political power still in the hands of the People's Liberation Army (pla), which holds the gun, is one of the more intriguing mysteries beguiling China watchers. This article is an attempt to provide a background for the present drama being played out in the People's Republic of China (PRC).

By the autumn of 1965 , Mao began to lay the groundwork for the Great Proletarian Cultural Revolution, which was to push China to the brink of chaos. In August 1966, using the pla to provide the training and logistics, Mao assembled the first contingents of the Red Guards in Peking, gave them his benediction, and dispatched them throughout China to attack the entrenched bureaucracies in the educational, economic, and party sectors. By January 1967, it was apparent to Mao that his "little generals" were not capable of carrying out their task without help. so he called on Lin Piao and the pla to lend them assistance. The bewildered soldiers, neither by training nor by disposition inclined to aid and abet anarchy, tended either to stand aside or to favor the so-called "entrenched" bureaucrats. Ergo, the confusion grew apace. By 1968 the pla was given the job. of bringing the Cultural Revolution to an end and of restoring order, a task more to its liking.

By the time of the Ninth Party Congress in April 1969, the pla commanders of the military regions and districts had supplanted the party bureaucracy and were apparently enjoying their new powers. The next five years witnessed Mao's efforts to
bring the military back under civilian control, a task that is still under way and still not fully accomplished. The politicization of the pla during the Cultural Revolution and the attempts to de-politicize it since the Ninth Party Congress are of continuing interest to the United States and to many another nation of the Western world.

## origins of the Cultural Revolution and the events of 1965 and 1966

The reasons given for the Great Proletarian Cultural Revolution are about as numerous as the China watchers writing on the subject. They range from those who see it as caused by a semideified Mao, striving to eradicate greedy bureaucrats, to those who see the whole thing as a power struggle among the power-hungry autocrats both in Peking and in the semiautonomous hinterlands. Others see the root cause in Mao's attempt to transform China into a modern industrial nation, on the one hand, and on the other his almost fanatical determination to prevent the consolidation of a bureaucratic-managerial class à la Russe.

There seems to be some agreement, however, that the seeds of the Cultural Revolution were planted by Minister of Defense P'eng Teh-huai's attack on Mao's policies at the Lushan Plenum of the Central Committee in August 1959 and the Central Committee's demonstration of a lack of confidence in Mao's leadership when it replaced him as head of state, the job going to Liu Shao-ch'i. For the next few years Mao's authority, except in the PLA, was in semieclipse. The "moderates," using such un-Maoist mechanisms as material incentives, brought production back to the levels prevailing before the Great Leap and even allowed the communes to decentralize to a considerable degree.

Mao fought back. At the Tenth Plenum
of the Central Committee in September 1962 he launched a "socialist education movement" to counteract what he regarded as a newly fledged "bourgeois elite," made up of bureaucrats who put their professional interests above revolutionary goals. Their new god was "expertise," and Mao saw this as a move away from contact with the masses. The "socialist education movement," however, was far less than an outstanding success, thus further embittering Mao. He was convinced-and he was probably right-that it had been sabotaged by the party and government bureaucracies.

Furthermore, as early as 1964, Mao became alarmed at the trends in the cultural field. Not only were the artists and writers aping Western forms but some were even aiming their barbs at Mao himself. For example, Wu Han, a deputy and close associate of P'eng Chen, the first secretary of the party committee in Peking, had published a play entitled "The Dismissal of Hai Jui," in which he described how a Ming emperor fired an honest and courageous official at the urging of some sycophants in the royal court. The analogy was obvious-Mao's cashiering of the honest and courageous P'eng Teh-huai. Teng T'o, another of P'eng Chen's deputies in the Peking party machine, wrote a series of essays under the general title of "Evening Chats at Yenshan," and in one of them he satirized Mao's "the East Wind prevails over the West Wind" as "Great Empty Talk." ' Mao called upon the Central Committee in September 1965 to condemn the intellectuals who were going astray so outrageously, but his appeal fell on deaf ears.

In October 1965, claiming that the party apparatus in Peking was controlled by his enemies, Mao left the capital and went to Shanghai, where the political climate was more congenial. In November a member of the Shanghai Party Committee, one Yao

Wen-yuan, apparently under the guidance of Mao's wife, Chiang Ch'ing, wrote an article criticizing Wu Han's play. The article got national circulation when published by the pla's Liberation Arny Daily and is usually regarded as the opening shot in the Great Proletarian Cultural Revolution.

P'eng Chen, realizing that the attack on his deputy, Wu Han, was really aimed at himself, tried to see Mao to mend his fences. In late December 1965, he was summoned to Shanghai for a three-day conference with Mao; Ch'en Po-ta, Mao's ex-secretary and then editor of Red Flag; K'ang Sheng, a security type sometimes called China's Beria; and Yang Ch'eng-wu, deputy chief of the pla General Staff. This pro-Maoist group instructed P'eng to demand "self-criticisms" from Wu Han and other offending intellectuals.

Mao then began the undoing of the chief of the pla General Staff, Lo Jui-ch'ing, who had been in eclipse since November 1965. In early 1966 the accusations against Lo Jui-ching became more and more severe. His main heresy, it seems, was his advocacy of a modernized PLA and the industrial buildup needed to supply the wherewithal to accomplish that. Both would require the patching of relations with the Soviet Union. Mao, however, saw China as strong in manpower, thus having to fight any invader in a "people's war"a sea of people engulfing the invader as he advanced. You do not attempt to fight a technologically superior enemy with his own weapons and strategy, maintained Mao; you pit your strengths against his weaknesses. The outcome was the fall of Lo Jui-ch'ing-literally the "fall," since he attempted unsuccessfully to commit suicide by jumping out of a window in March 1966.

This Mao versus Lo Jui-ch'ing clash in the winter of 1965-66 was more than

theoretical to Mao, since at that time he was convinced that China was about to be invaded. He told a delegation of Japanese Communists, visiting China in February 1966, that a war between China and America was inevitable in the next year or two and that Russia, using the SinoSoviet defense pact as a pretext, would also invade China. Thus China would be invaded from the south and the coast by Americans and from the north by Russians. The Japanese returned home convinced that Mao was a bit neurotic on the subject of invasions. ${ }^{2}$

In the meanwhile the Maoist group was intensifying the attack on P'eng Chen and. by implication, on his superiors, Teng Hsiao-p'ing, the general secretary of the Chinese Communist Party, and Liu Shaoch'i, the head of state. Why Liu Shao-ch'i picked April 1966 to go on a state tour of Pakistan, Afghanistan, and Burma is hard to fathom, but when he got back, he found himself outgunned in the Standing Committee of the Politburo. Furthermore, in mid-April an editorial in the Liberation Army Daily stated that the armed forces were the chief instrument of the dictatorship of the proletariat, that Mao was the creator of the PLA, and that the pla should be obedient to his instructions. As one author puts it: "The barrel of the gun, from which political power grows, had been openly invoked in support of Mao Tsetung." ${ }^{3}$ By June, P'eng Chen had been replaced, as had Wu Han and Teng T'o, in the Peking Party Committee. Lu Ting-yi, the Director of Propaganda, was out, and Lo Jui-ch'ing had been officially dumped. Since Lo, P'eng, and Lu were all full members of the Secretariat, the Maoists were seizing effective levers of power in the cCp's central apparatus.

At this point Mao, on 16 May, established a Cultural Revolution group with Liu Shao-ch'i in charge. Liu created "work
teams" to go to government offices, schools, and communes to carry out a rectification campaign. But Mao simultaneously set out to make Liu's "work teams" ineffective and use that ineffectiveness as a club with which to beat Liu. A woman on the staff of Peking University, Nieh Yuan-tsu, put up a large-character poster bearing the injunction: "Bombard the Headquarters!!" She called for support for Mao and the Cultural Revolution and stated that there was hanky-panky going on in Peking University. Since it was just before exams, the students were in a mood to let off steam. Mao had found his "little generals."

By July 1966 Mao, having the pla firmly on his side, having destroyed the opposition in the Peking Party Committee, and being in control of the Secretariat, decided it was time to return to Peking. To offset rumors that he was in bad health, he made his famous swim, on 16 July, in the Yangtze near Hankow-some 15 kilometers in 65 minutes! On returning to Peking on 18 July, he found the students at the various schools in a proper ferment and many of them already on the rampage. Many were the recruits for the first covert Red Guards, organized in May and June. Liu Shao-ch'i, immediately recognizing the Red Guards as aimed at him and his colleagues, declared them illegal. But it was too late, since his power at the center had already been too badly eroded.

Mao then set about the convening of a plenum of the Central Committee, the first since 1962. It met on the first of August, and it was no coincidence that the date was also Army Day, the celebration of the founding of the Red Army in 1927. By 8 August, with the help of pla officers and radical students, Mao was able to intimidate the Central Committee into approving his 16 -point program, the guidelines for the Cultural Revolution. On 18 August, Mao presided over a gigantic rally
of tens of thousands of Red Guards attired in uniforms provided by the pla. The rally was run along the lines of the Nuremberg Nazi get-togethers-cheer leaders leading the youthful Red Guards in rhythmic paeans of praise for Chairman Mao. The rally unleashed a two-month-long reign of terror, during which the young fanatics destroyed cultural treasures, raided educational institutions, and beat up thousands of suspected "capitalist roaders," the term given to anyone not acceptable to the Maoist zealots. Soon millions of Red Guards were pouring into Peking to be indoctrinated. By the end of November, Mao had blessed over eleven million of his young "warriors" at eight rallies. They were instructed to attack and destroy "those within the party who are powerholders taking the capitalist road." ${ }^{4}$

In October 1966 a new Cultural Revolutionary group was created to push the movement forward. The director of the new group was Ch'en Po-ta, Chiang Ch'ing was the deputy director, and $\mathrm{K}^{\prime}$ ang Sheng an adviser; it also included two members of the Shanghai Party Committee: Chang Chiun-chiao and Yao Wen-yuan. This group, especially Chiang Ch'ing, was to dominate events and determine the tone of the Cultural Revolution over the next two years. Its main task was to bring down Liu Shao-ch'i and Teng Hsiao-p'ing, the top party leaders in Peking, and to destroy the party apparatus in the provinces. The first task was easily accomplished; but the second, the extension of the revolution to the provinces, was to be the reef upon which the movement ultimately foundered.

During November and December, Chiang Ch'ing and her colleagues on the Cultural Revolutionary group went ape. P'eng Chen, Lu Ting-yi, Lo Jui-ch'ing, and P'eng Tehhuai were "arrested" by Chiang Ch'ing's favorite Red Guard contingent and publicly abused. They even lured Wang Kuang-
mei, Liu Shao-ch'i's wife, out of the safety of the official compound by phoning her that her daughter was in the hospital. The group was riding high at the end of 1966.

But it was becoming obvious to Mao that the Red Guards in the provinces were not doing as well. The local party leaders were creating their own Red Guard contingents to protect them from the invaders from Peking, and in some cases they were backed by the local military units. Many of the natural leaders of the Red Guards, those from the families of the party bureaucrats, began to lose their enthusiasm for the movement when it was focused on their own families, and some shifted sides. The last of the Red Guard rallies in Peking was held on 25 November, and the word went out shortly afterwards that the wandering Red Guards were all to return home by 20 December and that there would be no more free train rides or free food after 21 December. It was high time the "little generals" stopped clogging the rail lines. One estimate is that 50 million Red Guards had been shuttled by rail around China between August and December 1966. ${ }^{5}$

## the intercention of the PLA in 1967-1968

On 21 January 1967 a central directive ordered the pla to support the revolutionary left in its efforts to smash the party committees in the provinces and cities of China. This job of supporting the Red Guards was probably given to the regional forces, one of the two broad divisions into which the pla was divided. The regional forces were made up of the border troops, the independent divisions and regiments, and the garrisons in the cities, under the command of the 13 region and 23 military district commanders. The main forces. under the direct command of the headquarters in Peking, were composed of some 36 corps (sometimes called "armies"), each
made up of three divisions and some support units, about 45,000 men in all. Furthermore, the Air Force and the Navy were under the direct command of PLA headquarters in Peking. The region and district commanders had no control over the 36 corps of the main forces or over the Air Force and Navy units in their areas. But they did have a good deal of autonomy in the handling of the regional forces. ${ }^{6}$

The provincial military district headquarters were the key organizational link between the party and military bureaucracies, and many of the first secretaries of the provincial party committees were also the first political commissars of their respective military districts. On the eve of the Cultural Revolution, 18 of the 23 military districts had party secretaries concurrently serving as first political commissars, as did 11 of the 13 military regions. ${ }^{7}$ The ties between the regional military district forces and the party apparatus in the military district were very close, even interlocking. Thus when the word came down that the military commanders were to assist the radicals in the destruction of the local party apparatuses, the military commanders were bewildered. As Nelson comments: "The regional forces were as distant from the revolutionary rebels as they were close to the local Party apparatus. . . . No wonder so few military districts and garrisons supported the left wholeheartedly." ${ }^{8}$ To make matters worse, how was the military commander to determine which of the contending groups was the truly revolutionary one? If he made the wrong decision, he had Peking down on him, and he might also be attacked by the group against which he had decideda potent factor in angering many a military commander. Peking, aware of the tendency of the district commander either to drag his feet or even to side with the
party apparatchiki being attacked, began to use the main forces to take over in trouble spots. Over 20 of the 36 corps were involved at one time or another during the Cultural Revolution in support of the revolutionary rebels. ${ }^{9}$

In June 1967 an organization of industrial workers, known as the "Million Heroes," had been formed in Wuhan to oppose the Red Guards, and the Wuhan Military Region command was involved on the side of new organization. On 14 July Hsieh Fu-shih, Minister of Public Security, and Wang Li, a fellow-member of the Cultural Revolution Group, arrived in Wuhan at the head of a delegation to survey the situation. The region commander, Ch'en Tsai-tao, tried to get the delegation to look at both sides of the imbroglio, but Wang Li, acting as spokesman for the delegation, came out solidly on the side of the Red Guards. Early in the morning of 20 July, Ch'en Tsai-tao's troops began to occupy key points in the city, and a mob of "Million Heroes" grabbed Hsieh Fu-shih and Wang Li, roughing them up in the process. Chen Tsai-tao rescued them and carted them off to military headquarters. Peking was outraged-the Minister of Public Security beat up and then arrested!

Lin Piao during the last ten days of July moved naval units up the Yangtze to Wuhan and dispatched airborne units to the city. Tseng Ssu-yu replaced Chen Tsai-tao as commander of the Wuhan Military Region, and the two alused emissaries were returned to Peking. But the whole affair had jolted the military command in Peking and what was left of the government, since neither relished the idea of conflict between the regional and main forces of the pla. Furtherinore, although centrally controlled corps units had been put in charge of some military districts and even smaller administrative areas, it

was a dangerous gambit. This tended to politicize main force commanders and weaken their ties with headquarters in Peking. ${ }^{111}$ The use of centrally controlled forces of the pla was Mao's final trump card in carrying out the Cultural Revolution. As flare-ups between the regional and main forces in the ensuing months persisted, there was the danger that the main forces, the ultimate base of national
political power and national defense, would be severely weakened.

In the meanwhile, it was necessary to create something in the provinces to replace the wrecked party apparatuses and government bureaucracies. As early as January 1967 a Revolutionary Committee was established in the Heilungkiang Military District. The ideal arrangement aspired to in the creation of the Revolu-

tionary Committees was the bringing together of the military command, the "pro-Maoist" party cadres, and the representatives of the revolutionary masses (i.e., the revolutionary rebels) into three-headed committees, or, as the blueprint of the Maoist group in Peking read, the forming of a "Revolutionary Triple-Alliance" consisting of "revolutionary mass organizations," the local pla forces, and the "revo-
lutionary cadres" (i.e., pro-Maoist party officials who had seen the light). ${ }^{11}$ Early in the game, however, the military leaders and party cadres dominated the committees, with the military on top. For example, the four-man Standing Committee of the Heilungkiang Revolutionary Committee was composed of two military men, an old party cadre, and a representative of the revolutionary masses. ${ }^{12}$ The leading role of the military in the Revolutionary Committees, as they were created in one province after another, was almost inevitable. Once the pla had been instructed to intervene in the Cultural Revolution in January 1967, military units moved in to run industrial plants in the cities, began to administer civil aviation, and took over the police and security organs. The responsibility for maintaining a minimum of public order and some production tended to push the local military leaders to the fore in the new administrative organs in the provinces, the Revolutionary Committees.

During the period from 31 January 1967, when the first Revolutionary Committee was created in Heilungkiang, to 5 September 1968, when the last of the 29 Revolutionary Committees was estab-lished-a long and arduous process characterized by much factional in-fightingthe military came to dominate the committees. Of the 476 Standing Committee members in the 29 Revolutionary Committees, 235 , or 49 percent, were military men, 109 were veteran party cadres, and only 132 represented the revolutionary mass organizations. Of the 29 chairmen, 22 were military men ( 13 commanders and 9 commissars). ${ }^{13}$ It was altogether obvious by mid- 1968 that the pla had become the dominant administrative authority in the provinces.

In Peking by June 1968, both Lin Piao and Chou En-lai realized that, if the Pla
were to survive as a unified force, various military units would have to cease backing opposing armed factions at the local level, for otherwise the pla would disintegrate as a viable military organization. In July representatives of contending factions from many of the provinces were called to Peking to work out agreements, but little agreement seemed to come out of the meetings. Finally, on 28 July, at (0:30), Mao called in a number of Red Guard leaders and scolded them vehemently. This was the death knell of the Red Guards. They were rapidly cleared out of the various institutions they had taken over during the Cultural Revolution. For example, by the end of 1968 , two-thirds of the 15,000 students in Peking's Tsingua University had been sent to the countryside to learn from the peasants, a trip that was scarcely voluntary on their part. ${ }^{14}$

In a review of the role of the pla during the Cultural Revolution, two dates stand out: 23 January and 5 September 1967. On the first of those dates, the pla was instructed to intervene in the Cultural Revolution and thereby involve itself in the political maelstrom then raging throughout China. On the second date, the army was ordered to restore order and use force if needed. As one authority points out, ". . . this was the beginning of the end of the Cultural Revolution." 15 The pla was more than willing to use force, lots of force, by September, since in the aftermath of the Wuhan Incident in July the radicals in Peking had been urging the Red Guards "to drag out the handful of power-holders in the army," i.e., to attack the district and regional pla headquarters. Apparently the army's reaction to this line led to the 5 September order

PRC, party line. In Chairman Macis China, all instruction and inspiration emanate from the thought of Mao Tse-tung, whether it be the militia learning military skills . . . PLA and militiakemen conferring . . . Werdsmen in from the fields . . . fighters starting their shift.

authorizing force. Although the Cultural Revolution sputtered along until early 1969, with first the radicals and then the moderates on top in Peking, the ultimate power belonged to the Pla after September 1967.

In retrospect, the pla became the dominant force in the Cultural Revolution malgré lui. It was initially brought in, reluctantly, by the civilian leadership to aid the Maoist group in an intraparty conflict. Contrary to the expectations of the Cultural Revolution Group, however, the army tended to favor the moderate elements, both in the provinces and at the center; it tended to act as a moderating force, especially in the conflicts raging between contending elements at the local level. The military commanders were given the impossible task of simultaneously restoring order and aiding the Red Guards,
an unsolvable paradox. They had to opt for one or the other of these contradictory alternatives, and by natural bent and long training they preferred order to the Red Guard anarchy. Forced to enter the political arena, the pla in spite of itself was the dominant political and administrative force in the provinces by the end of the Cultural Revolution. ${ }^{16}$

## the role of the PLA in the immediate aftermath of the Cultural Revolution, 1969-1971

On the eve of the Cultural Revolution, China's foreign relations were deteriorating badly. The Chinese had worked assiduously in the first half of the 1960)s to build a strong position in Asia and Africa, had quarreled bitterly with the Soviets at a succession of Afro-Asian People's Solidarity Organization (AAPSO) conferences, and in Indonesia had won over both the


Communist Party (PKI) and President Sukarno to their side. On the eve of the Cultural Revolution, however, the whole elaborate policy had disintegrated: relations with aApso got so bad that the Chinese quit the organization, and the disastrous attempted coup in Indonesia in September-October 1965 led to the destruction of the PKI and the political castration of Sukarno.

During the Cultural Revolution, Peking's relations with the outside world fell into even more disarray. For example, for most of the period there was only one ambassador still at his post, Huang Hua in Cairo; the rest had been recalled for reindoctrination in the "Thoughts of Mao," a process that lasted out the Cultural Revolution. The Red Guards at one point took over the Ministry of Foreign Affairs, scattered secret documents about, and carted off the Minister, Ch'en Yi, to subject him to long and arduous public "struggle" sessions. They periodically harassed the Soviet and British embassies, and the latter was even burned down. In Hong Kong, the local Red Guards rampaged, killing constables and fostering a bus strike, and Peking for a while cut off food and water to the city. Even Ne Win of Burma, who had tried so hard to get along with his big neighbor, had to break off relations when the Red Guards in Rangoon carried on so outrageously that a Burmese mob burned out the Chinese diplomatic compound and raided the Chinese section of the city.

All these events, however, paled into insignificance when compared to the rise in tensions between Moscow and Peking. A succession of events in the early 1960s, such as the Soviet ambivalence in the Sino-Indian quarrels, the complete cutoff of Soviet technical and economic assistance to China, the Soviet stance on the IndianPakistani War in 1965 and the subsequent Soviet mediation of the war at Tashkent in

January 1966-all served to irritate the Chinese more and more. The insults exchanged between Moscow and Peking grew ever more vehement and also more frequent. Finally, the Soviet invasion of Czechoslovakia in August 1968 and the subsequent enunciation of the so-called Brezhnev Doctrine caused extreme alarm in Peking. If, as the new Soviet doctrine asserted, socialist states have the right, or even the duty, to intervene in other socialist states where there is either a domestic or foreign-inspired threat to socialism (a rationalization for the intervention in Czechoslovakia), who would be more vulnerable to the use of such a doctrine than China? Surely, if Moscow is to define "socialism," then Mao's China is the acme of heresy in Russian eyes.

In the spring of 1969, tensions along the Sino-Soviet border had built up to the danger point. Border incidents had been occurring with great frequency after 1960, and a rather severe flare-up took place in January 1967 along the Ussuri River. According to the Chinese, the Soviets had provoked a total of 4189 border incidents between October 1964 and March 1969. ${ }^{17}$ Mao, in his July 1964 conversation with some Japanese socialists, had poured oil on an already raging fire when he pointed out that tsarist Russia had obtained vast tracts of Chinese territory east of the Ussuri, north of the Amur, and in what is now Soviet Central Asia, by pressuring a beleaguered Ch'ing dynasty into "unequal treaties." He added that China had not yet presented her account.

The Soviets, alarmed by the rising crescendo of border incidents, seriously began to augment their forces along the Sino-Soviet border in 1967 and simultaneously signed a 20-year defense pact with the People's Republic of Mongolia. The Chinese, with 14 divisions in the Shenyang Military Region, five in Inner Mongolia, and five in Sinkiang, had about half a million soldiers in the border areas. This was the setting when on 2

March 1969 open warfare began on Damansky (or Chen Pao) Island in the Ussuri River.

Damansky is one of the many disputed islands in the Amur and Ussuri rivers, is uninhabited, and would seem to be a most unlikely spot to begin a major international incident. Just how the fire fight began, who was to blame, and how much the event was being manipulated in either Peking or Moscow are still puzzles. Most accounts have the Chinese bushwhacking a Soviet patrol and shooting it up rather badly, the Soviets claiming 31 casualties. Two weeks later, on 16 March, following a buildup on both sides, the battle was resumed, and this time the Soviets let it be known that it could escalate into a really serious conflict if the Chinese persisted in their belligerent activities. Peking got the message, and the hostilities ceased-at least in that area. ${ }^{18}$

The March incidents along the Ussuri signaled an accelerated Soviet military buildup along the entire Sino-Soviet border, and this in turn triggered a Chinese counter buildup. Both countries used the clash over the island to inflame national hatreds, and Western observers began to talk and write about the imminence of a major Sino-Soviet conflict. Imminent or not, the danger of such a war could not be ignored by Peking, and there was general agreement that it was high time to put a stop to the domestic shenanigans that had characterized the Cultural Revolution.

The gunsmoke along the Ussuri had hardly cleared when the Ninth Party Congress was convened in Peking on 1 April. It was at this congress that the pla consolidated its position at the center in addition to its power in the provinces. In the new Politburo, with its 21 full and 4 alternate members, the military got about half the slots: Lin Piao; Yeh Chun, his wife, in charge of the administration of the Military Affairs Committee (mac); Ch'en Hsi-lien, commander of the Shenyang Military Region; Ch'iu Hui-tso,
head of pla Rear Services; Hsu Shih-yu, commander of the Nanking Military Region; Huang Yung-sheng, chief of the general staff; Li Tso-p'ing, political commissar of the Navy; Wu Fa-hsien, head of the Air Force; Yeh Chien-ying, to become acting chief of staff in late 1971; and Li Teh-sheng, commander of the Anhwei Military District-all were actively engaged in military work. In addition, two of the Old Guard, Chu Teh and Liu Po-ch'eng, were soldiers and on the Politburo. Of the 170 full members of the Central Committee elected at the Ninth Party Congress, slightly more than half were military men ( 68 commanders and 19 commissars). ${ }^{19}$ Furthermore, the Minister of Defense and "Chief" of MAC, Lin Piao, was officially named Mao's successor and his deputy in just about everything. It looked as though Lin and the pla were in an impregnable political position. With military men sitting in the top slot in 22 of the 29 Revolutionary Committees and holding half the positions in the Politburo and the Central Committee, it would seem that Lin would be able to make his succession stick.

But the Great Helmsman was about to make another of his notorious 180-degree ideological shifts. He had used Lin Piao to back his leftist policy that unhinged Liu Shao-ch'i and company, and he was now about to go into an alliance with Chou Enlai in a rightist swing to unseat Lin Piao. As Lin was reputed to have said in 1971, when Mao's intrigues became obvious to him: "Once he [Mao] thinks someone is his enemy, he won't stop until the victim is put to death; once you offend him, he'll persist to the end-passing all blame on to the victim, held responsible for crimes committed by himself." ${ }^{20}$ Actually the Cultural Revolution ended in a three-way conflict: Lin and the pla, Chou En-lai and the remnants of the government, and the survivors in the Cultural Revolution Group. Chou and the remnants of the Cultural Revolution


Flight Training in the People's Republic
Postflight exchange on techniques . . . night
missions . . . cockpit instruction . . . drill


Group had no other option than to unite with Mao in an effort to undercut Lin Piao. For the next 28 months (April 1969 to September 1971) this group of strange bedfellows worked at the ruination of Lin Piao, and it was eventually successful. How this was done can be seen in broad outline although the dirty details are still murky.

At the outset it looked as though Lin and the military were steadily gaining in political strength. The attempt to shift political power back to civilians in the party by reconstructing the Provincial Party Committees boomeranged. The first reconstructed Provincial Party Committee came into being in December 1970, and the process was not completed until August 1971. But of the 29 First Secretaries, 22 were military men; and of the 158 Committee secretaries, 62 percent were military. "Only Shanghai, the cradle of the Cultural Revolution and the citadel of radicalism throughout its develop-
ment, retained a predominantly nonmilitary leadership." ${ }^{21}$ Apparently, judging from subsequent events, the unity of the pla in its new power position was more façade than reality.

It would seem in retrospect that Lin Piao and his staunch supporters on the General Staff were in conflict with many of the military leaders in the military regions and districts. Some of these could not forgive or forget the indignities they had suffered during the Cultural Revolution when Lin and his pals at the center were pushing them to aid and abet the Red Guards and the revolutionary left. It was during that period of the Cultural Revolution that some of the regional commanders came to look upon Chou En-lai as the voice of moderation, the man striving to keep the ship of state afloat in a sea of anarchy. The cracks in the army's unity that had appeared during the Cultural Revolution tended to widen as the army became
even more deeply involved in politics in the aftermath of the revolution. The main split appears to have been between Lin and some of the most powerful of the military region commanders.

Mao, seemingly somewhat amazed that his Cultural Revolution had brought forth not a victory for the radicals but a militarization of the party, began to call for a return to civilian control even before the end of the Cultural Revolution. The military went right ahead, though, in their seizure of the top slots in the reconstructed Provincial Party Committees and a goodly share of power in the central organs such as the Politburo and the Central Committee. Mao, backed by Chou En-lai and his moderates as well as by the remnants of the greatly weakened Cultural Revolution Group, then began undermining Lin Piao in earnest. The struggle came out in the open at the Lushan Plenum of the Central Committee in August 1970 when Lin, supported by Ch'en Po-ta, criticized those who had drafted a projected state con-
stitution (Chou En-lai had been the chief architect), which deleted the position of State Chairman of the PRC (Liu Shao-ch'i's old job). It is somewhat uncertain who Lin and Ch'en had in mind for State Chairman: some writers think it was Mao, to keep the chair warm for his heir apparent; others think Ch'en Po-ta was the claimant; and some think Lin wanted to step into the job immediately. The main objective, however, of the gambit was to retain the position so that it would mean someone was immediately over Chou En-lai, either Lin or Ch'en preferably. ${ }^{22}$ Mao was adamantly opposed to the retention of the position and reminded Lin that he had told him on six previous occasions that there was no need for a State Chairman.

With the battle lines more or less openly drawn, Mao then proceeded with his campaign to get rid of his appointed successor. In January 1971 the commander and the second political commissar of the Peking Military Region, both Lin supporters, were re-

## Woman's place is-

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lieved of their duties; and the 38th Army, also pro-Lin, was transferred to another area. Mao also succeeded in inserting some of his adherents into the mac, thus diluting the authority of Lin and his wife, Yeh Chun, head of the administrative office. At the Central Committee Work Conference in April 1971, it was disclosed that several Politburo members who had supported Lin at the Lushan Plenum had subsequently come forth with "self-criticisms." By the early spring of 1971, it was evident to Lin Piao that his position was being seriously undermined.
the fall of Lin Piao, 1971
In August and early September 1971, Mao went on an inspection trip through the Canton and Nanking Military Regions, where he talked with regional and district commanders about the necessity of the pla's giving up control of the party machinery. He, apparently, also asked for their support in the coming showdown with Lin Piao. He seems to have gained that support, and the day after his return to Peking, on 12 September, an aircraft belonging to the Chinese Air Force, a British-built Trident, crashed in Outer Mongolia and Lin Piao was heard from no more. Just what happened is still a mystery. Although there were rumors that Lin had died in that air crash, there was no word from Peking authenticating the rumors. It was not until 28 July 1972 that Wang Hai-jung, a young lady close to Mao and an Assistant Foreign Minister, confirmed a Chinese Embassy statement issued in Algiers as true: Lin Piao, according to that statement, had died in the plane crash in Mongolia while attempting to escape after failure of a plot to oust Chairman Mao. ${ }^{23}$ Mao, it seems, had revealed the same information earlier to Mrs. Bandaranaike, Prime Minister of Sri Lanka (formerly Ceylon), and to Maurice Schumann, Foreign Minister of France. Since then there have been several docu-
ments emanating from China, not to speak of the plethora of rumors and weird tales. In 1973 and 1974 the Chinese have gone after Lin Piao and his colleagues with a vengeance, and his crimes are multiplying by the day, including purported plans to assassinate Mao.

The main outline of the story being fed to the party faithful in China is as follows: Lin Piao and a number of high-ranking officers plotted a coup d'état; the plot entailed the assassination of Mao; when the plot was discovered, Lin panicked and tried to escape to the Soviet Union in a Trident but left in such a hurry that it was insufficiently fueled and without a navigator, ergo the crash. The Lin Piao plot, or at least an outline of it, has been circulated in China under the title "Outline of the '571 Project.'" ${ }^{24}$ Garbled and weird though it is, it attempts to show Lin, on the outs with Mao in late 1970, plotting with some fellow officers on the General Staff, especially Air Force leaders, to take over from old "B-52." the code name for Mao. Lin Piao's son, Lin Li-kuo, is portrayed as running about in Hangchow, Shanghai, and Peking trying to coordinate the plot.

In another account, "Document No. 24 of the ccp Central Committee," issued in June 1972, a much more detailed account of the Lin Piao plot is given. According to this version Lin and his colleagues attempted in September 1971 to assassinate Mao when he was touring the south on his inspection trip. They were unsuccessful, and the death of Lin is described as follows:

Seeing that his scheme had been exposed and that his last day was coming, Lin Piao hurriedly took his wife and son and a few diehard cohorts to escape to the enemy, betraying the Party and the state. In the early morning hour of $2: 30$. September 13, 1971, the Trident jet No. 256 carrying them crashed in the vicinity of Ondor Han in Mongolia. Lin Piao, Yeh Chun, Lin Li-kuo. and all other renegades and traitors aboard were burned to death. Their death,
however, could not expiate all their crimes. After Lin Piao's unsuccessful betrayal and defection, Huang Yung-sheng, Wu Fa-hsien, Li Tso-p'eng, and Ch"iu Hui-tso destroyed many of the evidences to cover up their own criminal acts. ${ }^{25}$

Those who went down with Lin Piao comprised a relatively high percentage of the top command of the PLa in Peking. The officers accused of being in on the Lin Piao plot were mostly chiefs and deputy chiefs of various segments of the General Staff, a number of top Air Force officers, and quite a few from the Navy and General Logistics Department. The most highly placed of those purged were Yeh Chun, Lin's wife and director of administration in Mac; Huang Yung-sheng, chief of the General Staff; Wu Fa-hsien, head of the Air Force; Li Tso-p'eng, 1st political commissar of the Navy; Chilu Hui-tso, head of the General Logistics Department; Yen Chung-ch'uan, deputy chief of the General Staff; and Liang Hsing-ch'u, commander of the Chengtu Military Region. More than thirty other high-ranking officers were involved in the purge. Five of the victims were on the Politburo, ten were members of the Central Committee, and others were secretaries or deputy secretaries in provincial party organizations in addition to their military positions. In the military structure per se, five were from the General Staff, five from Logistics, four from the Navy, and ten from the Air Force. The strong representation from the Air Force may account for the fact that all aircraft were grounded from 13 to 16 September 1971. The anti-Lin Piao group must have feared that the Air Force might attempt to help the plotters escape. The usual celebration of the anniversary of the founding of the People's Republic of China on 1 October was called off, probably because of the confused state of affairs in Peking following the ouster of Lin and his colleagues.

The Lin Piao affair, with heads rolling
thick and fast at the top levels, left the PLA as a whole decapitated. Apparently there was no agreement as to which of the survivors should get which job. Top slots such as the chief of the General Staff, head of the Air Force, and other heads of departments were left in the hands of temporary appointees whose titles carried the adjective "acting" to designate the transitory nature of their assignments. The Lin Piao affair, with its wholesale purge of top military personnel, is reminiscent of the wholesale slaughter of top Soviet officers during the Stalinist Great Purge of 1936-3.9.

## the military in the current phase of Chinese politics, 1971-1974

Although those close to Lin Piao at the General Staff and Departinent levels were purged immediately, Mao was much more careful in his handling of the Military Region and Military District commanders and their political commissars. After all, those people controlled the provincial party machinery by virtue of their positions as chairmen of the Revolutionary Committees and secretaries of the provincial party committees. The purge of suspected pro-Lin people in the provinces would have to be carried out with patience and a good deal of finesse.
One of the tactics used by Mao and his entourage was to so blacken Lin Piao's name that anyone with former connections could be regarded as "guilty by association" hardly a cornerstone of English common law but a rather widely used technique in Communist-ruled countries. Lin was accused of plotting to assassinate the Great Helmsman, of seeking the return of capitalism in the People's Republic, of trying to sabotage the détente with the United States, and of dealing with the Russians for assistance in dumping Mao. Just as Stalin was never satisfied with merely eliminating an opponent, or even potential opponent, but sought also to destroy his reputation utterly, so Mao has
dealt with his enemies. Liu Shao-ch'i was not simply a political rival who lost; he had to become a black villain, a "capitalist roader," "China's Khrushchev," etc. Now it was Lin Piao's turn to get the treatment. His military exploits, dating back to the late 1920s, were now downgraded and ridiculed. He was now a man who had long aspired to bring back capitalism and imperialistic exploitation to China, and he had even conspired with the Russians to return China to the subservient position it had held in the early 1950s. With the pushing of Lin's criminal activities back into the past, his earlier military associates became vulnerable.

The only difficulty with the whole stratagem was how to keep Mao himself from looking like a damn fool. After all, he had made Lin Piao his closest comrade-in-arms, his heir apparent, and had picked him to succeed P'eng Teh-huai as Minister of Defense in 1959. If the Great Helmsman himself had been fooled by Lin all those years, why blame lesser folk for failing to realize what a scoundrel he was? One attempt to offset this potential criticism of Mao was the circulation of a letter from Mao to his wife, Chiang Ch'ing, supposedly written on 8 July 1968. In this letter Mao comments ruefully on his elevation to the rank of "genius" by Lin Piao and on the latter's characterization of Mao's booklets as having "so much supernatural power." He was tempted to speak out against such adulation but feared that his words would help the "rightists" and hurt the "leftists" in the Cultural Revolution. He consoled himself, however, with the thought that: "We shall launch another movement for sweeping up the ghosts and monsters after seven or eight years, and will launch more of the movement later." ${ }^{26}$ Although there is general agreement that the letter was written by Mao, it is also generally agreed that it was written subsequent to Lin's downfall or that it was revised to include the anti-Lin comments.

By the summer of 1973 the Mao-ChouChiang Ch'ing alliance had gained enough control over the party apparatus to convene another Party Congress, and the 10th Party Congress met between 24 and 28 August 1973. It was notable for the shortness of the meeting and the secrecy in which it was held. There were 1249 delegates, 263 fewer than those in attendance at the 9th Party Congress in April 1969. The Congress elected 195 full and 124 alternate members to the new Central Committee, or 319 in all, some 40 more than the membership of the preceding Central Committee. Of the 319 Central Committee members, 100 , or 31 percent, were military; 91, or 29 percent, were veteran party cadres; and 104, or 32 percent, represented the Cultural Revolution faction. The allegiance of 24 members cannot be ascertained. The military, therefore, lost ground, since there had been about 50 percent military men in the 9th Central Committee. The Central Committee during its first plenary session at the end of the Congress approved a new Politburo of 21 full and 4 candidate members. Of the 25 members of the Politburo, only seven were military men; and two of those, Chu Teh and Liu Po-ch'eng, were Old Guard decorative members. As Rice points out, the 10th Party Congress reflected the "civilianization" of the ccr. ${ }^{27}$

On New Year's Day 1974, Peking revealed that nine of the eleven commanders of military regions had been reshuffled, thereby removing them from their "mountaintops," i.e., from the regions in which they had built up intimate and long-standing political, economic, and governmental ties. Ch'en Hsi-lien, who had been in command of the Shenyang Military Region (the three provinces of Manchuria) since 1959, was transferred to command the Peking Military Region. Hsu Shih-yu, in command of the Nanking Military Region since 1954, a region controlling about 40 percent of China's industrial output, was sent to head


In earlier times of comradeship-in-arms, Chairman Mao and Vice Chairman Lin Piao were seen publicly side by side. ... Red Guards and revolutionary masses from all parts of the country pass in review and glut Tien An Men Square in tribute to Chairman Mao.
the Canton Military Region. Seven other military regions got new commanders. The light touch was again revealed, however, since the commanders merely swapped assignments and thus found it difficult to plead demotion.

| Military <br> Region | Commander <br> in 1973 | Commander <br> in 1974 |
| :--- | :--- | :--- |
| Shenyang Ch'en Hsi'lien | Li Teh-sheng <br> Ch'en Hsilien |  |
| Peking |  | Ching Sheng |
| Canton | Tsu Shih-yu |  |
| Nanking | Hsu Shih-yu | T'ing Sheng |
| Chengtu | Ch'iu Chi-wei | Ch'iu Chi-wei |

- Chisu Chi-wei and Wang Pi-cheng had only been assigned to their respective posts in May 1973, so they hardly had time to establish "mountaintops" before the New Year's Day shuffle.

[^1]By the late spring of 1974 it looked as though Mao and the party were again in command of the gun. But it may be too early to make such a judgment, since the local military commanders are still powerful in the hinterlands while the regime in Peking seems rent with dissensions. Madame Chiang Ch'ing and her radical friends, Chou En-lai and his government colleagues, and the halfdozen military chiefs make a rather uneasy alliance in the Politburo. Each faction has to keep itself in the good graces of the Great Helmsman, and he-unless the law of mortality has been revoked for him-is tottering on the brink of the grave. His passing will probably bring on a resounding power struggle, and the military may again have to keep the ship of state afloat.

Maxwell Air Force Base, Alabama
18. Harrison Salisbury, War between Russia and China New York: Norton, 1969:, pp. 180-82: Marks, p. 58. For the Chinese view or casc, see Neville Maxwell. "The' Chinese Account of the 1969 Fighting at Chenpao," China Quarterly, No. 56 (October-December 1973). pp. 730-39.
19. Joffe, p. 457.
20. "Outline of the '5i1 Project." Issues and Studies. May 1972. p. 81. quoted in Philip Bridghan, "The Fall of Lin Pian," China Quarterly, No. 55 (July-Septemher 1973), p. 434.
21. Joffe, p. 466.
22. Details are in Bridgham, pp 434 fi. and in E. E Rice. "Leadership. Parts, and Army in Future China,- Pacific Community. V. 2 (January 197it). pp. 176-77: Min's side of the story' in "Muo Tse-tung's Talks to Responsible Comrades in Nanking and Shanghai Areas during His Inspection of the Troops." Issue's and Studies. VIII, 10 (June 1972). pp. 95-97.
23. New York Times, 29 Julv 1972.
24. A translation of the text is availahle in Issues and Studies (Taipei!, VhII. 8 May 19721. pp. 78-\$3. under the title "The Struggle of Smashing the Counter-revolutionary Coup of the Lin-Chen Anti-Party Clique.
25. Rssurs and Studio's, 1X. 3 , December 1972), p 95.
26. A translation of this letter is in Issura and Studies. IX. \& (January 1974), pp. 94-96.
27. E. E. Rice, "Leadership. Party and Army in Future Chima," Pacific Community. V. 2 Januury 19i41, p. 182.

Photographs and captions are adapted from China Pictorial.


Colonel Clinton H. Winne, Jr. $i$

OVER the past few years, there has been increasing discussion of a socalled "Blue-Water Strategy." Several articles have appeared in the general press as well as in Service-oriented magazines concerning the subject. This article will examine one feature of the proposed strategy-moving our nuclear deterrent to sea-to determine how it is affected by the recently concluded Arms Limitation agreements.

An article that appeared in The Nation in November 1970 discussed "the adoption of the 'Blue-Water' option, which would rely solely on sea-based missiles and eliminate vulnerable land-based ICBMs and manned bombers." ${ }^{1}$ In the April 1971 issue of United States Naval Institute Proceedings an article advocated "increasing the movement of the strategic deterrent to sea while there is still time." Why? "Because the inexorable advance of technology in both the United States and the Soviet Union is making all fixed, land-based deterrent systems vulnerable, obsolete and highly risky and tempting for pre-emptive attack." ${ }^{2}$ The author further recommended immediate deployment of between 300 and 400 Minuteman missiles at sea aboard specially designed or modified missile ships. He also recommended the phase-out of land-based strategic bombers and an increase in the strategic delivery capability of attack aircraft carriers. Then, in the December 1971 issue of Sea Power, Rear Admiral George H. Miller proposed a new national strategy that stressed movement of more of our nuclear deterrent, as well as general purpose military power, to sea. ${ }^{3}$

These authors are proposing that the "blue-water" strategy or option be applied both to general purpose forces and to the nuclear deterrent at sea. This article, however, will deal only with the latter aspect of the blue-water strategy, since it is more directly related to the agreements under
the Strategic Arms Limitation Talks (salt). Although salt may eventually have an indirect impact on planning general purpose forces, possibly as in such matters as freeing some money that would otherwise have been spent on strategic forces, the extent of the impact is not evident at this time.

> Credibility of the Blue-Water Strategy

It is evident that, even prior to the salt agreements, most defense planners did not accept a strategy that would place complete reliance on only one element of our nuclear deterrent. Most students of defense planning also saw the obvious flaws in this strategy of placing "all our eggs in one basket." Air Force Magazine, in a March 1972 editorial, exposed the dangers of this strategy very well. ${ }^{4}$ It is not the purpose here to reiterate these arguments. However, it is evident that we must maintain the strength of all three elements of our strategic deterrent: land-based missiles, seabased missiles, and bombers. In his Annual Defense Department Report FY 1973, Secretary of Defense Melvin Laird stated:

Turning to specifics in our planning, although each element of our strategic offensive forces at the present time possesses a substantial capability in its own right, we plan to maintain a combination of land and seabased missiles and manned bombers during the program period. This will enable us to take advantage of the unique capabilities inherent in these different systems, to provide a hedge against enemy technological breakthroughs or unforeseen operational failures, either of which might adversely affect our deterrent, and to complicate Soviet and Prc [People's Republic of China] offensive and defensive strategic planning. ${ }^{5}$
The Chairman of the Joint Chiefs of Staff, Admiral Thomas H. Moorer, in his Military Posture Report for FY 1973, lent
further support to the need for a mix of strategic offensive forces with this statement: "In this connection, I want to state once again the firm conviction of the Joint Chiefs of Staff that an appropriate mix of mutually supporting strategic forces is still essential to the maintenance of our deterrent." ${ }^{6}$

Programs to continue this strategic mix, including an option to increase the numbers of Minuteman III in the intercontinental ballistic missile (ІСвм) force, were advanced by the Administration in FY 74 budget requests. ${ }^{7}$

In spite of arguments against relying solely on a sea-based nuclear deterrent, it is unlikely that we have heard the last of these proposals. For one thing, some critics of Defense spending see the blue-water strategy as an opportunity to cut Defense budgets drastically. For another, there are those who still believe in the "assured destruction" theory of the early 1960s, i.e., that the capability to cause fatalities to a quarter or a third of the population of the Soviet Union is all that is required for deterrence.

## SALT Agreements

Therefore, let's look at the salt agreements to see if they support or nullify the arguments made by the advocates of a bluewater strategy.

The salt agreements consist of two principal parts: the Anti-Ballistic Missile (ABM) Treaty and the Interim Offensive Agreement. ${ }^{8}$ The abм Treaty is of unlimited duration and prohibits either the Soviet Union or the United States from deploying a nationwide $\operatorname{ABM}$ defense or a base for such a defense. Each side is permitted to deploy a limited defense of two areas-the national capital and one ІСвм complex. No more than one hundred $А в м$ launchers and interceptors are permitted at each site. The

Interim Offensive Agreement lasts for five years and permits each side to keep any fixed land-based ıсвм launchers currently operational or under construction. Additionally, neither side may convert any other ісвм launchers to modern large ballistic missile launchers. Each side may keep any submarine-launched ballistic missile (slbm) launchers operational or under construction. Also, newer slbm launchers may be built as replacements for older slbm launchers or for older heavy ісвм launchers. The Soviet Union is limited to 950 slbm launchers and 62 modern ballistic missile submarines. The United States is limited to 710 slbm's and 44 modern ballistic missile submarines. Bombers are not included in the agreement.

One immediately evident impact of SALT is a freeze on the present balance of U.S. icbm's and slbm's, except that the 54 Titan II icbm's (the only heavy U.S. missile and our only "older type deployed prior to 1964") could be phased out in favor of 54 additional slbm's. Any reduction of the Minuteman force could not, under terms of the Protocol to the Interim Agreement, open the way for additional U.S. slbm's.

## Survivability

Since the vulnerability of land-based missiles and bombers has been cited as the primary reason for moving the nuclear deterrent to sea, let's look at the effect of the salt agreements on the survivability of each of the three elements.

A potential threat to the survivability of the Minuteman force could be posed by an increase in the numbers, yield, and accuracy of multiple independently targetable reentry vehicle (mIRv) warheads on SS-9 or SS-9-type ісвм's. Admiral Moorer noted this potential threat as follows:

If these new or modified ICBMs also turn out to be MIRVed systems with significantly
improved CEPs, the potential threat to our minuteman force, which has been of such great concern to us over the last few years, could become a reality. The severity of the threat, however, would depend on the number, accuracy, and yield of the RVs carried by the new missiles.

Let me hasten to add that this assessment is not meant to be a forecast. It is simply one of the more likely possibilities which must now be taken into account, particularly in the absence of a meaningful agreement to limit the deployment of missiles. ${ }^{9}$

Although the agreement does not limit the accuracy or yield of the re-entry vehicles (RV), it does limit the number of rсвm and sLbM launchers and the dimensions of icbm launchers, and hence it indirectly limits the payload that could be deployed for a given level of technology (which remains unconstrained). Therefore, while the number of rv's allowable can be said to be indirectly limited, neither side has yet realized its full potential. Thus the Interim Offensive Agreement impact on the potential threat to Minuteman appears now to be marked by Soviet technological developments. In testifying before the House Armed Services Committee in July 1972, Admiral Moorer provided the following information:

With respect to our research and development efforts, while analyses conducted within DOD using Soviet force levels comparable to those constrained by sal indicate that sufficient MINLTEMAN missiles would survive to accomplish a retaliatory mission, it is still necessary to maintain a hedge against possible Soviet qualitative improvements or abrogation of the agreement. ${ }^{10}$ (Emphasis added.)

The hedge referred to in the testimony was the site defense research and development program. From the above information, it would appear that, under salt, the landbased ісвм force is still a viable part of our deterrent. Even complete vulnerability of


On 20 July 1960), along the Arlantic Missile Runge, tuo Polaris AI-X missiles were successfully fired from the nurleur sub USS George Washington white she was al a depth of alout 90) feet-a major adeancement.


the Minuteman force, unlikely as that is, would not eliminate Minuteman's deterrent value. Its destruction would require an enemy to expend heavily from his constrained forces, after which he would face the prospect of retaliation from surviving U.S. strategic force elements. Minuteman would continue to have deterrent value.

Turning now to the next element of our strategic nuclear deterrent, the submarinelaunched ballistic missiles, what effect does salt have on the survivability of this system? At first glance, the answer seems to
be none, since Soviet antisubmarine warfare improvements pose the primary threat to our SLBM's and ASW systems are not included in the salt agreements. There is an indirect effect on SLBM survivability, however, in that Ісвм's could be used to attack ballistic missile submarines if their location were known. The salt agreement limits the total number of Soviet icbm's and, therefore, could affect the desirability of using them for this purpose. A counter to this argument is evident in the large number of IСвм's the Soviets are permitted

A Poseidon missile (left) was launched during the first shakedown and demonstration, on 23 October 1970, from the nuclear-powered fleet ballistic missile submarine USS James Madison, the first submarine scheduled for retrofit. . . . At sea and under way-the USS Henry Clay (SSBN-625).

under salt-in the neighborhood of 1500 . Another factor is the omission of limitations on bombers. The Soviets have a large number of Badger medium bombers assigned to their naval forces. A technological breakthrough in submarine localization could facilitate the use of these Badgers against our slbm forces. It should be noted, however, that solutions to the localization problem will not come easily.

What about the impact of salt on the survivability of our land-based bombers? Here again, the threat is a postulated one and consists of Soviet sLbm's launched against bomber bases with insufficient warning time to permit safe escape of the alert bombers. ${ }^{11}$ The Interim Offensive Agreement limits the number of slbm launchers the Soviets may deploy but, because of the relatively large numbers permitted, does little to limit this postulated threat. However, other measures are being taken which will greatly reduce the threat to bomber bases from sLbm's, and these measures outweigh the limitations on the numbers of Soviet slbm's. These measures were described by Secretary Laird in his FY 1973 Defense Report and include: (1) dispersing the alert aircraft over a greater number of bases, generally farther inland than in the past: and (2) deployment of a new satellite early-warning system that will greatly improve the overall capability of our warning network, especially against SLbM launches. ${ }^{12}$

In suminary, then, the Interim Offensive Agreement will probably have a favorable impact on the survivability of all three elements of our strategic deterrent.

One final point should be mentioned concerning survivability. The threats that have been postulated against Minuteman and the bomber force have usually been considered in isolation against each component, rather than as part of a carefully considered overall plan. It is unlikely that a prudent

Soviet planner would target all of his most efficient weapons in this manner. In other words, the presence of the other two elements of the deterrent must be considered, as well as other potential targets that must be struck. The salt agreement makes it even less likely that the Soviet planners would use their salt-constrained forces to attack only one or two elements of a comprehensive target system.

## Flexibility and Effectiveness

Even though the advocates of a bluewater strategy focus their attention only on the vulnerability aspects of land-based ICBMS and bombers, we should not neglect the other characteristics that are essential to deterrence. Not only must our strategic forces survive, they must be effectively employed. Furthermore, they must possess the flexibility to permit their employment across the spectrum of nuclear warfare. The salt agreements have given tacit recognition to the fact that the United States and the Soviet Union are now in a position of parity with respect to strategic forces. The parity position has given rise to the President's use of "sufficiency" in prescribing our planning goals for strategic forces. It has also led to the statement by the President that he must have strategic options other than simple "assured destruction." The President has said:

A simple "assured destruction" doctrine does not meet our present requirements for a flexible range of strategic options. No President should be left with only one strategic course of action, particularly that of ordering the mass destruction of enemy civilians and facilities. ${ }^{13}$ (Emphasis added.)

How can this flexibility and range of options be provided? An obvious requirement is to insure that we have the command and control and communications systems to permit carefully controlled em-


A Soriet " $N$ "-class nuclear-powered submarine apparently was in distress when found surfaced on the Atlantic Ocean in April of 1970.
ployment of parts or all of our strategic forces. A second requirement is that these forces be capable of attacking a wide variety of targets, both hard and soft, minimizing collateral damage to population and civilian facilities when required.

Now, what is the impact of salt on these requirements? First, since the ABM Treaty precludes an area $A B M$ defense, fewer of our offensive warheads will be required to penetrate and neutralize that defense. This means that a greater number of our weapons could be targeted against other targets, providing greater flexibility of employment. How does this consideration affect the "blue-water" options? The bombers with their recall, strike assessment, and reconstitution capability, provide the greatest flexibility. However, one drawback is the longer time they require to reach their targets. For attacking time-sensitive targets, then, missiles must be used. The Minuteman systems, because of their accuracy and yield combinations, have greater employment flexibility than do the submarinelaunched ballistic missiles. An interesting aspect of the ABM Treaty is its effect on the employment of Poseidon, in particular. As the Chairman of the Joint Chiefs of Staff has noted, the Poseidon, with its many mirv's, was specifically developed to penetrate a sophisticated Soviet ABM defense, relying upon the exhaustion of interceptors rather than upon penetration aids. Neither our current sLbM's nor our icbm's were designed to have a hard target kill capability, as the Chairman told a Congressional Committee last year. ${ }^{14}$ For this purpose, the manned bomber remains preeminent.

The survivable submarine-launched sys-
tems can be withheld and retargeted. They thus provide flexibility to withhold a retaliatory decision until the nature of the attack can be fully assessed. This flexibility depends upon equally survivable command, control, and communications. For a carefully controlled strategic response, reliable communications are essential. Since the ballistic missile submarine's strong point is invulnerability, which is dependent on keeping its location unknown, sub-marine-to-shore communications are difficult. Exposure of a communications antenna on or near the surface could give away the submarine's position. An elf (extremely low frequency) system is being developed to communicate with submarines while they are submerged at operating depth. However, this would be a low data-rate system. A satellite communications system under development ${ }^{15}$ may provide better two-way communications with our submarines, but once again it may be necessary to expose an antenna, with the possible compromise of location.

This is not to say that we should adopt an "anti-blue-water" strategy and retire this portion of our deterrent. The sLbm's provide a large number of warheads, which currently gives the United States a numerical superiority in warheads, offsetting the Soviet advantage in delivery vehicles and megatonnage. In addition, at the present time, the slbm's provide a survivable retaliatory force that enforces the overall viability of our strategic force mix. However, neither should we consider retiring our bomber or Minuteman forces. As we have seen, each has its strong points, and all are essential. The salt agreements have done nothing to change this fact.

Air War College

[^2]2. George E. Lowe. "The Only Option?" United States Naval Instimute Pmicedings. vol. 97. April 1971, p. 23.
3. George H. Miller. -Needed-A New Stralegy for Preservation of the Bepuhlic." San Porver, val. 14. December 1971. Pp. 5-11
\& John L Fnsbee. Blue-Water Booby Trap." Air Force Maganne, vut 55. March 1972 p. 2
5. Seatemens of Screetury of Defense Melcin R Laind hefore the Senuls Abued Sercices Commatter on the FY 1973 Defonse Budget and FY 19:3-197. Frogrom. Febiuan 15, 1972 P. 66. Herenfer ated as FY 1973 Defense Repert
6 Stemement by Adoniral Thomas H Moorer, USN. Chaimuin, Jount Chiefs If Seqf. before the House Amsed Sercicas Connmifter on 18 Felmuary 1972, p. 21 Hereaker clled as Mitimery Foriun for FT 1973.
F. Scasemens of Secretary of Defense Ellioi $L$ Richardson before the Howne Ammed Sercica Committer on the FY 197t Detense Budget and FY 197t 197S Pregrom. Tursday. thoril 10. 19.3. pp. 9. 10.
8. Commarders Deges?. Department of Defense, vot. il August 10. 1972 pp. $7-27$.
9. Military Posture far FY 1973. pp. 8. 9.
10. Full Commimere Hearings on the Military Implia ations of the Strategic Ambs Limisation Tulls Agreemionts. Hearinga lefure the Comenitiee on Anned Services. House of Representatives. Washingtun, July 25, 1972, p 15148.

11 FY 1973 Defense Report. p. 71.
12 lhid. pp. 71, 75.
13. U'S. Furtign Pultoy for the 19\%On, A Repurt to the Cangyess by Richard Nixon. Piesident of the United States. February 9. 1972 p. 158.
14. Military Posture for FY 1973 p. 11
15. FY 1973 Defense Requrt. p. 74.

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## AIR UNIVERSITY REVIEW AWARDS PROGRAM

Major Edd D. Wheeler, USAF. has been selected by the Air University Review Awards Committee to receive the annual award for writing the outstanding article to appear in the Recieu during fiscal year 1974. His article, "U.S. Military Strategy: Paradoxes in Perspective," was previously designated "outstanding" in the July-August 1973 issue.

The awards program provides payment to those award-winning authors who are eligible: a $\$ .50$ award for the outstanding article in each issue and a $\$ 200$ savings bond for the annual outstanding article. The award winners also receive a plaque.

The bimonthly winners for the past year were Major Edd D. Wheeler, USAF, "U.S. Military Strategy: Paradoxes in Perspective," July-August 1973; Colonel Edward Stellini, USAF, "The Threat, Foreign Policy, and Cost Control: Parameters for Force Planning," September-October 1973; Major Ralph C. Gauer, USA, "Soviet Dissent: Its Sources and Significance," November-December 1973; Lieutenant Kenneth C. Stoehrmann, USAF, "Toward a Common European Armaments Effort." January-February 1974; Major General Oliver W. Lewis, USAF, "Simulation-The New Approach," March-April 1974; Robert Woodcock and Thomas Cord, "Stall/Spin Seventy Years Later," May-June 1974.

## INTERNATIONAL STRAITS AND THE LAW OF THE SEA CONFERENCE

John E. Lawyer, Jr.



UNTIL recently, developments in international law of the sea were something that most Americans, even those with an active stake in international affairs, could safely afford to ignore. This is no longer the case. Access to offshore oil and gas deposits has become increasingly important as the energy crisis continues to color world events. Control of ocean fisheries is hardly less important in a period of global protein shortages, since fish and fishmeal supply a major source of world protein requirements. These and related developments in an evolving set of sometimes complementary, sometimes contradictory maritime policies form
the substance of the work that the Third United Nations Law of the Sea Conference will tackle over the next year or so. The conference formally opened at U.N. Headquarters in New York in December 1973. Delegations did not get down to grappling with substantive differences, however, until the first working session, which opened in Caracas in the summer of 1974. The negotiations are expected to continue over a period of months, perhaps as long as two years.

From a national security point of view, the question of transit through and over international straits is probably the most important single issue to come before the conference. International straits have long been recognized as critical choke points in the flow of international trade and in the deployment of military power. More recently they have assumed increasing significance in terms of the regular supply of the oil essential to fuel a modern economy. More important, they are crucial to the deployment of national air and naval forces into the basins they connect. For example, our only easy and unrestricted access into the Mediterranean basin, and to the Middle East beyond, is through or over the Strait of Gibraltar.

## innocent passage, free transit, and territorial seas

An international strait, according to the doctrine laid down in 1949 by the International Court of Justice in the Corfu Channel case and subsequently codified in the 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone, is any strait connecting two portions of the high seas. That the right of innocent passage through such bodies of water extends
to warships as well as merchant vessels was established by the Court in the same decision, and this appears to be taken for granted in the 1958 Geneva Convention. ${ }^{1}$ This right is generally seen as a necessary consequence and extension of the freedom of the high seas, which freedom would be significantly curtailed if international straits could be closed more or less at will by the coastal state or states. The International Court further held in the Corfu Channel decision that it is geography rather than actual use which determines whether or not a strait is such an international highway. It does not matter whether the territory on both sides of the strait is possessed by a single state or by two or more nations, nor does it matter whether the territorial waters meet somewhere in the middle. ${ }^{2}$

At present, a majority of the nations of the world claim a twelve-mile territorial sea; but a substantial minority, which includes most of the major maritime nations (except the U.S.S.R.), recognize only three miles. The significance of this difference is that, were the emerging consensus on the twelve-mile limit to become a formal, universally recognized legal norm, upwards of one hundred international straits that are traversed by a high seas corridor under the present three-mile concept would, under a twelve-mile regime, be completely overlapped by the territorial waters of the adjacent coastal state or states. Unless some special provision were made for international straits, transits through and over these important passages would thus come substantially under the control of the coastal states, subject only to a provision for innocent passage of naval vessels. This is basically the position being pushed by most
coastal states not having substantial fleets of their own. These hundred-odd straits that are more than six but less than 24 miles wide include the English Channel at Dover, Gibraltar, Malacca, and many of the other major straits of the world.

In contrast to this trend, the United States has consistently insisted that recognition of a twelve-mile limit in place of the traditional three miles must be coupled with some provision that would retain the right of free transit (as opposed to innocent passage) through and over such vital world waterways. The difference between free transit and innocent passage is a critical one from the security point of view. Under the regime of innocent passage codified in Section III of the 1958 Geneva Convention, the rule is established that transit is innocent only "so long as it is not prejudicial to the peace, good order or security of the coastal state." The last section of the article also requires that submarines exercising the right of innocent passage navigate on the surface, showing their flag. In Article 16 a coastal state is given the right to "take the necessary steps in its territorial sea to prevent passage which is not innocent." This phraseology is nebulous enough as it stands; furthermore, the use of the word "prejudicial" suggests that an actual injury to peace, good order, or security need not be taking place for the passage to be deemed no longer innocent. If a reasonable chance exists that such injury may be in the offing, the coastal state would be in a strong position to decide that the passage is not innocent and exclude the vessel from its territorial waters.

Though the 1958 Geneva Convention prohibits the suspension of innocent passage in international straits, it does not thus prohibit states from deciding that a given transit-or, more important, class of transits-is noninnocent and taking preventive steps. While under current inter-
national law and practice the coastal state appears to be able to make this decision unilaterally, if the decision were applied so as to preclude what another power regarded as a vital transit right, it is unlikely that the flag state would quietly acquiesce. For example, as the Chairman of the Dod Advisory Group on the Law of the Sea, Leigh Ratiner, has written:
> . . . thus is can be assumed that if Spain were to close the Strait of Gibraltar to all warships, and efforts to change the Spanish position through negotiation were to fail, some state would nevertheless exercise its right to transit the Strait of Gibraltar. ${ }^{3}$

It is equally likely that the United States would challenge any coastal state's assertion that nuclear-powered warships were by their very nature too hazardous to be accepted as innocent, and that Japan would not quietly acquiesce in an Indonesian decision that the passage of supertankers through various Indonesian-claimed straits posed too great a risk of a super oil spill to be permitted.

The degree to which other nations take sides in what could quickly degenerate into an international shouting match (or worse) would probably depend more on political factors than, strictly speaking, on any clear reading of international law, though no doubt everyone would point with great righteousness to one rule or another to prove his case. Nor would it be realistic to suggest that political factors would play no part in the coastal state's original contention.

International law of the air does not recognize any right for aircraft overflight comparable to innocent passage for vessels. In maritime law, as mentioned earlier, innocent passage is derived as a necessary consequence of freedom of navigation on the high seas, a reflection of the geographical and physical constraints that limit the
movement of ships. No such constraints apply to aircraft, which can overfly the barriers of geography, so there is no provision for "innocent overflight" in international law. The Chicago Convention on International Civil Aviation (1944), which sets the basic pattern for signatories' overfight and landing rights, applies only to commercial aircraft. Decisions on military overflight are thus within the sole competence of each country for its own airspace. Article 2 of the Chicago Convention also recognizes the "complete and exclusive sovereignty" of a state in the airspace over its territorial sea.
The extent of a state's territorial sea thus becomes a critical question with respect to the free navigation and overflight of straits. Extending the width of the territorial sea to a twelve-mile limit would put a powerful new political lever into the hands of coastal states, not all of which are friendly to the United States. Even among those governments associated with U.S. security objectives, it would be unrealistic not to expect them to use this leverage in support of their own objectives vis-à-vis the U.S. government.
In view of this fact, one might wonder whether the U.S. has any interest in recognizing a twelve-mile limit, even if most other countries are urging it. Unfortunately, the matter is not that easy to resolve. Not surprisingly, the width of the territorial sea has been one of the most sensitive issues in maritime law. Despite at least two close attempts, the world community has not so far been able to agree on a generally accepted limit, either in the 1958 Convention or elsewhere. That convention did at least succeed in setting a theoretical maximum limit: Article 24 states that the contiguous zone, adjacent but external to the territorial sea, shall not extend beyond twelve miles from the baseline from which the territorial sea itself is also measured,
thus indirectly and tacitly limiting the maximum breadth of the territorial sea to twelve miles. ${ }^{4}$

The lack of an explicit consensus and the variety of state practices, however, have encouraged some states to advance more extensive claims in recent years. Brazil, for instance, has proclaimed a 200 -mile territorial sea, which sweeps out across an enormous area of the South Atlantic. Certain archipelago states, notably Indonesia and the Philippines, have declared vast areas of formerly open sea to be their internal waters by the simple device of drawing the baselines from the projecting capes and headlands of their outermost islands and measuring outwards from there. Unless this tendency towards proliferating claims beyond a twelve-mile limit can quickly be brought under control through international agreement, the tendency to stake out extensive national maritime claims will degenerate into a veritable scramble. It could conceivably end in denying the U.S. important operating freedoms in large sectors of formerly open air and sea space or at least requiring us to pay for them-nor would the price be limited to money.

## U.S. oceans policy

Within the United States government, the Inter-Agency Task Force on the Law of the Sea is the main body in which the U.S. negotiating position is hammered out. This group includes high-level representatives of the Departments of State, Defense, Interior, Commerce, Justice, and Transportation and representatives of the National Security Council Staff, the National Science Foundation, and the National Council on Marine Resources and Engineering Development. ${ }^{5}$ Though the committee is normally chaired by State, the Defense view generally seems to have been the most weighty in formulating the overall U.S.
position. As Mr. Ratiner has written concerning the thinking behind the American position on the straits issue:

> Nations which depend on their merchant marine and navies for economic and national security . . . can be strangled by having access to oceans limited or delayed when passing through narrow international straits. Submerged passage of submarines, overflight of aircraft, and freedom from restrictions generally would disappear ... [or] depend on the good graces of the coastal state or states bordering the strait in question. Such a result would be unacceptable to any country with global interests, a global foreign policy, a large merchant marine, and a large navy and air force. It is principally for this reason that the United States has opposed territorial sea extensions beyond 3 miles. ${ }^{6}$

Clearly what he terms the "vital national security interests" prevail in the overall U.S. position, reflecting Navy and Air Force concern to preserve maximum freedom of navigation and overflight. Were the U.S. to be denied free access through the Strait of Gibraltar, for instance, the utility of the large naval base just a few miles to the west at Rota, a key point for the deployment of U.S. nuclear-powered submarines carrying a significant portion of the American strategic deterrent, would be greatly reduced.

Even within the security community, however, not all Western strategists share the official U.S. view that continued unrestricted access through international straits is central to the Western security position. To quote one recent analyst, Friedhelm Kruger-Sprengel:
... as most of the coastal states in the North Atlantic area are nato countries, a broader territorial sea can generally be regarded as not a threat to the mobility of nato naval forces. On the contrary, a broader territorial sea gives nato states additional opportunities of keeping foreign warships
farther from their coasts, should security interests make such a step necessary. . . . From the point of view of the nato states in Europe, there is no necessity to strengthen the right of passage in the seas around Europe, for such a measure would only favor the navies of the Soviet Union and other Warsaw Pact states. ${ }^{7}$
In light of the fact that approximately half of the Soviet military shipbuilding capacity is in the Baltic area and Leningrad is the U.S.S.R.'s most important port, he argues that a twelve-mile territorial sea, at least in the Baltic area, would on balance serve Western interests better than those of the Soviets. Where necessary in given strategic straits, according to this view, the West could ensure its rights by negotiating specific bilateral agreements, a task that might be easier than persuading the whole international community to accede to the U.S. position in the forthcoming negotiations.

There are in fact some indications that the U.S. government is reacting to the growing pressure against an unyielding American position on the straits issue and, rather than seeking for a universalistic rule covering all hundred-odd straits, is concentrating its attention on the sixteen designated "Straits of Major Importance" listed by the Geographer of the Department of State. ${ }^{8}$ If the U.S. does in fact fall back to some such position, it may well prove to be the one step backward that makes possible the two steps forward to an agreement.

## other national views

Among the major maritime powers, Russia alone presently claims a twelve-mile territorial sea, a position that goes back to Lenin himself. This traditional claim provides the technical basis for the apparent double standard the U.S.S.R. has adopted with respect to navigation of international straits. The Soviets demand free transit
only through those straits that would be affected by expanding the present territorial sea to twelve miles; those already under a twelve-mile regime, which includes all those in Soviet waters, thus would not be included. The Soviets do not recognize the right of innocent passage through their territorial sea. The United States, the United Kingdom, and Japan all currently recognize only a three-mile territorial sea, but all three have formally stated they would be willing to accept a twelve-mile limit as part of a satisfactory overall settlement.

Nor should one overlook the degree to which the old patterns of international politics have eroded, at least in this one area. The Soviets have publicly endorsed the U.S. "free transit" approach, while the American delegate has scrupulously refrained from attacking or even mentioning the double standard implicit in the Soviet reservations. Spain, though tied to Western security interests through the broad-ranging 1970 Agreement of Friendship and Cooperation with the United States, has been leading the attack on the position the U.S. government feels is "vital" to its global strategic security responsibilities. In this, Spain has had the strong support of the Latin Americans, who, with no immediate stake in straits navigation, are probably more influenced by the chances of Spanish support on the fisheries question than by the much-vaunted ties of a common cultural heritage. Some nato thinkers likewise seem to discount any real danger to the security of the West, and many in nato are probably more bothered by the possibility of a Soviet-American rapprochement that would to some extent freeze them out than by the specter of restricted navigation through international straits.

In East Asia, the Japanese, though still trying to preserve as low a profile as possible in international politics, are being
inevitably pushed to center stage. At some point, however, they will have to choose between accepting the greater degree of coastal state control over their access to vital energy supplies implicit in a twelvemile territorial sea, on the one hand, and, on the other, by their opposition to a twelvemile limit, antagonizing South Asian neighbors whose goodwill they have been diligently cultivating for some years.
In matters of the law of the sea, as in most questions, each nation perceives its national interests differently. The U.S. seeks to preserve its global strategic advantage, an important component of which is the ability to project American air and naval forces through and over the Strait of Gibraltar into the Mediterranean basin and the Middle East area. The Soviets, with extensive oil supplies within their own sphere, likewise appear more concerned with the strategic aspects of free transit than with the economic aspects, especially since their access by submarine between the Black Sea and the Mediterranean is currently restricted by the Montreux Convention. The Japanese, on the other hand, are primarily concerned with continued access through Malacca and other Indonesian-claimed straits to the Middle East oil supplies essential to their economy. The British have both extensive trade and security interests; their position is in addition complicated by particular historical connections with Gibraltar, Singapore, the Channel, etc. But generally, these states, as major maritime powers, favor as liberal a regime for international states as possible.
By contrast, most coastal states perceive their advantage to lie in as restrictive a regime as possible. This in part stems from a genuine desire to protect their shores, populations, and fisheries from pollution or nuclear accident. The memory of the Palomares incident is still a factor in Spanish policy, and the Torrey Canyon disaster has
been cited by the Malaysian delegate in past debates. But beyond these legitimate concerns, coastal states would also no doubt like to increase their leverage in international affairs, and they see increased control over vital waterways as an effective means to that end.

## the negotiating climate

How can all the various political, institutional, strategic, and even physical factors that cluster around the straits issue be accommodated, to say nothing of the question of trade-offs between the straits issue and others, such as conservation of fisheries or control over natural resources exploitation?

As another commentator, Louis Henkin, has pointed out, "Law is shaped by the interplay of a variety of national interests in a complicated political process." ${ }^{9}$ The important word here is "political." The ultimate resolution of the matter will evolve from hard bargaining based on several sets of competing national interests between straits states and user states, maritime industrial countries and underdeveloped countries, conservative and radical governments, land-locked and coastal states, etc.

In view of the variety of interests involved, it is not to be wondered at that the negotiating process to date has been difficult and often uncompromising. The preponderance of intensely nationalist states among the less-developed countries, many of which played no part in negotiat-

[^3]ing the 1958 accords, and the general reluctance of the Department of Defense to favor concessions in the U.S. position, have in the past tended to produce a climate marked by intransigence, though a more constructive atmosphere appears to be emerging as national delegations come to grips with the specific problems they must face in reaching an acceptable agreement. The high stakes involved and the relatively high degree of ignorance in a number of delegations about the complex legal and technical factors bearing on the situation have both added to the difficulties inherent in the negotiating situation. ${ }^{10}$

At the same time, the diversity of interests involved ought to make for some degree of flexibility in the negotiating process. It would be important in this respect, however, that the whole set of tradeoffs and compromises between security, energy, fisheries, and seabed resources interests be written into a single package, as the United States and others are advocating. Otherwise, if states are left free to pick and choose among several separate conventions dealing with these topics, as was the case with the 1958 Geneva accords, it is unlikely that a workable measure of agreement could be achieved. States would simply ratify those measures that further their interests and ignore the rest, vitiating the whole concept of a negotiated bargain in which concessions must be made in one area to secure benefits in another.

Fletcher School of Law and Diplomacy

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## MANAGING THE BOSSES

## Aspects of the Proposed Defense Oificer Personnel Management System



APMROPRIA1 b phates to deseribe the continuilig ealls for montermization of the haisic structure of defense persmine policies are increasingh fropuont and ever mure strident. Contineed reliance om policies prescriled hy laws adopted tor Hemilitari of anmber cra is perceined varionsly bs
 mbumfer force, conspinatorial or some combination of all thene pejoratives. Irumicalle some of the most vixilerouscritice mat be surprised ti discover that the Departmont of Detense vens the sitnation im mud the vme way Haced wilh large-scale decreases in

force levels and particularly serious fluctuations in the population of commissioned officers, personnel managers at the Department of Defense are perhaps more acutely aware of the problems relating to current personnel policies than some of their Congressional critics.

It is, of course, the Constitutional responsibility of the Congress to provide the armed forces such flexible and efficient management tools as are required to administer appointments, promotions, separations, and retirements of all members of the armed services. ${ }^{2}$ However, since World War II the manner in which Congress has discharged its responsibility and the way in which the services have interpreted and applied the laws have led to a veritable patchwork quilt of personnel legislation and policy, particularly in areas relating to the administration of officers.

It is the patchwork quilt of defense officer personnel policies that this article addresses in three steps. First, it will describe some current defense officer personnel laws and policies with a view toward evaluating their usefulness in today's armed forces. Next, the proposals made by the Department of Defense to render the policies uniformly understandable to its members and to the Congress will be examined. Finally, observations will be offered on a few of the facets of the proposals that may influence the probability of their eventual adoption. It is hoped that, armed with the information presented, the reader will be better able to judge for himself whether this portion of the proposed Defense Officer Personnel Management System (DOPMS), which was submitted to Congress in January 1974, promises a bright new era of administration for commissioned officers or an attempt to gain too much at once.

## inconsistencies of current law and policy

It might appear reasonable to assume that
creation of the Department of Defense in 1947 would have made standard such matters of fundamental importance as the promotion of officers of the three military departments. Yet, for reasons valid at the time of their adoption, the managerial needs of the three services dictated over several years different systems for selection for temporary and permanent promotion.

For example, permanent promotionsthose that govern an officer's tenure-were prescribed by the Officer Personnel Act of $1947 .{ }^{3}$ Temporary promotions-those that allow an officer to assume higher rank, receive increased pay and allowances, and fill positions of greater re-sponsibility-were and are made within restrictions specified by the Officer Grade Limitation Act of 1954. ${ }^{4}$ Not surprisingly, legislation enacted at different times, to provide for particular situations here or peculiar occurrences there, spawned varying policies on promotion. In the Army and Air Force the two legislative acts were interpreted as requiring that an officer be selected by separate promotion boards on separate occasions for advancement to the same visible rank-once for temporary or insignia-change promotion and a second time for permanent (regular) promotion relating to tenure. Conversely, law and policy as they pertain to the advancement of officers of the Navy and Marine Corps provide for but a single selection for promotion to both temporary and permanent grade as vacancies occur within respective statutory limitations. ${ }^{5}$ Thus grade, pay, and tenure of these officers are governed by single selections for promotion throughout their careers.

Another patch in the quilt relates to the differences in retirement and separation criteria as they are prescribed by Congressional direction. Mandatory separation or retirement of regular officers after certain lengths of commissioned service is
required by law. Even so, depending upon the rank attained, statutory tenure differs among the services. To illustrate the point, the cases of two officers can be hypothesized. A Navy officer whose permanent rank is that of commander has failed on two successive occasions to be selected by promotion boards for advancement to regular Navy captain. An Army lieutenant colonel has likewise failed of selection on two successive occasions for promotion to regular colonel. The Navy officer will be involuntarily retired upon completion of 26 years of commissioned service, but his colleague in the Army may not be involuntarily retired until he has completed 28 years of commissioned service. The apparent inequity might have been compounded if the hypothetical incidents had occurred in the early 1960)s. At that time Congress authorized the Navy officer up to $\$ 2000$ in extra compensation while his Army colleague was not authorized extra separation pay. ${ }^{6}$ Whether up to $\$ 2000$ in extra compensation offsets the deficit of two years' active duty in the mind of the Navy commander will remain unexplored. The point is that if the cited variations in officer personnel administration defy the logic of the reader, they may transcend logic to produce displeasure, annoyance, suspicion, and confusion for the legislator who attempts to discharge his Constitutional responsibility of making "rules for the government and regulation of the land and naval forces." ${ }^{7}$

## remedies proposed by <br> Department of Defense

In response to Congressional demand and its own discomfiture with the unwieldy system in existence, the Department of Defense formed a study group in 1972, the findings and conclusions of which formed the basis for a report to Congress entitled Report on Officer Grade Limitations. ${ }^{8}$ In
the report the Secretary of Defense made proposals that, if enacted in legislative form, would significantly modify both the Officer Personnel Act of 1947 and the Officer Grade Limitation Act of 1954. According to the Secretary, the ends sought were those of
-allowing the services to meet requirements for officers in the various grades at ages conducive to effective performance,
-providing career opportunities that effectively attract and retain the number of high caliber officers required, and
-making consistent among the services the career opportunities afforded. ${ }^{9}$

These ends, the Secretary stated, would be best served if the Congress were to provide flexible and effective management tools to the Department of Defense and to the armed services. Specifically, the Secretary of Defense asked that the Congress take action to
-establish new permanent statutory limitations on the numbers of officers who may serve in certain grades,
-provide common rules for the appointment of regular officers and for the active duty service of reserve officers,
-enact uniform provisions of law for the promotion of officers, eliminating the existing system of temporary promotions, and
-establish universally applicable statutes governing tenure and mandatory separation or retirement for reasons other than physical disability. ${ }^{10}$

If considered superficially, the goals sought appeared little different from the objectives of both of the previous officer personnel management acts. However, beneath the surface the proposals contained some provisions that, if enacted, would represent major changes in current policy and law.

In the first place, the proposals relating to statutory grade limitations would apply
to all officers between the ranks of first lieutenant (Navy lieutenant, junior grade) and colonel (Navy captain). A feature of the proposal relating to grade limitation that bears noting is that officers in the ranks mentioned who are recalled to active duty in emergencies would not be included in computations for specified grades for two years following their recall. ${ }^{11}$

Provisions for a single standardized promotion system for each service, with promotions made on a permanent basis as vacancies occur within the grade limitations discussed previously, represent the second major change included in the proposed legislation. The need for Army and Air Force officers to undergo two separate selections for promotion to a given rank has long been questionable. The temporary promotion system determines the active duty rank of the vast majority of officers in those two services, and temporary promotion currently precedes permanent promotion by several years. If the proposed plan is enacted by Congress, promotion timing and opportunities would be as follows:

| Commissioned <br> Service in <br> Years | Grade <br> Achieved | Survivors of <br> 100 Career <br> Officers | Promotion <br> Opportunity |
| :---: | :--- | :---: | :---: |
| 0 | Second Lieu- <br> tenant/Ensign | 100 | - |
| 2 | First Lieu- <br> tenant/ <br> Lieutenant (Jc) | 96 | Fully <br> Qualified |
| $10-11$ | Captain/ <br> Lieutenant | 87 | $95 \%$ |
| Major/Lieu- <br> tenant Cmdr | 65 | $80 \%$ |  |
| $22-23$ | Lt Col/ <br> Commander | 41 | $70 \%$ |
| Colonel// <br> Captain | $50 \%$ |  |  |

The declining number of survivors is attributed to several factors other than voluntary resignation. Attrition resulting from death or disability accounts for some
of the decline, but a greater role in attrition would be played by the forced resignation or retirement of those officers who twice failed to be selected for promotion. ${ }^{12}$

In addition to providing for the involuntary separation or mandatory retirement (if eligible) of officers in the grades of captain (Navy lieutenant) or below who twice fail of selection for promotion, the proposed statute would authorize the Secretaries of the Army, Navy, and Air Force to convene boards to weigh the desirability of retaining those officers in the grades of major (Navy lieutenant commander) and lieutenant colonel (Navy commander) who have failed on two successive occasions to be selected for promotion. Similarly, continuation. boards for officers who have served as colonels or Navy captains for at least four years would be convened by the Secretaries, and those not selected for continuation on active duty would be involuntarily separated or retired. In both the latter cases, a minimum of 70 percent of the officers considered would continue on active duty. ${ }^{13}$

## urgency and the Air Force

The proposal for altering existing statutory guarantees of tenure appears to be of fundamental importance to the accomplishment of the goals of the Defense Department's officer personnel management system. A significant item in the Secretary's proposals would provide that in each service's corps of officers those with more than eleven years' commissioned service would be regulars. ${ }^{14}$ Hence if the respective services are to remain within prescribed grade ceilings, particularly during periods of rapidly declining officer strength, removal or substantial modification of existing guarantees of tenure will he imperative. An example of the impor-
tance of changing the existing statutory provisions relating to tenure may be drawn from the current AF predicament.

The Officer Grade Limitation Act of 1954 specified lower ceilings for the numbers of lieutenant colonels and colonels in the Air Force than for the Army and Navy. Although the Congress accepted the stipulation of the younger (in terms of years of active service) officer population of the Air Force in 1954, the legislators recognized that, as the Air Force officer population "matured," the ceilings on lieutenant colonels and colonels would have to be adjusted. ${ }^{15}$ Since 1959 the Congress has had to grant the Air Force relief from strict adherence to the law no less than six times in order to keep Air Force career opportunities comparable to those of the other services. ${ }^{16}$ Given the current mood of Congress toward what some perceive as "top-heaviness" in the services and the fact that the latest relief granted the Air Force from the ceilings on lieutenant colonels and colonels expires on 30 September 1974, the ability to weed out less productive officers in these two grades takes on added significance. The repugnant alternatives might be for the Air Force to stop promoting entirely or revert to the provisions of the Act of 1954, with accompanying severe debilitation of the Air Force to attract and retain high-caliber young officers for years to come. ${ }^{17}$

## some unfacorable reaction

Notwithstanding the closely reasoned arguments for new officer grade limitation ceilings, the Secretary's proposals regarding tenure have generated a certain amount of controversy and criticism. Reasoned criticism centers around the inequities of adopting an "up or out" administrative system whose purpose is perceived
as that of sacrificing experience and skill for the purpose of allowing promising younger officers to advance in grade. ${ }^{18}$ Rising costs associated with military retirement programs are seen by other critics as attributable to the services' mandating separation or retirement of their members at early ages. The argument made by both critical groups is that money, skill, and experience are forfeited simply because certain officers reach their limits of potential for advancement in rank. ${ }^{19}$ One reaction to the legislative proposals cites the provisions for recalling to active duty certain involuntarily retired officers as a means of conserving the human resources otherwise lost through implementation of the proposals. Recalled on the basis of their individual abilities, such officers would serve in an unpromotable status outside the career stream of those who compete for continued advancement. ${ }^{20}$ It appears that such a procedure would have to be employed in numerous cases to offset significantly the human and financial problems created by changed tenure and grade limitation laws. Whether the Congress would approve of the exercise of such an option on a broad basis appears questionable.

Legislative proposals related to officer personnel management may generate even greater emotional heat and controversy when they are deliberated in conjunction with separate proposals for a modernized retirement act and an act regulating special pay. The Department of Defense is hopeful that its proposals will be considered by the second session of the 93d Congress so that grade imbalances aggravated by recent force reductions can be corrected, but there are several stumbling blocks to be overcome. ${ }^{21}$
prospects for success
The legislative proposals made by the

Department of Defense were predicated on the assumption that active duty forces would remain at the authorized strengths projected in the Administration's fisc'al year 1974 budget. However, in its first session the 9.3d Congress may have signaled that it demands even harsher measures to force attrition of officers. ${ }^{22}$ If similar decreases in service strength are prescribed as the Congress considers the FY 1975 budget, the Department of Defense may be forced to alter its legislative recommendations to provide for some even more drastic means of coping with overages in officer strength.

Retirement costs, a subject about which members of Congress are, with increasing frequency, declaring their astonishment and concern, may emerge as a very significant criterion on which the Congress bases its decisions regarding officer strengths. If consciousness of the high costs of military retirement programs does become predominant, the present legislative proposals may be less than warmly received by the Congress simply because the proposed statutes do not promise substantial nearterm reductions in the costs of military manpower.

Historical precedent appears not to be on the side of recommendations for farreaching reform in the administration and management of officers in the armed forces. The fate of the all-encompassing proposals of the Bolte Program of 1960 may have served as a warning to those charged with shepherding the current proposals through Congress. The Bolte Program, formally entitled the Department of Defense ad hoc Committee to Study and Revise the Officer Personnel Act of 1947, languished and died largely because it represented such a major departure from existing law and policy.

Although it differed fundamentally from the Bolte Program, submission of the proposed Defense Officer Personnel Manage-
ment System in its entirety to the Congress in early 1974 elicited a similar legislative response. Three months after the bill was introduced, Senator John Stennis, Chairman of the Senate Armed Services Committee, foresaw little chance of the measure's receiving prompt Congressional attention. Moreover, the Senator added that he had ". . . learned enough about it to know that [he did] not think it will be satisfactory to the committee." ${ }^{23}$

Prospects for adoption of at least parts of the total Defense Department proposal may be brightened if two other bills successfully negotiate the Congressional process. The two bills, essentially interim measures dealing with tenure for regular colonels, lieutenant colonels, and Army captains, were introduced earlier than the bill proposing the Defense Officer Personnel Management System. ${ }^{24}$ In certain respects, they offer the Congress opportunities to modify on a narrower basis current law and policy as they pertain to officer personnel management. However, their prospects for legislative adoption appear as uncertain as those of the broader bill. On a more optimistic note, success in obtaining approval of interim measures which complement the entire system could spawn additional piecemeal submission of bits and parts of the whole legislative package. In this way the risks of overwhelming the Congress with seemingly massive and intricate recommendations for reform might be lowered, and the Department of Defense and the services would gain the management tools they need.

Whatever strategy the Department of Defense adopts as the 2 d session of the 9.3d Congress proceeds, the emphasis will necessarily be on time. In an era marked by the cyclical expansion and contraction of the armed forces at intervals of from ten to fifteen years, to delay further the modernization of the basic structure of
defense officer personnel policies means only that the Department of Defense and the military departments will continue to improvise on the patchwork quilt. Stopgap measures taken in an atmosphere of crisis-management are no longer adequate
given the changed nature of today's armed forces, the uncertainty of current international relations, and the mood of the Congress. In the matter of managing the bosses, something must be done-and soon.

Air Commund and Staff College
1973. p. 135.
18. Lymn D. Smith, "Up or Out. The Cost in Dollars und Sense," Amy, December 1973, p. 16.
19. "Letters to the Editor," Amny Times, November 14. 1973. pp. 12. 18. July 11. 1973, pp 12. 20, August 1, 1973. p. 20.
20. Smith. p. 16.

21 "Is the Shake Fair?" Armed Fonces Juumal International, July 1973, p. 4.
22. Randall Shoemaker und Gene Fanigliett!, "Sinall' Soldier Cut Predicted," Army Times, November 28. 1973. p. 2.
23. U.S., Congress, House. A Bitl to Amend Tittes 10 and 37. United States Code. Relating to the Appointment, Promotion. Separation, and Renrement of Members of the Amed Forces, and for Other Pupposes, H.R. 12405, 93d Cong., 2d sess., 1974: Lee Ewing. "Officer Plun Deadi Grade Relief Asked," Air Force Tines, Muy 15, 1974, pp. 1, 11.
24. U.S., Congress, House. A Bill to Amend Tite 10, United Stutes Code. to Authorize the Selective Continuation of Certatn Regular Commissioned Officers on the Active Lists of the Ammy. Navy, Marine Corps. and Air Force upon Recommendation of a Selection Boand. H.R. 11113, 93d Cong., Ist sess., 1973: and A Bill to Amend Title 10, United States Code. to Provide Thur Commissioned Officers of the Army in Regulur Grades below Major May Be Incolunturily Discharged Whenever There Is a Reduction in Force, H.R. 11745. 93d Cong., Ist sess., 1973.

# MANAGEMENT OF THE DISADVANTAGED 

 Lessons Learned in Industry Captain George h. Wayne
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 1 WHISKYTHE UNITED STATES," according to Admiral Thomas H. Moorer, when Chairman of the Joint Chiefs of Staff, "is now committed to the lowest military force in strength since 1950." The "all-volunteer force" will have significant impact in the military and will require rapid and revolutionary changes in the nature and extent of our training, education, and management. Changes are necessary because many of the volunteers will be entering the military from disadvantaged backgrounds. While a number of "peopleoriented" programs have been inaugurated, we must continue to examine other management and training developments thoroughly for new ideas.

The developments to which I refer are those used by industry in employing people from disadvantaged backgrounds and those by which industry has transformed its objectives into productive training. Supervision of persons with disadvantaged backgrounds in the military, just as in industry, requires a better understanding of handicaps, capabilities, and attitudes of the disadvantaged and could be a significant step in "getting the job done with less." This article, based on the experience of more than twenty companies, will discuss their various programs and what lessons Air Force managers and supervisors can learn from their approaches.

In our society, there are a number of nonproductive people. The most obvious are the very young, the very old, those who by reason of age are not able to contribute, the physically handicapped, etc. In the past few years we have recognized another large body of nonproductive individuals: the uneducated, the untrained, and those who are capable but have been screened out by hiring and promotion procedures.

In this article, this group will be referred to as the disadvantaged. The Department of Labor defines a disadvantaged individual as:

One at the poverty level of income, who is partially or completely unemployed, and has one or more of the following additional characteristics: a school dropout, a member of a racial minority, less than 22 or over 45 years of age, and physically, mentally and emotionally handicapped. ${ }^{1}$
Approximately $13,000,(0) 0$ ) Americans are encompassed by this definition. They constitute the tail end of the employment queue. Many of them have abandoned the search for work.

During the past ten years, companies have become subject to the provisions of the Equal Pay Act of 196:3, Title VII of the Civil Rights Act of 1964, the Equal Employment Opportunity Act of 1972, and Executive Order 11246. This has resulted in a revolutionary change in hiring and training procedures. Now, the challenge is how to "screen in" a number of those who have been considered disadvantaged. This has required the replacement of many of the current concepts and methods of training with new ones designed to meet this challenge of change and continue to produce at a profit. These changes did not come about immediately. For example, the Civil Rights Act was passed in 1964, but it was not until 1968 that federal nondiscrimination regulations had any impact on most businesses. During the 197()s, after companies had spent hundreds of thousands of dollars on nondiscrimination cases in the courts, changes in hiring practices were implemented. ${ }^{2}$

What was learned by industry about the disadvantaged? Prior to the late 1960s very little was known about the disad-
vantaged. Except for an occasional esoteric article appearing in learned journals, they were not a topic of discussion. Today's personnel and training officials realize they are the "ugly poor." They are seen as people with few or no marketable skills, underor overweight, unshaven or with hair too long, clothed unconventionally, using slang, wearing sunglasses, maybe with poor hygiene. ${ }^{3}$ Mr. Jack Mulkey, Director, Woman's Job Corps Center, Guthrie, Oklahoma, described them as people who have never seen a dentist and never used a handkerchief. The average age of incoming corpswomen is $181 / 2$ years; average reading level is 5.8 years: average math level is 4.6 years. The chances of their achieving anything in a society made up of "institutions of exclusion, not inclusion" are remote. In spite of the tendency to generalize, it was also discovered that the disadvantaged constitute a large and diverse group with widely differing degrees of hardships and handicaps. It is not a monolith with identical characteristics. The disadvantaged still had to be treated as individuals and could not be stereotyped; programs for their improvement had to be shaped to the individual.

Industry soon realized that to cope in their environment the disadvantaged need intelligence and certain skills. Industrial officials found that the handicaps of the disadvantaged did not necessarily lie in any lack of intelligence but in environmental problems. Their handicaps result from having a different set of "coping skills," skills that are effective in their own environment but a handicap in another. Edward Chave, second vice president of Equitable Life, stated his company's test showed that one-fifth of his company's hard-core hirees had IQ's of 120 ) or more, a percentage higher than that found among the normal U.S. population. ${ }^{4}$

An effort to transfer the skills of the disadvantaged into meaningful employment
is essential. Consideration must be given to the socially unacceptable individual. This includes the third-generation welfare recipient, the pimp, the prostitute, and the pusher because these individuals, to an important degree, are the natural-born entrepreneurs of their culture. ${ }^{5}$ Some examples to illustrate this point were recently cited by Edward L. Field, vice president for Employee Relations, Federated Department Stores, Inc. In a speech before the American Bar Association he, by a few vignettes from his experience, convinced disbelievers that the disadvantaged are in fact employable. He told of an itinerant trumpet player with a sordid police record who is now in his second year as one of the top record salesmen in Los Angeles; of a tough, hostile high school dropout who was a member of a hate "whitey" group and who today is employed as the assistant to a Milwaukee coordinator of minority affairs; of a group of twelve women whose common denominators were having children out of wedlock and never having been gainfully employed-yet six of the group are satisfactorily holding customer contact jobs in Cincinnati. ${ }^{6}$ Obviously, these success stories are the exception rather than the rule. They do, however, prove an important point: if positive efforts are made to alter the courses of poverty, crime, and unemployment, and if appropriate training and opportunity are provided, success can be realized.

Efforts in these areas may not be as difficult as they appear to be. We in the military recognize the need-the obliga-tion-to intensify efforts to manage personnel resources effectively. The Air Force, for example, is making a great effort to meet the tough social challenges posed by the difficult years ahead. We spend millions on training and personnel planning. But will our efforts be blocked? Would
quality be sacrificed if we were forced to take on a disproportionate number of disadvantaged recruits? What would the alternatives be? Industry almost unanimously agrees that skill training is not enough. It found that to make the disadvantaged individual employable, he must be taught certain skills that were fundamental to members of the majority groups. Many of their recruits did not have a basic enough knowledge of reading, language, and arithmetic-even though many had completed 12th grade-to understand direction signs, safety signs, or verbal and written instructions. It was necessary to provide instruction in the three R's before job training could begin.

Because of the traditional values and family organization in the urban ghettos, the disadvantaged lacked orientation-towork discipline. They became bored easily and did not stay at their desk or the assembly line for the required periods of time. For them, time had no significance, and many had no clocks at home. In one project 25 percent of the trainees could not tell time; many could not deal with personal problems, and this affected their work habits. They needed help in dealing with credit, transportation, and even health and nutrition problems. Kodak found that many of its trainees did not know the procedures for cashing or depositing checks. Philco-Ford Job Training Center discovered that many of its girls did not eat regular meals; as a result, even when the temperature was 80 or 8.5 degrees, some of them complained of being cold. Hiring and training the disadvantaged reveal that such problems, unless recognized, can be frustrating to a supervisor, cause communications to break down. and hamper success in both training and supervision. Companies like Kodak, Martin-Marietta, Ford, and Samsonite realized that you cannot simply hire disadvantaged workers
and leave it at that. As one executive put it: "We hired them like they were so many Cinderellas who only needed invitations to the ball. We forgot they didn't have any fairy godmothers to get them dressed in time and onto the right bus." ${ }^{7}$

After some pre-job training, companies could begin technical or job training. There appeared to be no set way of providing for the variety of training demands, but this was necessary in that training was tailored to individual needs. Once the trainee was able to get to and from work, understand simple instructions, and read safety signs, skill training was initiated. Almost from the day the disadvantaged trainee was born, his educational development had been based on those things necessary for survival. In many instances, to change this pattern proved to be fatal; therefore, new goals were sought and instituted. Redefining basic education targets, for example, meant that a clerical training course that included English, arithmetic, and perhaps history now teaches only secretarial English; or if the trainee is being taught a technical trade, the secretarial English and history courses are eliminated, and shop mathematics and blueprint-reading are taught. Overall, training had to be relevant; training became relevant when the trainee was hired and not just promised a job. A few companies have instituted "exploratory programs," which enable the trainee, while taking shop mathematics, to explore various technical areas until he finds the field he is interested in. When a trainee expresses an interest in a specific area, training is then oriented toward that particular job. Even when he selects a field incompatible with his capabilities, he is persuaded by the instructor that he has not failed. Dr. Yamahiro of the Martin Company succinctly states that "perfunctory programs are meaningless, an
individual will succeed only if the company wants him to be successful."

Since the trainees, in most cases, are high school dropouts and have already related their classroom experience with failure, on-the-job and work-study train-
ing has proven to be more motivating. Instructors take a distinctly adult approach to the disadvantaged trainees. They are addressed as "Mr." or "Miss" or "Mrs." The trainees are reminded that they are being trained not just for a certain job

On ghetto streets. the disadiantaged often encounter the hustler and other purveyors of vice.

but "for promotability as well as for more responsibility." As one instructor explained to me: "I constantly tell my students that he or she is 'good' and that eventually my job will not be secure."

How does industry deal with the historic background of these problems? Experts in the field of training and management recognize that training alone is an attempt to cure chronic long-term problems by dealing with symptoms and not causes. Many company officials, seeking to deal with causes, have launched a number of innovative programs designed to upgrade the disadvantaged while they are still in their schools and communities. Because most of these company programs are remedial, it is necessary to get to the disadvantaged child before he is eligible for employment. One way of doing this is to help the school. Dr. E. Grant Venn, Associate U.S. Commissioner of Education, puts this idea in historical perspective:

I would suggest that we begin thinking about doing the same thing for the kids in the city that, two generations ago, we did for the farm child. At that time, we took a national look at the farm problem, decided that the disadvantaged were on the farms, as they were. It's time we begin to mount such programs for the disadvantaged youngster in the city and give him the same kind of pertinent education. ${ }^{8}$
Today industrial representatives are visiting schools not just during the recruiting season but throughout the entire school year. There are attempts to strengthen public education now and for years to come. Companies are providing funds and assistance for purposes such as counselors, technical education, teachers, tours to cultural facilities and college campuses, etc. One industry conducted a charm course for tenth-grade girls, and another established a model employment office to prepare students in the procedures in-
volved in looking for and finding a job. Others have instituted teacher-manager interchange programs and factory-schools in the communities. ${ }^{9}$

Education and training of management can be as difficult as training and educating the disadvantaged. Dr. Anthony C. Campbell, assistant to the president of Responsive Environments Corporation, made this comment:

> . . I never met anybody who was hardcore until I met social scientists, teachers, personnel directors, "manpower specialists" who are really hardcore-failures, that is, in reaching stated goals with specific populations. We are the unchanging, stubborn, difficult ones who need to be seeking new solutions. They [the disadvantaged] wait; we describe.

While this description of management does not fit every executive, manager, and supervisor, it does apply to a number of individuals in responsible positions. The interesting point here is that, when the federal government committed itself to the cause of equality, many executives went to their personnel men and told them to hire and train the disadvantaged. There were no guidelines detailing how this was to be carried out productively or successfully. Only when companies recognized that hiring the disadvantaged, like antitrust matters, was likely to be a matter of top management concern for many years were they aware of the commitment necessary on their part. Today most major industries have made it clear that they support Equal Employment Opportunity (EEO) programs. Supervisors have been informed that they are being rated in their performance as supporters of such programs. Further, they are aware of the fact that their future bonuses, merit increases, and promotions rest on their ability to do a good job in this "special assignment." Supervisors are relieved from the responsi-
bility of obtaining immediate full production by their personnel, are not forced to train/supervise more than one or two disadvantaged trainees, and are provided the assistance of trained counselors to deal with special problems. In the meantime they are trained in the special skills needed to understand, supervise, and train the disadvantaged, including minority history, equal employment opportunity, Affirmative Action programs, and the avenues open to managers to express their own grievances.

How are these programs evaluated? Traditionally, success of new programs was measured by the retention and productivity of new employees. It has now been decided that concentrating on attrition does not measure the success of such programs. One observer summed up the point in this manner:

Turnover is often the process by which people become familiar with work and jobs. A young man who uses his job experience to get a better job is obviously not a program failure. The important thing is to help the disadvantaged from abandoning his desire or intention to work at all. ${ }^{11}$

Since there are no set evaluative methods available to determine the impact of employing the disadvantaged, a number of companies sought to concentrate on what impediments block the success of the disadvantaged and cause them to leave. The major problems fell into the following categories:

Double standards. The charge of "double standards" is sometimes raised by workers as a device to resist training the disadvantaged. While it is true that the disadvantaged trainees require extra time and attention, the other workers must be shown that a "double standard" has always ex-isted-only in their favor. One long-time industrial relations man evaluated the so-
called "double standard" by making a comparison with other ethnic groups.

> Every ethnic group that's ever come into our plant has had some effect on what rules we have and how we enforce them. Every group has some special holiday that we have to adjust our production for and some special day when we wink at the schnapps on their breath. Why should the [disadvantaged] be any different? ${ }^{12}$

Competition from the ghetto. The problem here is that the "soft core" individual who is willing to work has already been influenced by the poorly motivated man, the man convicted of crimes, and the psychologically disturbed man. A major problem is to convince the individual who really wants a job that the hustler, the numbers racketeer, and the petty criminal, "those who live off the ghetto economy," are not really better off. In other words, business can't meet the wages of the successful hustler. Some companies have attempted to combat this situation by assigning another employee, one who came from the same background but who has been integrated into the work force, as a "coach" or "buddy." The job of the coach is to function as liaison between the trainee and the "world of work." With the help of professionals, a successful coach, provided he is dedicated, will eventually prove to the trainee that working is better than hustling.

Corporate racism. Dispite the highsounding policies of most businesses today about equal opportunity, the minority executive has not advanced beyond the position he was in during the 1960s. James S. Spain, President of the Council of Concerned Black Executives, made the following point regarding blacks and supported it statistically:

The plan for Progress, in 1963, included 441 major American corporations. These 441

Hired as trainees, the disadcantaged often rise to responsibility and promorability, confirming the ultimate industrial worth of the disadvantaged.

companies employ 9.7 million people of whom one million are black. According to the latest [1970] published figures, these companies have a total of 936,152 managers and officials. Of that number 1.1 percent are black. The companies also employed 884.492 professionals. Of this group, 1.4 percent are black. ${ }^{13}$

Most minority executives are in positions such as public relations, community relations, and industrial relations, where the emphasis is on mere visibility rather than real impact on the corporate economy. The problem with such jobs is that the minority executive will not be selected for special training programs to groom him for upper-level management, nor will he be rotated through the variety of jobs necessary to familiarize him with key aspects of the company's operations. Unless there are successful minorities, visible
in the company's hierarchy, it will continue to be very difficult to convince the disadvantaged hiree that he should change his life style and become a part of the "system.'

Many of the programs mentioned in this study are too new to be systematically evaluated, and many areas and questions challenged are still being interpreted by the courts. However, the Air Force supervisor or manager can and should begin considering the concepts developed by industries, as a gauge for his own success and the success of his subordinates.

Traditionally, we begin with the basic assumption that we are all Americans. Our recruitment, training, and education programs are geared to this concept. It is true we are Americans, black, white, and brown, but in the areas mentioned we are dealing substantially with cross-cultural


## Vietnam

Ways to bridge a cultural gap were demonstrated in Vietnam, where the language barrier was even more pronounced than in the ghetto. Instructors showed how by the actual doing, with the help of detailed drawings and texts in the native lunguage.

problems. These problems, when combined with prejudice and racial discrimination, many times result in supervisors' alienating their personnel, many times without knowing why. Middle management becomes frustrated because programs do not produce expected results; consequently, imaginary problems are raised, and the real ones are often overlooked. If there are lessons we can learn from the experience of industry, these lessons are in the area of bridging the cultural gap.

The problems associated with bridging the cultural gap are nothing new for Air Force personnel. We have been training foreign students at U.S. and overseas installations since 1950. Bridging the cultural gap had particular significance in Vietnam in the 1970s when we sought to make South Vietnam self-sufficient. The Job Performance Aid (JPA) manuals, which were written in both Vietnamese and English, demonstrated many of the techniques used by industry. For example, these manuals also relied on simpler language, more illustrations, learning by doing, and making use of cultural values to motivate. Since thousands of Vietnamese were trained in record time, it is obvious that instructors were not inhibited by cultural gaps. ${ }^{14}$ If such success can thus be realized abroad, why can't equal success be realized at home with the disadvantaged? Can it be that deep down we expect them to be stupid, lazy, and inferior? If this is true, we must make special efforts to prepare ourselves to deal with their problems. With a few changes in our perspective, we can pave a different path in training and motivating the disadvantaged.

What changes in perspective are necessary in order to help the disadvantaged make the transition to the Air Force way of life? At present all Air Force recruits are generally treated alike in training and motivation, regardless of background. The

Air Force must make a concerted effort to assess individual behavior; in this way a determination can be made of the cultural variables normally invisible. We must recognize the tremendous pressures, real and imagined, which the disadvantaged recruit faces in a new work situation. Since many are overly sensitive to supervision and prone to distort even helpful criticism into hostile attitudes, the use of titles emphasizing respect and dignity is necessary. More important, the approach taken by the military to humble every recruit by stripping him of his civilian habits and behavior traits and then attempting to engender or sharpen in him a new dimension may not work with the disadvantaged. Because he is a stranger in a strange and, in his opinion, hostile environment, stripping him of his "security blanket" may be more than he can bear. His way of life has protected him during infancy and nurtured him through successive years of discrimination and racism; asking him to be humble and submissive may leave him fearful, shattered, and resentful, never to recover again.

The approach to the disadvantaged should be to know his goals and appreciate his need for involvement in the group process. Instead of asking him to reject his culture, we must seek to use his culture to motivate him. One way this can be accomplished is by identifying the informal leaders and utilizing them to communicate the values of the formal group. Once we have determined what motivates the disadvantaged and have come to understand his behavior, we can begin to integrate his goals with those of the organization. The success of this approach is limited only by the extent of our involvement.

Involvement means more than making policies and demands understood. Involvement dictates that we get to know our
subordinates as individuals, as persons. For the Air Force supervisor this means putting forth an effort to find out what the disadvantaged subordinate seeks in life and helping him achieve his goals. This involvement cannot be approached sincerely without compassion, empathy, and total awareness of the disadvantaged airman's point of view. Formal and informal conversations establish the foundation of mutuality from which the necessary empathy and compassion will develop. Conversations with the disadvantaged satisfy his need for assurance that the supervisor is interested in helping him make a meaningful and worthwhile contribution of his abilities and skills. Involvement, therefore, encourages the disadvantaged and also helps the supervisor learn some of his motivational factors. The communicative skills of the supervisor encourage enthusiasm and foster an atmosphere in which the disadvantaged airman will seek new experience and can then make contributions resulting from his personal improvement efforts.

I am not trying to give the impression

[^5]that civilian firms are paragons of organizational virtue. Historically, military leaders have contributed immeasurably to management philosophy. In fact, the history of military organization reflects both give and take in personnel management techniques. Doing a good job of supervising and managing people is not accidental. Unless we learn to know our people, we will probably adopt some approach that will lead to our thinking of "we" and "they." Such thinking will lead to one group's understanding what is expected of it and why its participation is necessary, while the other group experiences a sense of irritation and discomfort and becomes restive in the unit. The individuals who fall into the latter category, in the military just as in the civilian community, create problems, inhibit mission effectiveness, and, worst of all, make no contribution to society or the military. In the final analysis, a nation's survival depends on the intelligent use of all its resources, the most important of which is human resources.

United States Air Force Academy

[^6]
# Air Force Review 

# CIVIL AIR PATROL 

the unknown player on the
Air Force team


I am convinced that the key to the effectiveness of any organization is the dedication and professionalism of its people. As I begin my term as Chief of Staff. I do so with great confidence in all the people who make up the Air Force team-the active force, the Guard and Reserve, and our original 'all-volunteer' force, the Civil Air Patrol.

As you, the members of the Civil Air Patrol, complete your thirty-second year of service to our nation, 1 salute your contributions to the Air Force as well as to civil aviation. Your dedication and sacrifice in times of emergency or disaster are tributes to the spirit of your membership. The cadet program has for years been responsible for producing some of our most dedicated career airmen. As the growth of civil aviation for both business and pleasure continues to accelerate, the importance of your voluntary efforts takes on even greater significance.
$l$ congratulate you for the fine record of achievements you have compiled in the past, and I look forward to your continuing support as we face the challenges of the future.

THESE are the words of Air Force Chief of Staff General George S. Brown in a letter to all Civil Air Patrol (CAP) members dated 27 August 1973. Although he describes cap as part of the Air Force team, "our original 'all-volunteer' force," how many Air Force people really know what support cap offers to the Air Force and civil aviation? How many know that Cap has existed since 1941? Indeed, how many know that this group of 60,0000 volunteers is the civilian auxiliary of the usaf and is, therefore, part of the Air Force team?

This article has one primary purposeto provide information about cap. While a general discussion of its history and organization is the point of departure, major emphasis is placed on CAP missions and how they benefit the Air Force and the nation. Some suggestions as to how the Air Force can make better use of its auxiliary, to the benefit of both, are offered in conclusion. The suggestions are made with full knowledge of the continuing force and budget reductions. In fact, it is this bleak outlook that argues for the
maximum use of all players on the Air Force team, Civil Air Patrol included.

## history and organization

Cap was created on 1 December 1941. one week before Pearl Harbor, as part of the Office of Civil Defense. The reason for its hirth remains a backbone concept today-aid to others. Specifically, a group of general aviation people wanted to organize and volunteer their lightplane fleet in support of the developing national mobilization and thereby free military aircraft and personnel for higher-priority missions. During the war these civilian volunteers performed a variety of missions including coastal patrol, courier service, border patrol. search and rescue, and target towing.

An example of what the organization accomplished becomes evident from a brief examination of the coastal patrol mission. Using single-engine aircraft, cap crews ranged out as far as 150 miles from the Atlantic and Gulf coasts searching for enemy submarines, ships in distress, and
survivors of submarine attacks. During the 18 months of coastal surveillance operations in 1942 and 1943, CAP crews flew 244,600 hours, the equivalent of 24 million miles. They reported 173 enemy submarines and dropped 83 bombs and depth charges. They actually sank two submarines. But this accomplishment was not without sacrifice. Ninety aircraft were lost, and 26 airmen were killed. ${ }^{1}$

CAp's initial contact with the Air Force occurred in 1943, when CAP command jurisdiction shifted to the War Department and control was assigned to the Army Air Corps. As a result of this change, a new mission was added to those already being performed: aviation cadet recruiting. Fortunately, a pool of potential cadets existed within the organization because Civil Air Patrol had established its own cadet program in 1942. By 1944 CAP efforts resulted in an oversupply of aviation cadets. ${ }^{2}$

After the war, Congress formalized the CAP organization and its relationship with the Air Force by two public laws. In 1946 Public Law 476, 79th Congress, incorporated the body as a benevolent nonprofit organization, and it remains today a civilian corporation rather than a military organization. The same act established three primary missions for CAP: emergency services, the cadet program, and aerospace education. In 1948 Public Law 557, 80th Congress, as amended, established CAP as the civilian auxiliary of the Air Force and authorized the Secretary of the Air Force to extend aid to the organization. It is important to note that the Air Force does not control Cap. It does support Cap in a liaison and advisory capacity. This act is the basis for Air Force personnel being assigned to CAP duty, reimbursement of certain expenses to CAP personnel, and Air Force use of CAP in fulfilling the af noncombat mission.

CAP is organized generally along Air Force lines. It is composed of nearly $20(0)($ units, including squadrons, groups, wings, and regions. National Headquarters, known as Cap-usaf, is located at Maxwell afb, Alabama. The eight regions report directly to Maxwell, and each is responsible for several wings. There are 52 wings, one in each state plus Puerto Rico and the District of Columbia. Groups are an administrative echelon and function between wing headquarters and the squadrons. As in the Air Force, the operational unit in CAP (where the troops are and where the job gets done) is the squadron. The vast majority of units, about 1700, are grassroots squadrons.

All CAP members, including corporate officers, are volunteers. Members are either cadets or seniors, depending on age. Cadets are between the ages of 13 and 18; seniors are 18 or over. Membership is open to male and female U.S. citizens who meet a few simple requirements. Total CAP membership is 60,000 (35,000 seniors and 25,000 cadets), all of whom pay dues for the privilege of serving in this totally volunteer organization.

Most income to operate cap at all levels comes from membership dues. Dues vary, depending on the unit and type of membership, cadet or senior. Actual total cost to each member varies with his degree of participation in the program.

The cap national leadership is a combination of CAP corporate officers and the Air Force personnel who staff the National Headquarters. The senior corporate officer, the Chairman of the Board, functions much like the chairman of any large corporation. The Air Force leader and link between the two groups is a USAF senior officer, usually of general rank. He serves in a dual capacity as the National Commander of CAP, a corporate position, and as commander of all Air Force personnel

Civil Air Patrol
-the ewrly years


Established one week before Pearl Harbor as part of the Office of Civil Defense, the CAP's u:artime missions included coastal putrol, courier service, border patrol, search and rescue, and target towing. In coustal surveillance during 1942-43. CAP flew 244.600 hours, reported 173 enemy submarines-sinking two of them-and dropped 83 bombs and depth charges; in so doing CAP lost 90 aircraft and 26 airmen. At a coastal patrol base somewhere on the East Coast, CAP volunteers pass in revieu (above). ... A CAP fly-in for a special day serced as an inducement for recruiting cadets into the wartime flying program.



A CAP coustal patrol plane circles survivors of a sinking ship, off the East Coast of the United States. .. A Aly-by message pick-up by CAP uald sometimes the preferred mode of wartime communication. A rescue boat arrices to pick up survivors on a raft spotted by CAP putrol.
assigned to Civil Air Patrol duty. His authority in the former role stems entirely from the constitution and bylaws of the CAP corporation. He is, in fact, the administrator of the corporation.

This organization requires a close relationship between the two groups. Corporate officers meet several times a year to establish policy and conduct corporate business. National Headquarters develops programs and guidance for the membership in accordance with corporate and Air Force policy. It is responsible for all Air Force personnel assigned cap duty either at the headquarters or in the liaison office structure.

In addition to his own people, each CAP region and wing commander is assisted by an AF liaison officer and small AF staff.

Their function is to advise and assist the CAP commander and provide liaison between Cap and Air Force and other governmental agencies. They also visit cap units at all levels. Often they are the only direct contact between CAP personnel and the Air Force, and as such they perform the vital task of providing visual evidence of Air Force interest and support for the cap program.

Many Air Force Reserve personnel are also involved with Cap through the Reserve Assistance Program (rap). Currently, some 800 Reservists, officers and enlisted, are contributing to the Air Force mission through this program. RAP personnel assist CAP commanders by providing military expertise and a pool of skilled manpower to further CAP programs. This program


## nergency Services

exhausted CAP cadet (opposite) takes a hearned break from Oregon flood relief

An aircrufl of the New Mexico IP Wing (right) spots its search objece during a simulated search and rescue ssiun. . . CAP nuembers rush to board military helicopter bringing discaster hef to lictimes of Hurricane Agnes.

also provides the Reservist an opportunity to participate in short active duty tours and earn points toward promotion and retirement.

Each of the three missions of CAPemergency services, the cadet program, and aerospace education-provides benefit and additional capability for the Air Force.

## emergency services

The emergency services mission was a principal factor in the birth of CAP. Today, as during World War II, cap participation in this activity frees military aircraft and personnel to be used for other purposes. Over the years the mission has grown in scope and now consists of three distinct sub-missions: search and rescue, natural disaster assistance, and civil defense support.

It is in the search and rescue (SAR) areas that benefit to the Air Force is most visible. The National Sar Plan assigns responsibility for coordinating this mission in the continental United States to the Air Force. ${ }^{3}$ The Aerospace Rescue and Recovery Service (ARRS), with headquarters at Scott AFb, Illinois, is the Air Force executive agent for the mission. However, ARRS aircraft are primarily based along the coasts, and therefore it is not possible to deploy them quickly to inland areas. Also arrs aircraft are few in number, with overriding commitments to uniquely military missions, and thus they are seldom available to aid SAR efforts for civil losses. Enter the Civil Air Patrol. CAP is the world's largest volunteer civilian SAR organization. ${ }^{4}$ The CAP has been largely instrumental in the success, on the working level, of the national SAR plan for the continental United States and Alaska. ${ }^{5}$ About 80 percent of all hours flown on SAR missions in those areas are flown by CAP. ${ }^{6}$

There are several reasons for this, but the key factor is cost. The costs of maintaining an active duty search force are many and varied. They start with acquisition, operations, and maintenance costs for the large fleet of small aircraft that would be necessary for this type of work. Range and speed constraints would make it impractical to deploy these aircraft from central points in time of need. In any sar mission, fast response is critical. Case histories indicate that the life expectancy of injured survivors decreases as much as 80 percent the first 24 hours following an accident. ${ }^{7}$ This establishes the requirement for a large number of dispersed operating locations, preferably in remote areas, where aircraft crashes are not immediately seen. The costs of supporting such a network on a full-time basis are obvious and prohibitive. Replacing the thousands of CaP pilots with an equal number of active duty second lieutenants would cost millions of dollars a year in salaries alone. And such a permanent sar force would be economically unsound. Because of the low SAR incident rate in many states each year, long periods of inactivity are certain. In 1973, for example, no missions occurred in three states. ${ }^{8}$

Yet 1973 statistics also reflect the large total effort expended on the sar task by Cap, whose aircrews flew 27,284 hours in 13,992 sorties. A total of 154 objectives were located during the 429 missions. The Air Force credited these efforts with directly saving 48 human lives. ${ }^{9}$

The reliance on CAP to accomplish this mission is one of the best bargains in Air Force history-a small investment that produces consistently large dividends. A search in January 1971 provided the opportunity to verify the advantages of the arrangement. The loss of an F-111D resulted in a gigantic joint search effort-

2300 hours flown by cap, 120) hours by us.af. The cost of Air Force participation was $\$ 400$ per flying hour. This figure includes personnel costs plus fuel and maintenance for an array of aircraft ranging from the O-2 to F-4. C-47 to HC-130. ${ }^{10}$ By contrast, cost to the Air Force for sar participation by cap averages about $\$ 10$ per flying hour, covering only reimbursement for certain expenses accrued during the missions: fuel and lubricants for corporate and member-owned aircraft and vehicles, communications, etc. In the fouryear period 1970-1973, cap flew 105,400 hours in direct support of the SAR mission. At $\$ 400$ per hour this would have cost the Air Force more than $\$ 42$ million. Instead, reimbursement to CAP amounted to slightly over $\$ 1$ million, a savings to the Air Force of about $\$ 41$ million.

But reimbursement to the cap member covers only a small fraction of his actual costs when he participates in a search. Aircraft owners have costs such as engine, airframe, and avionics maintenance that are not covered. Members receive no reimbursement for wages lost while away from the job and no per diem to cover the cost of food, lodging, or even babysitting fees while away from home.

In addition to the SAR mission, the Air Force has responsibility to provide aid to requesting civil authorities in the event of disasters resulting from floods, hurricanes, snowstorms, etc. Requests for such aid are channeled to one of three Air Force Reserve Region headquarters in the United States. cap again plays a major role as it is often the AF representative closest to the problem. Aerial surveillance, airlift of supplies and personnel, communications support, and disciplined manpower are the capabilities usually provided. In June 1972 during disastrous floods in six states following Hurricane Agnes, cap volunteers put in 11.000 man-days of work,
assisting in rescue work, distributing relief supplies, providing communications, and cleaning up when the floods subsided. In 1973 floods along the Mississippi River and its tributaries resulted in over 30000 man-days of similar effort by cap.

The third part of the emergency services mission is support for civil defense. In the event of a nuclear war, cap has the capability to perform an airborne radiological monitoring function in addition to the tasks accomplished during natural disaster situations. In both cases CAP provides the "air arm" for the civil officials responsible for coordinating recovery efforts. AF reimbursement of CAP expenses in either case is on the same basis as for the search and rescue operation. In addition, Cap has negotiated mutual support agreements with the American Red Cross and the Salvation Army that provide similar reimbursement arrangements for local disasters that do not require Air Force participation.

The move by CAP to strengthen its disaster support activities in recent years is a big plus for the Air Force. The average citizen is not directly affected or interested when CAP is looking for a lost aircraft. Many people have never flown, so the problem is just not "close to home." However, when the local river is literally lapping at the front door or a tornado has just roared down the street, the person's interest is immediate and acute. The rapid appearance of Civil Air Patrol personnel and equipment is noted, appreciated, and remembered. For all intents and purposes, CAP personnel in an Air Force type of uniform are the Air Force. The public relations benefits of such actions cannot be quantified, but neither can they be ignored.

The Civil Air Patrol capability to handle the emergency services mission is impressive. All $60,()())$ members, senior and cadet, are available. Of the 35,000 seniors,


Two cadets and an instructor (in beret) work out a rescue problem during a CAP encampment. A CAP instructor pilot briefs a cudet student pilot during a solo encampment. A CAP cadet master sergeant identifies his uward ribbons for visiting foreign cadets during the annual International Air Cadet Exchange.


18,000 are pilots. Cap possesses some 6200 aircraft, about half the number of the Air Force. Of these, 800 are corporate-owned, and 5400 are member-owned. The ground equipment consists of 2800 corporateowned vehicles and several thousand more that are member-owned. Operations are linked by about 17,000 radio stations. This communications network. two-thirds of it mobile, provides CAP with a unique capability. If necessary, CAP čan accomplish all communications requirements with this nationwide system. It is the only emergency services organization in the country that can operate independently of established military or commercial networks. ${ }^{11}$

Much Cap equipment is government excess property. Virtually all property acquired in this way requires extensive
renovation to return it to operational condition. This is costly, and expenses are climbing because the military is retaining property for longer periods prior to making it available. Thirty-eight recently acquired T-41A aircraft cost Civil Air Patrol an average of $\$ 3800$ each to refurbish to Federal Aviation Agency standards. In countless cases necessary funds have been donated by members in order to make equipment operational quickly. Individuals have paid to have radios rebuilt, vehicles repaired, and aircraft overhauled.

The cap emergency services capability represents a significant resource to the Air Force and the nation. While activities in this area always are well publicized, the other mission areas of CAP are no less important despite a lack of media coverage.
cadet program
The cadet program is designed to develop aerospace-oriented leaders from the nation's youth. The goal is attained through a balanced training program that permits all cadets to
-develop the knowledge, skills, and attitudes necessary for understanding the total impact of air and space vehicles upon society
-learn self-discipline through study of leadership practices and military training
-face moral issues of our time through discussion and debate
-become and remain physically fit through a special aerobics program. ${ }^{12}$
Cadets progress through a series of 15 achievements, each of which encompasses these four factors. Progress is rewarded by increases in cadet rank, presentation of ribbons and certificates, eligibility for nationally sponsored special activities, and eligibility to compete for academic scholarships and grants.

Cadets are assigned to squadrons staffed by senior members whose function is to guide and assist them through the program. Those senior members who work with cadets have accepted the toughest challenge in Civil Air Patrol. They have accepted a responsibility to help shape the emerging youth of the nation. While such a task inevitably results in some frustrations, it also offers the opportunity for contributions of incalculable value to the cadet generation.

As cadets progress in the program, they become eligible for various summer activities. Each year several thousand cadets become better acquainted with the Air Force during a one-week encampment on an Air Force base. This is a unique opportunity for the Air Force to show these potential volunteers what the Air Force is all about. These encampments should
specifically answer for each cadet the question, "What does the Air Force offer to me?"

Other cadets compete to attend additional activities sponsored by the Air Force and the Federal Aviation Agency. These activities acquaint cadets with the operating Air Force and orient them toward careers in aerospace. The most sought-after prize is the International Air Cadet Exchange, a one-month program to foster international understanding, goodwill, and fellowship. Last year about 200 cadets visited 21 foreign countries, and an equal number of aviation-minded young people from those countries visited the United States.

An obvious direct benefit to the Air Force from the cadet program has been mentioned: it is a source of personnel. Young people joining the cadet program demonstrate interest in aerospace, the acceptance of a military-type uniform, and willingness to participate in a quasimilitary organization. Many cadets pass to the ranks of either the enlisted or officer corps. Over six percent of the current Air Force Academy student body are former Cap cadets. ${ }^{13}$ In the context of the all-volunteer military, the importance of this source of AF members cannot be overemphasized. With no draft threat hanging over their heads, today's youth must really want to join the Air Force. The cap cadet corps, together with the Air Force Junior Rote, provides fertile territory for recruiting such a dedicated group of volunteers.

## aerospace education

The goal of the aerospace education program is to develop in all citizens a knowedgeable awareness of their aerospace world. Specifically, the objective is to create an understanding of the need for a strong
national aerospace commitment. Within CAP the aerospace education program is particularly directed toward the cadet membership. This portion of the cadet program consists of instruction covering such areas of study as principles of flight, navigation, and meteorology; the technological and sociological aspects of the aviation community; space technology; and an understanding of our aerospace heritage.

The CAP scholarship program provides another avenue of approach toward the basic goal. Each year Cap awards scholarships to cadets studying in aerospacerelated career fields. Sixty-seven cadets received scholarships in 1973.

Outside the organization, the aerospace education goal is pursued through the established education system, with efforts focused in selected areas. In order to generate understanding within the professional education community, a series of univer-sity/college-level workshops is held each summer in addition to in-service programs within school systems. Teachers attending these programs enhance their knowledge of aerospace and explore the most current methods of orienting youth toward aviation and space. In the past ten years, over $100,(0)(0)$ teachers have completed a workshop. In 1973 Civil Air Patrol cooperated with and supported about 175 workshops with an estimated attendance of over $15,(0) 0$ ) teachers and educational leaders. ${ }^{14}$

Another major area of interest is curriculum development. Cap has produced a variety of training materials to support aerospace education elective courses in junior and senior high school. In addition, Cap promotes the use of aerospace subject matter as a teaching vehicle, as enrichment material, and for career education in the elementary grades. While it is difficult to measure the results of these programs in quantifiable terms, it is cer-
tain that 1500 ) high schools taught an aerospace education elective course in 1973. Not all used Cap-developed materials, but certainly most of the courses were taught by teachers who were motivated by Cap-sponsored aerospace education workshops.

The aerospace education program benefits the Air Force in two ways. Because most CAP members are civilians, the membership itself becomes a valuable nucleus of support for Air Force objectives. Then, by spreading the word to other portions of the civilian community, they enlarge the impact. A point to remember is that the Chief of Staff has asked all Air Force members to help do the same thingdevelop understanding within the civilian community for a strong Air Force. ${ }^{15}$ CAP has been doing this since 1946.
cost cs. benefit
While much has been said about benefits to the Air Force from Civil Air Patrol, little has been said about specific costs to the Air Force to support its auxiliary. In fiscal year 1973, support to CAP cost the Air Force more than $\$ 6$ million. Costs for Air Force military and civilian personnel assigned to Cap-usaf represent more than 75 percent of this total. A little more than half a million dollars was used for reimbursement to CAP members for emergency services expenses. The remainder represents operating costs of the cap-usaf structure. ${ }^{16}$

Only one direct comparison of these costs to the benefits received is possible: By performing the search and rescue mission, cap has induced savings to the Air Force of about $\$ 10$ million in operating expenses each year for the past four years. In FY 73 that represents a saving of $\$ 4$ million when compared to costs. However, this figure is only a small part of the total
benefit to the Air Force. If the Air Force had to perform the emergency services mission itself, costs for establishing, training, and maintaining the necessary force must be added. In addition, while it is impossible to assess the benefits from the cadet and aerospace education programs, they do exist and are substantial. Total cost for all this in FY 73 was $\$ 6$ million.

## Can CAP help you? Can you help CAP?

Given that CAP represents significant benefits to the Air Force and also given that the military continues in a personnel and budget squeeze, how can Air Force units support Cap? There are several ways. One way is to understand and comply with existing Air Force policy concerning Cap contained in the 46 series of Air Force regulations. For example, AFr 46-4 states that "the Commander of each Air Force installation will designate an officer who, in addition to his other duties, will assist in effecting . . . cooperation and assistance" to cap. ${ }^{17}$ Having an active, energetic appointee in this position will result in the development of closer relations between the Air Force and Cap and certainly aid the commander in his efforts to implement General Brown's call for closer Air Forcecivilian ties.

One usaf captain's performance in this role shows what can be done. Appointed with no prior cap experience, he immediately made contact with the local cap units to "get his feet on the ground." He arranged for flights and hase tours for cadets, got radios and movie projectors repaired, got training aids and photos developed, and induced other officers to act as classroom instructors. CAP personnel kept him briefed as to their activities and emergency services missions so that the base commander could be apprised of programs and progress. The captain's efforts
benefited both the Air Force and the Civil Air Patrol.

AFR 46-5 provides additional guidance. This regulation outlines various functions cap may perform in direct support of Air Force installations. Recently the commander of Reese afb, Texas, negotiated an agreement with the local CAP organization to provide base rescue service after his assigned aircraft were withdrawn.

Another way to help is by actively seeking methods to support cap. Two recent incidents involving civil engineer Prime beef teams typify what can be done. In Nebraska a team moved an old schoolhouse five miles to an airport where a CAP unit converted it to a squadron headquarters. In Washington a team helped repair an emergency services training facility. Opportunities such as these are numberless. The use of scheduled flights with space available can provide CAP cadets with a long-sought-after orientation ride in an AF aircraft. "Third Lieutenant" type orientation programs are another possibility. Support in repairing or painting vehicles and aircraft is another productive area.

Finally, every base should host at least one cap unit. Currently, fewer than 30 percent of the major af bases in the U.S. do this. ${ }^{18}$ Although building space continues at a premium on most bases, the status of cap as part of the Air Force and the importance of its mission argue that every effort should be made to find the required space. A home on an Air Force base provides strong visible evidence to Cap members and civilians that the Air Force supports the cap mission.

Implicit in each of these suggestions is a key concept: the need for Air Force recognition and appreciation of cap efforts. Thousands of members volunteer their time, effort, and money to support the ideals of CAP because they helieve in its
mission. They wear essentially the Air Force uniform and consider themselves a part of the Air Force team. In return they ask for some occasional help and some encouragement from the full-time team partner.

What, then, is Civil Air Patrol to the Air Force? CAP is an Air Force interface with
the civilian world, and in many remote corners of the country it is the Air Force. It is a group of dedicated, disciplined volunteer civilians helping the Air Force fulfill its emergency services responsibilities in the most efficient, cost-effective manner possible. It is a group of responsible adults helping to develop the aerospace-oriented leadership of tomorrow from the youth of

The Civil Air Patrol helps sponsor nerospace educution workshops for teachers each year, here us part of the National Congress on Aerospace Education. Popular TV star Lloyd Haynes ("Room 222") uddressed this year's meeting.

today. It is a group of citizens of altruistic motives, in step with the Air Force, asking to serve in an age of generally

Notes
1 Civil Air Patrol Manual 190-1. Infomation Officets Handhwok Maxwell AFB Alabama National Headquarters, Civil Air Patrol. April 197(1), p. $1+7$.
2. lbid.
3. Air Force Manual 642. Nathenal Scarch and Rescue Manual Washingtan: Department of the Air Force. I July 1973). Appendix A. "National Search and Rescue Plan-1969," para fic thereafter cited as AFM 64-2).
1 Brigadier Cieneral Lestie J. Westberg. LISAF. National Commander. Civil Aar Patrol. speech given 14 October 1973 at CAP National Convention, Las Vegas, Nevada.
5. AFM BH-2, para 212b(d, bl.

6 Brigadier Ceneral Leslie J Westherg, USAF, National Commander. Civil Air Patrol, speech given 6 Decemler 1973 al Chicago. Illinois.
7. AFM 642. para 732.
8. Cicil Air Patrol Report to Congress 1974 tapproved but not yet published lext Maxwell AFB. Alabama: National Headquarters, Civil Air Patrol, February 1974). hereafter cited as 1974 Report to Congress).
9. Cin il Air Patrol .News, "CAP Missions in 73 Net 48 Lives Saved" Manwell AFB. Alabama: National Headquarters. Civil Air Patrol). vol 6.

## unfavorable feeling toward the military. CAP is a player on the Air Force team. <br> Air Command and Staff College

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no. 2 (February 1974). p. 1.
    10. Interview with Major John C. Cody. USAF Mission Coordinator.
    Maxwell AFB, Alabama, 28 November }1973
        1I Interview with Lieutenant Colonel Willian T Capers III. Director
of Information, National Headquarters, Civil Air Patrol, Maxwell AFB,
Alabamia, 10) January 197& thereafter cited as Capers interview)
    12. 197f Repont fo Congress.
    13. Telephone conversation with Captain Boyle, USAF Academv. Office
of Information, Colorado Springs, Colorado, 11 January 1974.
    14 1974 Requort to Congress.
    15. General Ceorge S. Brown. "A Mescige from the Chief of Staff,"
Air Fonce Policy Letter for Commantern, }15\mathrm{ November }197
    16. Interview with Major Patrick E. O Reilly, DCS/Comptroller. National
Headquarter, Civil Air Patrol. Maxwell AFB. Alabarna, }28\mathrm{ December
1973.
    17 Air Force Regulation 46-4. Civil Air PatroL Auxiluary of the Air
Force (Washington: Department of the Air Force. }13\mathrm{ February 1956),
para 9h.
    18. Capers interview.
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IN THE recent past there has been a succession of writers offering new management techniques with the apparent objective of putting down the "old days." These experts generally have no real experience in persomel supervision, but they do have a wealth of theories gained through academic endeavors. One assumption these new management theorists make is that authoritarian methods and capricious behavior used to be the way supervisors operated. The fallacious assumption that the man in charge had unlimited and unquestioned authority is a fair indication of the lack of perspective on the part of persons new to the realities of supervision. The propensity of "enlightened" writers to reinvent the management wheel is evident in most of these literary efforts.

During the past fifty years social changes and technological advances have impacted heavily on military and business activities. This has resulted in many different approaches to participative management, with great emphasis being placed on the art of persuasion. Evidently, a theory has developed that assumes changing technology also has caused a significant evolution in mankind. So many names have been given to leadership and so many management techniques have been offered that new managers become confused when they assume responsibility.

The supervisor-subordinate situation always depends on the application of the personality of the person in charge to motivate the people being directed. Poorly directed, unhappy employees simply cannot function effectively. Supervisors who do not recognize their own limitations, balanced with employees' needs, usually stumble along hypnotized by their own genius, probably never realizing that they offend subordinates when they ignore the fact that most people work for them out of economic necessity. It is easy to con-
vince yourself that you are as good a manager as you wish you were. There is plenty of evidence that lack of leadership ability is no bar to advancement. Therefore, assignment as the boss is not necessarily a credential of leadership.

Principles of management for supervisors and prospective managers are taught at nearly every organizational level. This educational process usually is concerned with advice to prospective supervisors regarding the functions of planning, organizing, directing, and controlling an enterprise of one kind or another. How to manage is supposed to be the substance of these courses. In addition, numerous books and articles have been written regarding human relations and how to get along with subordinates. Management programs become complicated because we attempt to tell managers how to do things. The trouble with this approach is that an unlimited number of things can be done, and the variety of ways to do things is practically unlimited. Reams of paper can be written, and proposals caan be expounded to infinity.

It seems to me that we should take the principles of management and apply them within certain constraints. If management is looked at from a historical standpoint, one revealing conclusion can be reached: When God handed down the law to Moses, He placed great emphasis on what the people should not do. If we establish a few "thou shalt nots," we give the manager a framework designed to avoid dissension within his organization. It is impossible to legislate intelligence, but it is possible to prevent managers from inadvertently destroving their organization by use of some simple "thou shalt not" rules.

Three basic rules are offered by which a supervisor can evaluate his own performance and give his subordinates some methods of operation that may achieve
organizational objectives without unnecessary conflict. These three "thou shalt nots" do not limit the ability of managers to function. Rather, they give some evaluation criteria for the manager's protection, his subordinates' peace of mind, and their combined ability to achieve mission objectives.

The three "thou shalt nots" are as follows:
(1) Thou shalt not tell subordinates how to do their jobs except in training situations.
(2) Thou shalt not violate the organizational structure.
(3) Thou shalt not emphasize specific behavior traits.
If the manager looks at his position and the positions of his subordinates in the light of these few constraints, he has an excellent chance for success.

Most people want to do a good jol). They need the satisfaction that comes from being given a task and being permitted to do it without being analyzed every step of the way. Once an organization is established. a real leader simply permits people to accomplish their work (in their own area) and does not attempt to reorganize around individuals or add additional tasks simply because the leader has the authority to do so. Organizational structures are important to subordinates, and they should be important to managers. The use of specific evaluation criteria places undue emphasis on behavior patterns and causes people to respond in the terms by which they are judged. If a supervisor emphasizes certain personal traits, behavior becomes more important than mission accomplishment.

If you tell a man what to do, he usually will get the job done, but if you tell him what to do and how to do it, you invariably run into an element of resistance and a communication difficulty that is frustrating not only to persons being supervised but to the supervisor himself. One of
the greatest assets a leader can possess is the ability to allow his subordinates to do their jobs in their own way. If the supervisor can keep his people working in the job for which they were employed and refrain from directing the way they do their jobs, loyalty, conscientious application, and real accomplishment will probably be the result. You cannot order anyone to love you or respect you. You can only give him the sense of dignity that comes with your expression of confidence that is shown in your ability to let him perform.

The story of the football coach whose quarterback was not performing the way the coach thought he should emphasizes this point. During a losing game the coach called the quarterback to the sidelines and said, "It's now second down, and we're on our own 10-yard line. I want you to do exactly as I tell you for the next three plays. Run with the ball on the next play, throw a forward pass on the third down, and punt on the fourth down." The quarterback then followed his coach's instructions to the letter. On the next play he carried the ball for a 40-yard gain. On the second play he threw a forward pass, which was caught by a tight end who was tackled on the 1 -yard line. The quarterback then punted the ball. The coach ran on the field and said, "What the hell were your thinking about?" The quarterback replied, "I was thinking I had a pretty stupid coach."

Every supervisor has subordinates, they really are people, and they all have feelings. If you want to damage morale and efficiency, just harp on how to do the job. This gives subordinates the impression that you have no confidence in them and that you think you know more aloout their tasks than they do. When you tell people how to do their jobs, when to go one place or another, and what to do with their time, they invariably develop an intense
dislike for the organization and the supervisor. We can demand organizational loyalty, sing the company song, dress in the company uniform, and memorize the company slogan without risk, but when we begin to pick at the way people do what they know they should do, we destroy initiative, ingenuity, and the willingness to support the organization.

In an era of specialization, many managers pride themselves on their detailed knowledge of activities under their supervision. Depending on the level of supervision, of course, it is not always necessary for the supervisor to have an intimate knowledge of every facet of all operations under his control; besides, the very human tendency to offer advice is often misinterpreted as orders concerning how to do a job. The words of former Secretary of Defense Robert A. Lovett are well worth remembering in this context:

Keep me from the fatal habit of thinking I must say something on every subject. Release me from craving to straighten out everyone's affairs. With my vast store of wisdom and experience, it seems a pity not to use it all, but thou knowest, Lord, that I want a few friends at the end.

Whatever the job may be, no one appreciates having someone else do it for him or criticize the way it is done. It may seem fashionable-and safe-to attack functional areas other than one's own or offer "how to" advice. However, if everyone rows on his side of the boat and in his own place at the oarlock, there is a good chance that the boat will travel forward at a reasonable rate. The supervisor is then responsible for steering the boat. When the manager permits one person to do another's job and causes people to cross lines of functional responsibilities, though, it soon becomes evident that there simply is not enough room for everyone
to paddle on the same side of the boat.
Organizational structures generally are a good thing. The director or supervisor who feels compelled to assign individuals to special projects or organize working groups and committees when he already has the organizational structure to accomplish the job is doomed to lose the support of his staff and create dissension within the organization. A difficulty with much top-level management is that some managers choose to ignore their own organizational structure by using expediency as an excuse.

A kind of disregard for channels of authority that has an extremely detrimental effect on morale and discipline is a supervisor's use of the so-called "open door" policy. Contrasted with the "olden days" when the chain of command was scrupulously adhered to, the recent open-door practice dangerously erodes the authority of middle managers and confuses not only the workers but all levels of subordinate supervision. The most flagrant violations of organizational structure stem from top managers who seek out complaints and encourage individuals to bring problems to them personally for instant solution. The supervisor who dips his oar into the responsibility ocean of subordinate managers by generating complaint sessions and visiting workers on the job, with the apparent objective of countermanding the orders of middle-management, effectively undercuts all levels of supervision within his organization. The moment workers discover that they have easy access to the top man, with the added knowledge that he will "straighten things out," intermediate supervisors are placed in the defensive position of responding to orders only. The boss then loses the willing support of his intermediate supervisors, destroys initiative, and creates workloads at the expense of mission objectives.

Nor should the energy and personality traits of individuals overshadow the functional responsibilities with which they are charged. All of us have seen organizations where one functional area is more important than others in the eyes of the manager because of the personality of the man in charge of that function. Supervisors must be acutely aware of this fact. Simply because a man is particularly capable should not be an excuse to permit him to do someone else's job (dip his oar into someone else's ocean). This guideline must be adhered to if positive results are to be expected.

The supervisor who will not permit subordinates to question decisions in their functional area will develop an organization of "yes men." Many an organization has a system of evaluation and a promotion procedure that a reasonably bright person can cope with if he applies a few techniques that adhere to the personal viewpoints of his superior. The way to advance is to follow the party line and always agree with the boss. A person need not necessarily give up his integrity in order to be promoted, but parroting policy statements is politically expedient. If we are aware that most management techniques
do not really consider subordinate employees as people but merely as tools through which personal objectives and organizational goals are achieved, we can modify our own behavior. Once this is recognized, supervisors must perform within a framework of constraints. Because management trainees are taught to avoid all negative aspects of personal relationships, we place undue emphasis on the art of persuasion. It is my opinion that how a manager looks at himself is important, but it is even more important that he try to realize how he appears to others.

If supervisors at all organizational levels made decisions within the framework of three simple constraints, we could avoid situations that now appear to cause a work discontent unknown in the past. Managers must emphasize effort that advances organizational goals and yet is within given constraints:

- Don't tell people how to do their jobs.
- Don't violate the organizational structure or permit the structure to be violated.
- Don't place emphasis on methods when evaluating performance.

Arnold Air Force Station. Ternessee

# MYTHS, REALITIES, AND THE MILITARY-INDUSTRIAL COMPLEX 

Chaplain (Lieutenant Colonel) George H. Bause, USAF

FOR centuries philosophers have argued that the crucial problem for all men is the epistemological one, the problem of knowing. Senator J. William Fulbright begins his book Old Myths and New Realities (1964) by noting how difficult it is for the human organism to know and deal with reality. A man's perception and objective reality are often quite different. Perhaps if he could see or know clearly, he could make rational decisions; but he fails to see, he refuses to accept what he sees, he is displeased by what he sees, and he often dislikes the idea of change. The result is that he fails to see his world for what it is and he acts irrationally.

In the confusing times in which we live, we hear all kinds of charges made against our institutions and social order. One particular epithet that draws more heat than light is "military-industrial complex" (miC). This article will elucidate a number of the myths and realities, rational and irrational, surrounding the mic.

The late President Dwight D. Eisenhower, in his farewell address, singled out the MIC and alerted the nation to its becoming a potential problem:

This conjunction of an immense military establishment and a large arms industry is now in the American experience. The total influence-economic, political, even spiritualis felt in every city, every statehouse, every office in the federal government. We recognize the imperative need for this development. Yet we must not fail to comprehend its grave implications. Our toil, resources and livelihood are involved; so is the very structure of our society.

In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power

It is of some importance to remember that President Eisenhower, by inclination and practice, had evidenced throughout his career a concern for limiting governmental power. His statements, public and private, reflect the Populism of his forebears. We must also note that his farewell was more than just a message; it was a special moment historically. The experience and impact of Washington, Jefferson, and other Presidential farewells provided ample models to emulate. A military man of note, imbued with history, Eisenhower would hardly treat this speech lightly. Moreover, the outgoing President had witnessed the promises of Kennedy's plans of government and military expansion. While we can hardly lay claim to understanding all the factors that motivated the President, it does seem reasonable to believe that if he had seen so clearly the negative side of the mic he would have acted upon his fears before this late date. He seems to have been alerting the republic to a potential problem that could materialize only if uncontrolled.

By the late sixties all kinds of elements within the population were able to use the term for their ends. To some the military-industrial complex was a bane, to others a blessing.

To those who saw our struggle with world Communism as a continuing neces-
sity, the mic was of enormous significance for security for ourselves as well as our allies. To others it meant the forcing of competition and an endless arms race. To some it provided an inducement to the economy; to others it provided wealth to the rich without helping the poor, who were locked into the lower strata of the social order. To some it offered a magnificent boost to technology, not only for better weaponry but for spin-off civilian benefits as well; to others the cost was too great and tied up funds needed for social purposes. To some it protected the Free World system; to others it added a force and value structure to American life that would eventually change the system. To some the MIC was an appropriate way for government to work with industry to meet defense needs; to others the collaboration meant an unholy alliance that would lead to dishonesty and corruption. Basically the term raised as a Presidential concern took on a more negative coloration as the frustrations of the Vietnam conflict wore on, as the social revolution gained force, and as the basic question became what America's role for the future would be in a changing world.

## accusations against the MIC

It seems that to explore the MIC adequately we must consider those characteristics of the complex that most of its critics ascribe to it. To do this we must deal with the idea of conspiracy, the element of secrecy, the subject of preparation as confrontation, the level of defense spending, war profiteering, military retirees in industry, the size of the complex, the lack of control over it, and the evaluation of the MIC as "institutionally rigid."

Conspiracy. American history is replete with the writings of many who see conspiracy at every turn. Richard Hofstadter,
in his Paranoid Style in American Politics (1965), used the phrase "paranoid style" in describing the grand theories of conspiracy of those persons who have obvious feelings of persecution. The perception of the person evidencing this approach to life sees an amorphous group of agents who have a design upon the resources of the land and its people. The paranoid stylist sees his role as being unselfish and full of deep patriotism, quite righteous, and morally indignant. The rhetoric of the conspiracy claimants has been labeled for what it is. No evidence has been produced to substantiate a de facto conspiracy. To label as "conspiracy" a concern about national security says more about the perceptions of the accuser than it does about the situation. Honest differences amongst all elements of the mic are as varied as the general population. People connected with the complex are among the strongest advocates of détente, salt, and a smaller voluntary military.

Secrecy. The question of secrecy looms large to many when matters of a military nature are discussed, and perhaps it will loom even larger as a result of present domestic problems in government. Since those outside the complex do not possess information and often question the credibility of information provided by the military or the government, questions are raised as to the validity of considered threats. The secrecy game is insidious because it can be used so simplistically as to invalidate any discussion. Critics will have to decide how valid the annual posture statements of the Secretary of Defense are. There are very few areas that are not available for public discussion. Size of forces, amounts of arms, contractual developments, and relative strengths are in the public domain. Internal efforts within the Department of Defense evidence not only awareness of this concern but positive
steps to raise the level of public understanding and discussion. The broad accusation of a conspiracy of silence and secrecy can be substantiated in some few situations but cannot be supported as a blanket accusation.

Confrontation. Often the claim is made that military preparation leads necessarily to confrontation, that a force in readiness is a force anxious to exercise its war muscles. It seems that certain elements feel that they are the only ones who want a state of peace. Is there not a legitimate place in the world for a maintenance of peace? The notion of a complete trust system, wherein one can accept in faith the idea that a state system or even an international system can bring peace and a cessation of hostility, does not equate with any picture of man in either modern ethical systems or ancient ones. Biblical understanding of man usually places man in two worlds (often pictured, as in the language of Augustine, as two cities): the city of God, founded on love and trust of God and our fellowman, and its earthly opposite, the city of Man, founded symbolically by Cain. Cain's city always has with it some aspect of the venom of his original fratricide. God's city is a trust system; man's city a distrust system. There is ample history to substantiate the latter. The logical corollary for a system designed to maintain peace and deter aggression is the vocation of military service. Can reason suggest that the role of government is to withdraw from the protection of its people? All forms of power, whether sexual, economic, political, or military, have potential for misuse. But to isolate one form of power without relating it to its function and its need in an imperfect world seems less than responsible.

Defense spending. Another rather obvious fiction is the concern voiced by many
that the defense budget has loose purse strings and a runaway percentage of the economy. The claim has been made that it has less control and less scrutiny than other programs emanating from Washington. This myth is just not true in fact or practice, past or present. The defense budget receives more scrutiny, not less. Systems analysis, planning, programming and budgeting systems, and other tools of cost analysis have been applied more in the Department of Defense than in any other government activity. The number of military personnel has been decreased from $3,547,000$ in 1968 to $2,199,000$ in 1974, and the defense budget from 12 percent of the gross national product in 1954 to 5.9 percent in 1973.

Furthermore, one's consideration of cost must relate it to the total American economy. Complexes surrounding education, medicine, farm products, transportation, etc., derive their support from several levels of government (state, county, and municipal), whereas the military budget is drawn totally from the federal coffer. The subject of our national commitments and our national responsibility to the world at large needs balanced study before the United States exits from the international arena. Recent struggles in the Near East and the accompanying energy crisis reinforce the significant global role of the United States today.

War profiteering. Accompanying the controversy over the runaway defense budget was the contention, always renewed in America during and after wars, of the making of enormous war profits. A spiraling inflation, together with the high cost of sophisticated weaponry and the ever increasing cost overruns, easily substantiated the general distrust of an anguished and long-suffering nation. The popular image presented in numerous volumes and articles on war profiteering was finally put to rest
with more extensive audits by the General Accounting Office in the Defense Industry Profits Study of March 1971. The study shows, among other things, that thirty-two large defense contractors selected at random who did more than ten percent of their total business with DoD made basically the same profit as thirteen contractors, also randomly selected, who did less than ten percent of their business with dod.

Military retirees in industry. A corollary to the profiteering myth is the idea that the number of retired military participating in second careers with war-making industries is excessive or, even worse, is another symptom of the evils of the mic. Calculations drawn from a study made by Senator William Proxmire indicated that only eight percent of the officers, colonel through general, were employed by the 100 largest defense industries. Even high estimates place only forty percent of all retired military in the defense and aerospace sector of the economy. It hardly seems wrong or a necessary evil to expect persons with specific skills and developed vocational roles to pursue a second career in an area where they have background and experience. When questions of proportionality, level of entry, and diversification of employment are thoroughly analyzed, the evidence gives very little that is conclusive. Early fears in this area, inflamed by rhetoric and exaggeration, have subsided with each new study.

Size of MIC. If the former fictions and exaggerations are accepted, there still needs to be some consideration given to the problem implicit in any core of interest as large and powerful as that associated with the mic, but these concerns and implications could well be leveled against any other big complex. To isolate them as an evil in one area without relating to all structures is an argumentum ad hominem and adds little to thoughtful discourse.

Lack of control. Critics frequently point out that the concern for national security which unites military, industrial, and governmental security planners lacks any kind of countervailing force in the social order. This seems to neglect the fact that there are numerous and strong countervailences within the complex. Not only do we find a variety of views within the military itself but also we find independent groups within government (Senate, House of Representatives, National Security Council, etc.) and outside government (rand Corporation, Brookings Institution), all of which have had impact in trying to keep expenditures down, reduce procurement, and develop decision-making processes for a time of restraint. Again, it is important to note that systems analysis, planning-programming-budgeting systems, as well as other means of relating costs to effectiveness, have been pioneered in government by the Department of Defense. Would that other complexes were able to make judgments in social and educational areas as effectively.

Rigidity. Finally, the general accusation is frequently made that the mIC is institutionally rigid. Those who delight in this argument stereotype the military and those associated with it. The discipline of order, regulation, and institutional commitment are symptoms that impede innovation or adaptation. To validate this argument, a critic would have to be aware of the process of change occurring within all facets of the mic. It seems difficult for persons within the structures to comprehend fully all the changes taking place. To draw a fair comparison, one would have to make a study relating the degree of changes among several complexes, such as the teaching-administration-education complex, the physician-medicine-hospital complex, and other similar interlocking structures. It is very difficult to justify the generality
that members of the mic are any more conservative institutionally than administrators, doctors, teachers, etc.

## the facts to be known

Modern technology has had enormous impact on the defense scene. The requirement to understand the complexities of the management of a continuous flow of new systems has created an entirely new atmosphere for the men and women who manage, operate, and maintain current systems. It certainly is not an atmosphere that lacks change. Thus the changing scene has thrust upon persons within the mili-tary-and in the mic as well-the need to be adaptive as well as innovative. The static scene of a "Beetle Bailey" environment is an anachronism in the light of change. The very nature of the demands has a significant influence on the person selected, the kinds of peers he competes with, the continuous education he receives. and the advancement that comes to a person of ability. It is obvious to persons inside and outside the mic that change in the complex is integral to its life at this stage in history. A maginot-line mentality is a guarantee of failure for the military as well as industrial support systems.

It seems to me that the time is more than past for persons of good will to stop
scapegoating the mic and start affirming the fact that our nation needs and demands cooperation among technology, management, industry, government, and the military to solve the problems of security and deterrence. There is not a mic conspiracy; arguments as to secrecy have been exaggerated, and public information is available to the seeker; preparation is responsible and does not necessitate confrontation; spending is under control; profiteering is grossly exaggerated; countervailing forces do exist; and the labeling of the mic as institutionally rigid is not accurate.

Our nation deserves the best from all its people. We need to assess myths, fictions, inaccuracies, proper proportions, facts, and realities of all segments of life, including the military-industrial complex. We need to examine our dreams and fantasies and know them for what they are. There is plenty of room for discussion and honest difference of opinion to choose among national priorities and concerns. There is not room for responsible persons of good will to dismiss the need for the mic, to disregard the nature of men and nations, and to distrust a team effort whose service to the nation has been demonstrated in every period of our history.

Air War College

## THE NAVIGATOR

An End to Professional Discrimination?

Captain Chris L. Jefferies

ON 2 February 1974 the usaf Chief of Staff sent a message to all major commanders announcing a major change in Air Force policy with regard to flying command assignments: a decision to seek the repeal of Section 8577. Title 10, U.S. Code, which limits command of flying units to pilots. The object in doing so is to allow navigators to become eligible for command of flying units. The justification stems, in part, from the fact that prohibiting navigators from commanding flying units "can be viewed by some (both within and outside of the Air Force) as discriminatory.
" ${ }^{1}$ That the issue should be considered in terms of discrimination is of particular significance, since discrimination in any form and its result-alienation and disaf-fection-unquestionably limit a group's useful, relevant, and meaningful contribution to society. Hence, it is appropriate that the issue of navigators and flying command assignments be viewed in these terms.

Until now, Air Force officers trained and employed as navigators have been largely excluded from the rank of general officer, thus from opportunities to serve in highlevel executive management positions and to participate fully in the policy-making processes of the usaf. This is discrimination. Although repeal of Section 8577 would ostensibly eliminate its basis, the issue is not dead. Indeed, it has much deeper significance requiring further consideration. This article, then, attempts to focus on the issue of the navigator and command assignments by discussing the result of years of professional discrimination, the problems that will have to be overcome to eliminate it, and, by way of recommendation, what might be done.

## discrimination and its result

At the heart of the problem has been a statement included in Section 8577, Title 10, United States Code, upon which the discrimination has been based: "Flying units shall be commanded by commissioned officers of the Air Force who have received aeronautical ratings as pilots of service-types of aircraft." ${ }^{2}$ Innocuous and logical on the surface, the provision has had much deeper significance when one considers that many high-level command positions requiring the rank of general officer are viewed as "flying unit" command positions, thus subject to the provisions of Title 10 . When one considers, further, that the only opportunities for "flying unit" command experience lie in the operations flying areas and that these have been restricted to pilots, then the pilots have been the flying officers who have had opportunities to advance to general-officer rank and executive leadership.

Indeed, this assumption is confirmed in Air Force Manual 36-23, which outlines the officer career structure. Referring to pilot careers, the manual states: "The pilot, the military's most expensive product, is a high value resource which commands special management effort and planning as pilots become principal executives and planners in the Department of Defense. ... " ${ }^{3}$ (Italics added.) Referring to navigator careers, however, the manual states: "Navigators provide a rated talent reservoir from which to select Air Force commanders and executives at all levels . . . [for] . . . command and staff management of functions associated with air operations. . .." 4 (Italics added.) Considering, again, that "air operations" include the principal executive and
planning positions within the USAF and that qualification for these positions has included completion of pilot training, ${ }^{5}$ it becomes very apparent why navigators have indeed had to settle for positions "associated with air operations" and thus for limited careers. AFM 36-2:3 has most effectively assured that the important roles in USAF leadership and policy-making are reserved for pilots. The evidence and result: a 28.6 -to-1 ratio of pilot-rated to navigator-rated general officers. ${ }^{6}$ Moreover, results of the 1974 brigadier general selection board confirm the effect and indicate that an imbalance in favor of pilots will continue. Of the 66 colonels selected for promotion, $51(77 \%)$ were pilots, and only $4(6 \%)$ were navigators. The nonrated officers did better, with 8 selections ( $12 \%$ ), ${ }^{7}$ although they make up more than $50 \%$ of the force.

While nonrated officers have also been excluded in the process, the issue concerns discrimination among flying officers. Indeed, few would argue that a nonflyer should command operational Hying units; yet even this limitation allows for more general officers who are nonrated than those rated as navigators. ${ }^{8}$ Consequently, denying navigators equal opportunity with pilots for advancement into general-officer rank has appeared as a particularly selective form of discrimination.

A second result of long-standing professional discrimination toward the navigator is found in an examination of secondary-zone promotion selections, demonstrating again that navigators have not had opportunities for advancement equal to those of pilots. The secondary-zone promotion is significant hecause it provides a route by which officers showing exceptional ability and promise, and thus most likely to be selected as general officers, are allowed to progress at an accelerated rate. Of those officers considered for early promotion to major in 1972, for example, $38.6 \%$ were pilots and
only $8.7 \%$ were navigators. The selection results illustrate a greater disparity, with pilots receiving $61.9 \%$ of the secondary promotions and navigators only $2.6 \%{ }^{9} \mathrm{Al}-$ though secondary-zone selection of navigators to lieutenant colonel and colonel ranks reflects a slight percentage increase, it is not significant enough to indicate a departure from the established pattern of discrimination. A four-year average of lieutenant colonel and colonel secondary-zone selections by rating (1970-1973) reflects the following: for lieutenant colonel, $6.3 \%$ were pilots and $9 \%$ were navigators; for colonel $60 \%$ were pilots and $5 \%$ were navigators. ${ }^{10}$ (Compare these figures to the total rated force distribution in note 6.)

The imbalance in the general-officer ranks in favor of pilots and the difference between pilot and navigator secondary selection opportunities are not, hopefully, a result of conscious discrimination against navigators (indeed. the uniformity of low navigator secondary selections for all ranks suggests that this is unlikely). The obvious and significant implication, however, is that navigators have not been allowed the experience, recognized by promotion boards. that would enable them to compete with their pilot peers: that is, command experience in flying operations.

Having considered the results of professional discrimination toward the navigator regarding his opportunity for secondaryzone promotion and advancement to gen-eral-officer rank and high-level executive management responsibility (reflected in the low number of general officers rated as navigators), there is little point in arguing the issue if there were no visible effect on the navigator group as a whole. However. a visible effect does suggest itself, a third result of discrimination that is of immediate concern to navigators and persomnel administrators alike: disaffection and estrangement. While the roots of alienation as it
occurs in an organization are in dispute among administrative theorists (being attributed to many causes, if not to the basic hierarchical structure of organization itself), the term is used here in a very specific sense: because navigators have not had career opportunities equal to those of their rated peers, it is likely that discouragement and disaffection among them has caused many to leave the usaf, creating a navigator shortage. ${ }^{11}$ Evidence is suggested first by the "voluntary navigator recall" program instituted in 1971 to induce separated navigators to return to active duty; second, by the reduction in the number of navigators serving in the rated supplement to lessen the immediate impact of the shortage upon flying duties; and finally, by an increase in navigator "production" from 80) to 1200 new navigators per year. ${ }^{12}$

While the shortage is admittedly no "proof" of navigator alienation, it is an indication that alienation may exist. Nonetheless, a link can be established by sampling the "Letters to the Editor" in the Air Force Times, a column providing a means for individuals to express their concern with usaf problems or practices. Regarding the issue of navigator disaffection and the resulting shortage, three examples illustrate the link:

Reference several letters on "why the navigator shortage?" The answer is pretty obvious to me and many other navigators in the AF. A navigator is treated as a second-class officer, completely subservient to the pilot. What they mean is rhip is for pilots only. [signed] Second Class Officer. ${ }^{13}$
Another navigator states, referring also to the navigator shortage, "I now understand why [the shortage] after 11 years and my first pass-over. . . . Now that I have come up for majority, I have nothing on my record except navigator assignments. . . . Thus, I feel I'm not being judged fairly." ${ }^{14}$ Finally, an individual who questioned the valid-
ity of command positions of all types being filled largely by pilots wrote: "From my personal observation it seems that pilots are given preferential treatment when it comes to filling command vacancies whether or not a pilot rating is required for the vacancy." ${ }^{15}$ While it is not valid to claim that these samples represent a majority of navigator feeling, they do serve to illustrate a linkage between disaffection and the shortage, and they indicate its source: lack of opportunities equal to those of pilots. Nevertheless, the point of a navigator shortage can be summarized in a statement by Group Captain (Colonel) D. F. H. Grocott, Royal Air Force, made with regard to the Raf experience with a similar shortage. Referring specifically to navigators, he wrote, ". . . able men will not join if there are no prospects or will leave when they discover they have no future. Therefore, equality of opportunity with other able men is essential." 16

## problems to overcome

We have considered three results of professional discrimination toward navigators. That the cause can be traced to denying them the opportunity to command flying units has been recognized, and the first step has been taken: the Hq usaf decision to seek repeal of Section 8577, Title 10. However, can we consider that step alone sufficient to eliminate the long-standing results of discrimination? Experience suggests that we cannot. Following are three reasons why this may be so.
The first reason is reflected in the experience of the Royal Air Force when confronted with a similar problem. Since their experience has several points of comparison with that of the USAF, we may usefully consider its background. In 1948 the raf suffered a serious shortage of navigators, much as the usaf has in recent years. A committee ap-
pointed to investigate the problem concluded that a lack of navigator career opportunities equaling those of pilots was the major factor in their inability to attract navigator candidates, a factor also affecting navigator retention. Consequently, the committee determined that the logical approach would be to give navigators prospects of promotion and assignment equal to their pilot peers. The recommendations were adopted, and an Air Ministry order was issued stating, "It is the intention that all navigators entering the Royal Air Force should have career prospects comparable with those open to pilots . . . [and] will be eligible for promotion [in the General Duties Branch] on the same basis as pilots." ${ }^{17}$ (The General Duties Branch is the career category from which raf squadron commanders are normally selected.)

Of significance to the usaf problem is the fact that raf articulation of the policy was insufficient. Because of lead times insisted upon to allow navigators adequate preparation for command assignments, together with a hesitancy to move in a new direction, the system continued much as before, with the result that navigators who should have been gaining junior command or staff experience were retained in flying duties. This further deprived them of experience necessary to prepare for higher-level command positions, making it even more unlikely they would have careers equal to those of pilots. The result was widespread disappointment among raf navigators, so much so that the entire issue was reviewed in 1954.

Even though the review authority determined that promotion boards had been considering pilots and navigators equally, making no distinction between the two aircrew categories, it admitted that in appointments to command and appropriate staff positions navigators had fared badly; even though equal opportunity was the policy,
pilots were still receiving a disproportionate share of promotions and command assignments. Consequently, the Air Ministry found it necessary to restate in a policy letter that, "all other things being equal," navigators were eligible to command flying units and would be assured the opportunity to do so. In effect, an "affirmative action" policy was necessary; that is, a conscious effort to identify flying units that navigators could command, "reserving" them for navigators. Unless the USAF undertakes a similar approach, the same problem is likely to affect the usaf navigator.

That the policy has worked successfully is reflected in the number of raf navigators who command flying units. In 1970, 31\% of flying units from squadron level upward, excluding units flying single-seat aircraft, were commanded by navigators, or $24 \%$ of the total number of flying units. ${ }^{18}$ These percentages are in about the same ratio as the overall raf pilot-to-navigator ratios. The ratio of navigators holding the rank of group captain to pilots doing so is also about the same. (Compare this with usaf ratios: $28 \%$ of all rated officers are navigators, yet only $16 \%$ of rated colonels are navigators.) Proportional representation between navigator and pilot-rated air (general) officers in the raf has not yet been achieved. but the trend is toward doing so; certainly it is much closer than in the USAF. ${ }^{19}$ Thus, the raf experience with navigators is relevant to the USAF: a hesitancy to institute a new program and the lack of a positive effort to place navigators in command positions necessitated a delayed review and rearticulation of the policy. Certainly we can learn from their experience.

A second reason that repeal of Title 10 alone may not be sufficient to eliminate the results of discrimination can be found in long-standing and well-entrenched pilot attitudes toward navigators. Indeed, for decades it has been implied that pilots possess
an inherent superiority over navigators with regard to qualifications for command; that only individuals who qualify as pilots have the capability to lead; and that nonpilots therefore lack the ability, intelligence, and skills necessary to provide leadership. As illogical and unlikely as these implications seem, they nonetheless have their proponents among pilots. Commenting on numerous complaints of discrimination made by navigators in the "Letters" column of Air Force Times, a pilot wrote, in response to a specific complaint:

He mentioned the lack of equal opportunity for navigators. He had the same opportunity as anyone else to command. For some reason, he didn't qualify for the first prerequisite in the long road to command. I'm speaking of pilot training, of course. Perhaps he did qualify, but washed out-forgive me. Thank goodness the af still feels that any man must earn the right to command. ${ }^{20}$
Will repeal of Section 8577 change these attitudes? If they are not recognized and if efforts are not made to compensate for them. discrimination is likely to continue as before.

The third reason-and the third problem to overcome-is implied in an organizational "administrative" assumption: the institutionalized tradition of "pilot." USAF organizational doctrine and practice have long maintained that pilots receive their first "taste" of command experience while functioning as aircraft or flight commanders and that all other crew members are therefore subordinates who must accept limited careers. (Indeed, even a copilot cannot expect to become a general officer unless he first becomes an aircraft commander.) Thus, the long tradition of "pilot" has become institutionalized, so much so that it has become the basis for command selection even though the functional validity of so doing has passed. Hence, it is necessary to consider the probability that aircrews really function as "collective" decision-making
hodies, since no single individual can perform all skills of all crew members, and that decisions are made collectively, not by the pilot alone, even in emergency situations: the navigator determines which field is closest and most suitable for landing; the engineer determines the "systems" conditions and aircraft emergency performance capabilities. By the time the aircraft commander reacts, the decision has effectively been made by all. (The same situation exists to a lesser degree in twoplace aircraft.) Thus, unless the usaf recognizes that the institutionalized tradition of "pilot" is not the only means by which one can gain leadership, that the navigator sitting either three feet to the side or six feet to the rear of the pilot also shares in it, then it is unlikely that repeal of Section 8577 will have much effect in overcoming the results of long-term professional discrimination toward the navigator.

## recommendations

Experience suggests-and this article points out-that actions beyond seeking repeal of Section 8577 are necessary. What those actions might be follow.

First, the pattern to overcome the effects of discrimination toward the navigator has already been established in other contexts: the "affirmative action" program. In this context, it must include an overt, well-planned, and carefully instituted program to ensure that navigators will have the opportunity to experience flying unit command. The program should begin with a recognition that, since navigators have operated with pilots in the same milieu, they too have gained "an intimate knowledge of tactical, strategic and defensive warfare and its logistical requirements, including techniques of employment of appropriate type aircraft." ${ }^{21}$

Second, positions that navigators can fill
in preparation for actual command should be identified and a percentage reserved for them. Examples include squadron and wing operations officer positions, command-post controller positions, and, perhaps most important, "mission" command positions: that is. flying missions in which pilots retain command of the aircraft but command of the mission or task is given to the navigator. The mission commander would receive "inputs" from the pilot as necessary regarding the aircraft status when making decisions. Indeed, some missions, particularly those of a strategic nature, are navigatororiented: the navigator plans the mission profile and is thus in a better position to direct and control its operation, leaving the pilots free to operate the aircraft. (The raf homber and maritime forces have long and successfully used the principle.) Such mission commands would be invaluable in giving navigators operational flying command experience and would go a long way in overcoming the traditional "pilot" institution limitation.

Third, selected flying units that could be

[^7]commanded by navigators should be identified, chosen from among all strategic flying units (airlift and bomber), but limited among tactical units to those flying aircraft in which navigators regularly fly as crew members.

Fourth, navigators with broad flying experience who have demonstrated command ability in "additional duties" or in the rated supplement should be identified and appointed on a planned, progressive basis to command the selected flying units.

Finally, any rated distinction between navigators and pilots should be eliminated from promotion folders and consideration, allowing only experience to reflect an officer's qualification. Flying officers could be identified only as "rated," not as "pilot" or "navigator." If navigators are then allowed flying command experience, they will be able to compete equally with pilots for promotion selection. As a result, individual qualification alone will eventually assure equitable representation of pilots and navigators at all levels, even among general officers.

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[^8]

THE French military observer who watched in amazement the charge of the Light Brigade at Balaklava on October $25,18.54$, said: "It is magnificent, but it is not war.'

During World War II, Regensburg/ Schweinfurt resembled Balaklava in magnificence of military valor. Together they stand at the pinnacle of military courage, boldness, and determination. But there the similarity ends. The charge of the Light Brigade at Balaklava was not war because it lacked a valid purpose and a reasonable chance of achieving such a purpose. Regenshurg/Schweinfurt was war-strategic air war at its best and at its worst-because its magnificent valor was dedicated to a valid purpose. It held promise of crippling Germany at a blow, with the consequent saving of thousands of lives by shortening the war. The amazing boldness of the charge at Balaklava was repeated at Regensburg/Schweinfurt and was redeemed in an equally bold purpose.

In Double Strike, Edward Jablonski has written a stirring epic of combat in the air.t It is all there, portrayed in a style that sweeps the reader into the midst of furious combat. The reader is stationed at every key battle position. He sits in the cockpit of the lead bomber of the combat wing and in the cockpit of the last bomber of the low squadron, where the German fighters concentrate their most persistent attacks and the casualties are most numerous. He stands at an open gun port at 20,000 feet with wind whipping through the fuselage and the temperature 50 below, and he swivels in a power turret and mans the tail guns. He bends over a bombsight, concentrating on his bomb run to the exclusion of all else, oblivious to the carnage
all about him; and he plunges into the swirling combat of the fighters. Thus the reader sees far more than any single participant could possibly have seen, through the author's catching and preserving in panoramic action the whole progress of the battle-the seconds and minutes of machine gun and cannon fire, the lifetime of hazard compressed into hours.

Double Strike is a fine combat report and has caught the spirit of the operation. All the vital elements of the battle in the air are authentically described. The friendly fighters, so welcome to the bomber crews, provide escort protection part of the way. The enemy fighters, who bore headlong into the dense bomber formations, are vividly portrayed. Even the thoughts and actions of the German fighters, who press their attacks with such furious effectiveness, are reported in detail. Through it all the cold courage of bomber combat leaders, determined to reach and destroy their targets on the ground, shines clearly through the melee of twisting action. What a relief to look up from the printed page and grasp the snug warmth of a comfortable room!

Mr. Jablonski has written an inspiring and authentic account of the combat aspects of an important strategic air mission of World War II at the height of its fury. True, there are minor discrepancies, in the preliminary description, such as the date of Rudolf Hess's abortive flight to Scotland, but the spirit of warfare in the air rings true.

Although there is little that a reviewer can add to the author's great combat report, much has been left unsaid about the purpose of the mission. It is in this field of purpose, of "Balaklava Redeemed," that some comment may be useful. Why Regens-
$\dagger$ Edward Jablonski, Double Strike: The Epic Air Raids on RegensburgSchweinfurt, August 17, 1943 (Garden City: Doubleday, 1974, \$7.95), 271 pages.
burg? Why Schweinfurt? What was intended? Had someone blundered?

Regensburg/Schweinfurt compressed in microcosmic form the gamut of American strategic air warfare, from concept to execution. The violence of conflicting emotion in the field of concept and purpose preceded that in the field of combat. Proponents and opponents wrestled in the field of theory. Strategic air warfare was untried; it had no heritage on which to stand and build. In general the American theory of strategic air warfare rested on three basic precepts:

First, that modern great nations were dependent upon industry and integrated industrial systems for the waging of war and for their continued sustenance as great states.

Second, that modern physical structures, on which industries and industrial systems depend, could be destroyed by correctly targeted bombs, if they were properly placed.

Third, that strategic air striking forces could reach their targets and deliver their bombs with adequate accuracy, without sustaining intolerable losses.
Before the trial by combat of strategic air warfare in Europe, there was difference of opinion concerning all these contentions, but especially in regard to the first and the third.

Concerning the first precept, those theorists oriented to surface warfare demanded to know when any great nation had been brought to its knees by air attack. None had. But, then, none had been subjected to massive strategic bombing, either. Even the airmen were at variance. The British accepted the general concept but doubted the American method of selective targeting. They had been driven by experience to a different method, an effort to cripple the industry of Germany by disrupting the lives of German workers. They sought to achieve
the objective described in the Casablanca Directive-to "bring about the progressive disruption and dislocation of the German military, industrial, and economic systems" by bombing German cities which harbored important war industries, till the capability of the German state to wage war and "the morale of the German people were fatally weakened." The method by which the Americans sought to achieve this aim rested upon the careful selection of vital industrial targets and their destruction by precision bombing. The American concept was sometimes described as "bottleneck" targeting and bombing.

Regensburg and Schweinfurt were prime examples of the American concept and method. They were also prime examples of what Air Marshal Sir Arthur Harris of raf Bomber Command derided as "panacea bombing."

Actually neither "bottleneck bombing" nor "panacea bombing" was a suitable expression of the basic concept. The distinguishing feature was analytical selectivity. In its simplest form the target selected resembled a "carotid body," which in the human anatomy is a small mass of cells and nerve endings in the neck, so sensitive and vital that pressure on it will produce stupor, partial paralysis, unconsciousness, and ultimately perhaps even death, if not relieved. The process of selecting and bombing such targets in the body of an enemy state might be described as "carotid bombardment." Schweinfurt was precisely such a target.

Carotid targeting was not the only kind of selective strategic bombing. Munitions factories, such as airplane assembly plants (of which Regensburg was typical), airplane engine factories, tank factories, motor transport factories, submarine building yards, steel mills, and aluminum plants constituted vital but not "carotid" selective targeting. The major category of selective targeting
pertained to systems. Each corporate structure, whether it be the human anatomy or the body of the state, is made operative by the service of vital systems. The corporate body of the state is dependent on such systems as the electric power system, the rail transportation system, the highway and canal systems, the petroleum system, the food distribution and preservation systems, the water systems, and the communications systems. Disruption and neutralization of any of these can render the body inoperative. Strategic targeting requires careful analysis to determine the importance and vulnerability of each system, and the vital targets within the system. Strategic effectiveness requires precision bombing of those targets and continuity of attack to keep them inoperative. Like the human body, the corporate state body is capable of great flexibility and the substitution of one vital element to serve in place of another. But even if substitution or replacement is possible in some systems, both bodies suffer from shock, both require time for repair or substitution, and both require a period of relative tranquility to bring about recuperation. These must be denied if the strategic bombing attack is to be effective. Strategic air attack of these vital systems might be described as "organic systems targeting."

The most difficult aspect of selective bombing operations lies in current appraisal of results. It is necessary continually to appraise the selection itself. Were the considerations that prompted the selection of the targets true and sound to start with? Have they changed? Has the enemy found a substitute? And next, is the target destruction producing the expected results? For instance, if the selected target system was enemy transportation, is the successful bombing of bridges producing the expected result? Has the enemy found a substitute method of moving supplies? It is of little
consequence to report that the bridges have been hit by superbly accurate bombing. The question is, "Has the flow of men, equipment, or supplies been stopped, or greatly diminished, and is it having the effect on the enemy that was anticipated?" Have we selected the proper targets within the target system? Have the proper size bombs been used to insure lasting destruction? Photography, the best source of target destruction analysis, will tell much about damage, but it still leaves much to be determined or deduced. To abandon the target system too soon because evidence of results is not discernible may be very wrong indeed. To carry on the assault when it is not going to produce results is obstinate stupidity. Differentiation between the two is a most difficult art. It proved exceedingly difficult, at the time, to appraise the effectiveness of the attacks upon Regensburg and Schweinfurt.

Appraisal after the war indicated that Regensburg was less vital to the support of the German fighter defenses than had been anticipated; Schweinfurt was proved to be fully as critical as analysis had indicated. It was truly a "carotid target," but it was many months before we found that the bombs had been too small to accomplish the lasting destruction that was planned. Regensburg was a part of a vital element of German military power. Schweinfurt was virtually a "carotid body" in the corporate anatomy of the Third Reich. Their selection was the result of an interesting process.

Regenshurg was an important element of the German fighter production complex. It was the site of a large German fighter assembly plant. Its importance as a target is almost self-evident. Germany recognized her vulnerability to defeat from the air. She belatedly took major strides to provide fighters for her protection. Those fighters had to be weakened if the American air
offensive was to be feasible without extraordinary losses.

Schweinfurt was the location of a very critical element of German industry as a whole and war industry in particular: antifriction bearings, "ball bearings." Over half the antifriction bearing production of the Reich was located there. Furthermore, it was the source of the great majority of large bearings, the kind that are essential to the production of aircraft engines, tanks, automotive vehicles, diesels for submarines, and large machine tools and manufacturing machinery, among other things. Schweinfurt was far more vital to the German war effort than the 52 percent production statistic would imply.

The ball-bearing industry at Schweinfurt was proposed as a target by the Committee of Operations Analysts, which had been assembled by General Arnold to analyze German war industry and recommend targets for operational consideration. An American vice president of the Swedish skF bearing company suggested ball bearings to Air Corps Colonel Guido Perera, who was acting as executive secretary of the Committee of Operations Analysts. The members of the committee quickly agreed. The British Ministry of Economic Warfare enthusiastically endorsed it. Here was a real "carotid body." a constriction through which a vital element of nearly all new products for warfare and much of the productive machinery of industry were channeled. It was a nerve center vital to the German state at war. Stopping the flow through that small orifice could have enormous impact on the production of munitions of all kinds and on German industry as a whole. The Committee of Operations Analysts listed antifriction bearings second among nineteen potential targets for consideration: it was second only to the production of fighters in Germany, and indeed it would affect that also.

When the list of targets recommended for operational consideration came to the Planning Team for the Combined Bomber Offensive, in England, the first three targets in the list of nineteen were accepted with enthusiasm:
(1) German aircraft industry, with first priority on fighter aircraft
(2) Ball bearings
(3) Petroleum.

I was the Director of the Planning Team for the Combined Bomber Offensive. The team had been set up by General Ira Eaker, Commanding General of the Eighth Air Force. Brigadier General Fred Anderson, who commanded the Fourth Bomb Wing, was also a member, as was raf Air Commodore Sidney Bufton. After we had agreed on Schweinfurt, our greatest dread was that the Germans would recognize the dependence of their war effort on ballbearing production. We were afraid they would realize it was an extremely critical feature of their war economy, a vulnerable, concentrated target, and would disperse the factories before we could destroy them. We believed that the thorough and complete destruction of this concentrated complex would produce catastrophic disruption on a very wide scale.

The British underscored the importance of ball bearings from their own experience. A German bombing attack on Coventry had blown out the windows and skylights of a major aircraft engine factory there. Rain and mist had soaked trays of ball bearings waiting for installation. By the time the situation was recognized, the bearings had rusted. Production came to an immediate stop. New bearings were obtained from the factories, which were barely able to keep pace with demand, but it raised at once the question, "What would have happened if the ball-bearing factories had been destroyed?" The equipment for manufacturing ball bearings is both heavy and precise and

is complicated to produce. Engine production would necessarily have been subjected to a long, perhaps a critical, lapse.

In the history of World War II and in light of subsequent investigation and analysis, only one other "carotid body" target was discovered that compared in constrictive importance to ball bearings: the three tetraethyl lead and one ethylene dibromide plants essential to the production of German aviation gasoline. The critical nature, concentrated production, and vulnerability of these plants escaped the attention of the air strategists. After the war, the U.S. Strategic Bombing Survey had this to say:

Virtually all aviation gasoline production came from the hydrogenation (synthetic)

## Regensburg

Deep inside Hitler's Germany on the banks of the Danube River, venerable Regensirurg assumed lat-ter-day vitality as an aircraft production center. In particular it was the site of a large Messerschmitt fighter assembly factory and thus a prime target for Allied bombers. On 17 August 1943, Eighth Air Force B-17 bombers penetrated heacy opposition and blanketed the target area with superb concentration (above). . . . Four hours later fires still burned. Inat the accuracy of the bombing of factories and airfield (opposite ahove) shous to good effect; the hospital at loottom left was all but untouched.
After dropping their lombs on Regenslurg, the B-IIs headed south veer the Alps toward North Africa, on their first shuttle-hombing raid.

plants, and ten of the eighteen hydrogenation plants (including the iso-octane plants) produced 80 per cent of the total aviation production.

A major opportunity in the Allied air offensive against oil was unexploited. Ethyl fluid is an indispensable constituent of highgrade aviation gasoline. The addition of ethyl fluid in very small amounts to gasoline is so beneficial that no modern aircraft is operated without it. Ethyl fluid is made from tetraethyl lead and ethylene dibromide. There were only two tetraethyl lead plants in Germany and one in occupied Francethere were only these three plants supplying tetraethyl lead and one plant supplying ethylene dibromide. These plants were not bombed, although the equipment and processes used were such as to make them highly vulnerable to air attack.

Selective bombing in this case failed because strategists failed to perceive the opportunity. They did not fail to perceive the opportunity presented by antifriction bearings. Here was a concentrated industrial target whose elimination would drastically affect Germany's whole prosecution of the war.

The second precept-that bombs could be produced that could destroy any known man-made structure-was generally conceded, though it took the British Tall Boy 12,000 -pound bomb to penetrate the submarine pens at Saint-Nazaire and Lorient. We consistently underspecified the proper size of bombs. This was most apparent at Schweinfurt.

The third precept-"The bomber will get through," or, more properly, "The air striking force will get through"-was the most crucial one of all. It contended that the air striking force could reach its targets and sustain the bombing offensive without unacceptable losses. If it was false, the other precepts were of little value. Unless the bombs could be put on the targets and the targets destroyed at a cost that was en-
durable, then the whole approach was an exercise in academic futility. In 1943, before the escort fighters had hit their stride, the issue hung in the balance, sustained by the raw courage of the bomber combat crews. The question of penetrating the defenses and sustaining the offensive really depended on three factors:
(1) machines and weapons-airplanes, electronic control and warning systems, antiaircraft defenses, passive defenses;
(2) organization and efficiency, including training and tactical doctrine;
(3) men and commanders-the will, determination, persistence, and competence of the fighting crews and their commanders, up to the Air Force Commander himself.

As for the first factor-machines and weapons-there can be no doubt that we in the Army Air Corps erred in failing to demand and get the development and production of a long-range escort fighter. We should not have been put aside by the contention of the engineers that it was much too difficult. As it was, before the war, we accepted their contention and took the only other path open-fighting our way to the targets with heavily armed bombers employing massed defensive firepower from close formations. The bomber aircraft were superb. The B-17s in particular would take an astonishing amount of damage and still keep flying, and both the B-17 and the B-24 were capable of dealing out a formidable hail of defensive gunfire. But they needed from the first the fine support that was finally provided by the P-47 and the P-51 with droppable fuel tanks.

As for the second factor-organization and training-the Air Corps and the Eighth and Fifteenth Air Forces did reasonably well. The primary failure was in not properly training our gunners in the most difficult of all gunnery: flexible defensive gunfire in air combat. But the painful and costly development of air doctrine and tactics
that preceded the first important strike at industrial Germany was invaluable in all that followed. Development and standardization of procedures, tactics, and doctrine made possible the flexible assignment and control of massive air task forces.

I $_{\text {N Regard }}$ to the last factormen and leaders-the nation was superbly served.

Double Strike impresses the reader with the bold courage and determination of the fighter pilots, both friendly and enemy, and of the bomber combat crews. The essence of valor frequently burgeons from the reaction of riposte, the impulse to fight back. Certainly this pervaded the fighter pilots, who not only could fight back but could move to the offensive against their opponents. Most men respond with anger as well as fear when they find that someone is deliberately trying to kill them, and that anger spurs them to counter action and tends to overcome the fear.

This psychological crutch to courage did not apply, however, to all members of the bomber crews. It applied in some measure to the gunners, who could shoot back, though they could not move to the offensive. But it was entirely lacking to the pilots and bombardiers and navigators. They had somehow to rise above the personal danger surrounding them and place the accomplishment of the mission above personal survival. There is very little emotional support for courage to be derived from the destruction of buildings and structures that are five miles below, barely discernible, and completely strange and impersonal. Courage and determination have to stand on their own merit, without benefit of anger, and surmount the crash of conflict all about. Those men, to my mind, were courageous beyond description.

This superb dedication to fulfillment of
the mission did not surface by accident or by some sort of psychological osmosis that was roused by combat. It was the product of organization, indoctrination, and personal inspiration. This feeling flowed from the top down and permeated the crews. It was the essence of morale and esprit de corps, and it stemmed from belief in the national purpose and from years of devoted service to the Air Corps. It was the ultimate product of leadership. In the process of development of the powerful U.S. Strategic Air Forces, consisting of the Eighth Air Force and the Fifteenth Air Force, it flowed downward from General Carl Spaatz and General Ira Eaker and General Doolittle and General Twining to the division commanders and wing commanders and crews.

It had taken years to create, and it took months to permeate the combat crews, most of whom had been nonprofessionals before the war. The crews were sustained by the conviction that destruction of the targets was vital to America's war effort, that it was possible of accomplishment, and that it was worth the cost that would be levied in combat.

The two bombardment division commanders of "double strike" were Curtis LeMay, whose superb combat record has become a legend, and Bob Williams. LeMay needs neither introduction nor exposition. His leadership and performance in combat were outstanding. Bob Williams's achievements are less well known, but his stature looms as great in the eyes of his men and associates. Actually, neither could exercise much command control during the mission. Their contribution had come in the months of training and indoctrination and inspiration. But their presence on the mission meant a lot to the crews and to the conduct of the operation.

Bob Williams was a few years senior to the rest of us. He had been one of the
few chosen to pilot a B-17 in the early days of the 2 d Bombardment Group at Langley Field, Virginia. To me he seemed the very personification of "the officer and gentleman." As a commander he was urbane and personable without any hint of familiarity. He was an exacting but an understanding taskmaster, and whatever the job he demanded, he could do it better himself. It has seemed to me that the perfect achievement of leadership lies in getting other people to do what you want them to do because you are convinced that it is both right and necessary to do, and they are inspired to want to do it. To my mind, Bob Williams provided that kind of leadership. He was the "follow me" kind of leader.

Bob Williams had been selected to go to England as an observer before the U.S.
entered the war. He was wounded and lost an eye during a heavy air raid on London. He had chosen to view the scene from the roof of his hotel rather than seek safety in a shelter. A bomb falling close at hand blasted nearby windows, and glass shards damaged one eye beyond repair. This would have sent most men to retirement or to inactive posts. Williams recovered enough to keep right on going.

On the Schweinfurt mission, Williams and his division went through torture during the hours of waiting for the weather to clear enough to permit takeoff. They knew that the carefully integrated plan of operations had been thrown out of balance by the fog that held the lst Bomb Division on the ground long after the 3d Bomb Division had departed.

General Nathan Twining, who served

many years with Bob Williams, says: "He is a wonderful man. Solid. Calm. Strong character. Competent. Great pilot. Great leader. One of the best."

I had commanded the lst Bomb Wing (later designated the lst Bomb Division) until about two months prior to this mission. My distress in leaving the command to return to the planning business was eased by the knowledge that the reins were being taken up by a man who had my highest admiration and confidence.

Next in the ascending hierarchy of combat command at the time of Regensburg/ Schweinfurt stood Fred Anderson. I think no bomber command has seen his superior. His contribution to the strategic air war in Europe was the equal of that of LeMay in the Pacific. He had enough combat experience to know what he was de-


## Schweinfurt

In Bataria on the Ricer Main, Schweinfurt ino longer the mere "pig crossing" its name suggests) was of primary concem to the Allies as manufucturing center for ball bearings and aircraft components and as a communications nucleus. The 17 August bombing (oppasite) was concentrated on the murshalling yard and hull-bearing factory and adjoining areas (A); with a heary focusing on a smaller industrial plant $(B)$; and several direct hits on aircraft component and ball-hearing units (C).

With smoke rising from the pummelled city below. B-17s head back toward the Ci.K. The mission was a success but at considerable cost in men and aircraft.
manding, and beneath a rugged exterior he had a sentimental affection and admiration for the crews. His command presence was clear and firm.

Fred believed in the importance of his overall mission. He believed that the sources of German fighter strength must be cut away at all costs. Regensburg was an important contribution to that end. He also believed in the Schweinfurt mission. He had been a party to the planning that selected both. The measure of his command courage is attested by the fact that he launched a second attack on Schweinfurt two months later, after the carnage of the first one.

Brigadier General Frank O'D. ("Monk") Hunter, an ace of World War I and one of the most charismatic and courageous fighter pilots of his day, commanded the VIII Fighter Command in the early days of the Eighth Air Force. The brunt of adjustment of men and fighter airplanes to a bitter air war in a sophisticated environment fell upon him. He sought desperately to extend the range of his fighters by improvising droppable fuel tanks, so that they could fill the role of escort fighters. By the time of Regensburg/Schweinfurt, the command had passed to Major General "Bill" Kepner, as dedicated a member of the strategic air striking force as there was. At this time the problem of extending the range of the P-47 fighter had been only partially solved, and the P-51 Mustang had not yet appeared on the scene. The pilots of the P-47s did a magnificent job within the limits of their range, but they had to leave the bombers at the German border and turn back.

Finally, there was a top commander for this double mission who carried an additional load that was little known to anyone. Lieutenant General Ira Eaker, as Commanding General, Eighth Air Force, stood as a firm supporter of his combat commands and a stout shield against attack from behind
(i.e., from the high command, from political dissidents, and from the critical press). It is hard to overemphasize this role. The bomber commander needed all the strength at his command in directing the bloody fight. He needed that shield against attack from the rear. Higher headquarters, if it is thousands of miles away in a different environment, can hardly be expected to understand fully the perils and vicissitudes of daily operations, and critical press comment often outruns the competence of the commentator.

Blistering criticisms and imperious demands from Washington came crackling over the air. Someone had to filter them, provide sensible responses, and shield the combat commanders, who were wrestling with terribly difficult ordeals. I do not suggest that incompetence should be shielded or tolerated, but competence itself can be shattered by unreasonable attitudes and demands from above.

Not many modern commanders could enjoy the liberty taken by the Duke of Wellington when he supposedly responded to his masters in England to the effect that if he took time to answer all their ill-conceived questions he would have no time left in which to fight the war. But the impulse can easily be understood.

Ira Eaker was a stalwart leader who urged, encouraged, sometimes influenced, sometimes directed the superlative team below him, and always absorbed the attacks from the rear. Ira, too, believed in what his command had set out to do. He had given approval to the selection of Regensburg and Schweinfurt. After the mission a veritable storm of criticism and abuse fell upon the Eighth Air Force from people who heard only the dreadful toll in men and airplanes and who understood neither the accomplishment nor the purpose.

Later in the war Eaker served in a similar role for the Fifteenth Air Force in its
crucial offensive against German fighter production-including missions against Wiener Neustadt and a return mission against Regensburg.

## $E_{\text {dward Jablonski has provided }}$

 a fascinating account of the missions on 17 August, though their importance would be better portrayed if the strategic purpose had been described and appraised. The description of the missions would also have profited from an outline map. I must take issue with Mr. Jablonski on one point, however. In his final paragraph he asks, "What is war?" and he answers, "War is, I repeat, killing and destruction; that is the ultimate and bitter truth, whatever you stand for."This is half a truth-the half that is embraced by many authors and most members of the news media and that has been accepted by most people. It is the popular view. Often, but not always, it is right. But killing and destruction are just the manifestations of war, not its purpose. It is the purpose of war that can be either unspeakably evil or unselfishly ennobling. Wars of aggression can be prompted by avarice or the ambition to conquer and impose control; resistance to such aggression, which also is war, can be prompted by willingness to pay high costs for defense of country or preservation of liberty. The two cannot simply be lumped together and condemned as equally brutal. Failure to resist, failure to fight for high purpose, can also be condemned.

As for Regensburg/Schweinfurt. how can the missions be appraised? What were the results? Were the strategic purposes sound? What were the mistakes? What were the lessons?

The first mission against Regensburg struck a powerful blow, though not a mortal one, at German fighter production.

Total Me-109 fighter production dropped from 725 in July to 536 in September ( $74 \%$ ) and 357 in December (49\%). But in the long run defeat of the German fighter force stemmed from a number of causes, and it cannot be concluded that shortage of airframes was the critical one. Postwar examination and analysis indicate that the bombing effort should have been directed against airplane engine factories rather than airframe assembly factories. Loss in combat of competent flying training instructors and loss of aviation gasoline due to bombing of synthetic oil plants were even more important contributing factors to the final defeat of the German day fighter force by the combined efforts of American air striking forces. But the attack on Regensburg certainly contributed to the defeat of the Luftwaffe.

Schweinfurt came closer to producing a decisive result. This first attack reduced production to 35 percent, a shattering blow. But the effect was temporary. The factory buildings were heavily damaged. There were eighty hits in the targets. But the heavy machinery survived. The bombs were too light and they were fuzed for insufficient delay.

The bomb loads were $100(0)$-pounders $(28 \%)$; 500 )-pounders ( $50 \%$ ); and incendiaries $(22 \%)$. They should all have been $1(0)()-$ pounders and 2000 -pounders. This would have meant fewer bombs and fewer hits by one bomb division. Actually both bombardment divisions should have been directed at Schweinfurt to assure an adequate number of hits with the heavier bombs. Albert Speer also reached this conclusion. Real and final destruction of the ballbearing factories and machinery would have produced enormous effects.

The German Minister of Armaments and Production is perhaps the best authority on the subject. In his book, Inside the Third Reich, Albert Speer says:

We barely escaped a further catastrophic blow on August 17, 1943, only two weeks after the Hamburg bombings. The American Air Force launched its first strategic raid. It was directed against Schweinfurt, where large factories of the ball-hearing industry were concentrated. The next day I inforined Milch's colleagues, "We are approaching collapse in our supply industry. Soon we will have airplanes, tanks, and trucks lacking certain key parts."
To the German Minister of Armaments and Production, the attacks on Schweinfurt were frightening. He later stated that there was no alternative but to repair the facilities as rapidly as possible since to move the factories would hold up production for several months. Efforts to meet urgent requirements through increased imports from Sweden and Switzerland met with only slight success. "What really saved us," he wrote, "was the fact that from this time on [after the second attack in October] the enemy, to our astonishment, ceased his attacks on the ball-bearing industry."

Speer was asked after the war what would have happened if there had been concerted and continuous attacks on the ballbearing industry-or if the Schweinfurt industry had been thoroughly demolished the first time. He replied:

Armaments production would have been crucially weakened after two months and after four months would have been brought completely to a standstill. In those days we anxiously asked ourselves how soon the enemy would realize that he could paralyze the production of thousands of armaments plants merely by destroying five or six relatively small targets.
This, of course, was the basic strategic concept behind the American operation. This was "carotid bombardment."

The sentimental briefing officer who predicted victory by Christmas may not have been too far from right. Still, the U.S.

Strategic Bombing Survey would report, "The Germans were able to survive the initial shock, take successful counter measures, and thus boast, 'No equipment was ever delayed because bearings were lacking.' "But the margin was very small in the fall of 1943. For months bearings were delivered by motorcycle messengers carrying small numbers in knapsacks to production lines that were gasping for life.

Where, then, lay the fault, and what was learned?

There were two tactical faults: one pertaining to timing, one pertaining to bombs.

Our anxiety lest the target be moved or dispersed led to premature attack, before we were ready in strength. The plan for the Combined Bomber Offensive was based on the concept that losses in bomber aircraft increased with depth of penetration into Germany but decreased in percentage as the bomber forces grew larger. Phase I, with relatively small forces, called for shallow penetrations. As the size of the forces increased and escort fighters extended their range, the depth of penetration increased until Phase IV included all of Germany. One exception was made: Schweinfurt. Because of its importance and the fear that the opportunity would be lost, Schweinfurt was put in Phase I, in spite of the deep penetration into Germany and the limited range of the fighters. Hindsight shows that this was a mistake. Schweinfurt should probably have been put in Phase III, when we had much larger forces and escort fighters that could go all the way.

As indicated earlier, the bombs should have been much heavier, and both bombardment divisions should have been concen-
trated on ball bearings. The combat losses would have been no greater, and Schweinfurt would have been completely destroyed as a source of antifriction bearings, with the result so feared by Albert Speer.

The purpose was sound. The performance was splendid. As so often happens in war, the attainment of full success eluded the combat command because of faulty timing and an erroneous operational decision: survey of the damage after the war showed that the bombs were too small. The mission would have been more effective if both divisions had been directed against Schweinfurt, but it must be remembered that Regensburg (German fighters) ranked ahead of Schweinfurt (ball bearings) in strategic priority.

The mission produced powerful but not mortal blows. That they were not mortal seems almost an accident.

As an act of strategic air warfare, the mission was magnificent. It was strategic air warfare with a sound purpose; it was air combat at the height of valor; it was unrelenting perseverance throughout a long and bitter fight against an able foe.

As Mr. Jablonski points out, the mission against Schweinfurt was originally planned as a combined operation with raf Bomber Command. In a regrettable change the raf follow-up was eliminated.

Edward Jablonski's book should be widely read, and Regensburg/Schweinfurt should be remembered wherever airmen meet as an example to the Air Force of what its men can do in a cause to which they are committed.

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Captan Chris L. Jeffemes M.P.A., University of Pittshargh) is an instructor in the Department of Political Science. USAF Acaderny. As a navigator, he has flown 817 combal airlift missions in C-1.30s, strategic arlift in MAC: C-14ls, and in the Belfas transport arcraft while on exchange assignment with the Royal Air Force. Captain Jefferies is a Distinguished Ciraduate of Squadron Officer School and of the Jenior Management Course. RAF School of Administration


Majoh Generrl Haywood S. Hansell. Jr. USAF Ret. B.S., Georgia Institute of Technology) was active in formulating the air plins instrumental in defeating Niazi Germany. Other assignments included Deputy Theater Air Officer, ETO: Commanding General of 3d Bombardment Wing, later of Ist Bornlardment Division, Eighth Air Force: Air Member, Joint Plars Committee. JCS: D/CS. $\mathrm{H}_{\mathrm{y}} \mathrm{AAF}$, and C/S. Twentieth Air Force: and Commanding General. XXI Bomb er Command Retired in $19+6$ but recalled for the Korean War. General Hansell retired again in 1955. He is author of The Air Plan That Defeated Hither (1972)

## AWARD



The Air University Review Awards Committee has selected "The October War: A Political-Military Assessment" by Major Bard E. O'Neill, USAF, as the outstanding article in the July-August 1974 issue of Air University Review.

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[^0]:    in the militia, engaging in production . . marching . . . and marksmanship.

[^1]:    Noles

    1. Excerpts from Wu Man's play and Teng Tos essays can be found in Jack Gray and Pastrick Cavendish. Chinese Communism in Crisis: Maoism and thrCultural Revelution .New York. Praeger. 19681, pp. 153-58 and 166-71.
    2. Kikuzo Ita and Minoru Shibata, "The Dilemma of Mas Tse-sung," in China Quarlerly, No. 35 (July-Septemiser 1968ı, p. 67.
    3. Edward E. Rice. Mau's Way Berkelev: University of California Press, 1972). p. 240.
    4. Ihid., pp. 257-59.
    5. thid., p. 293.
    B. For detals, see Harvey Nelson, "Military Forces in the Cultural Revolution. China Quarterly. No. 51 Julv-September 1972), pp. 44-47.
    6. Thid., pp. $+49-50$.
    7. MBid., p. 453.
    8. IInd., p. 455.
    9. Ibid. p 458.
    10. Jürgen Domes. "The Role of the Military in the Formation of Revolutionary nnmittees. 1967-68," China Quartariy. No. if (October-December 1970), p 113.
    11. Ihid
    12. Jürgen Dornes. "Parly Politics and the Cultural Revolution." in Frank N. Traeger and William Henderson, editors. Communist China. 1949-1969: A Tuenty- Year Appraisul New York: New York Universitv Press. 1970). p. $9(1)$
    13. Rice. pp. 454-35.

    15 Ellis Joffe. "The Chinese Arony after the Cultural Revolution: The Ef fects of Intervention, China Puarterly. No. 55 (July-September 1973). p. 455.

    16 For an excellent discussion of the rule of the PLA in Cultural Revolution, see Joffe, pp. 450-56.
    17. Colonel D M Marks, "The Ussuri River Incident as an Factor in Chinese Foreign Policy." Aip C'nicentily Reciew. XX11. 5 (Julv-August 1971!. P. 5 .

[^2]:    Notes

    1. Steve dArazien, "Blue Water Boondoggle," The Nation. November 10, 1970, p. 13.
[^3]:    Notes
    Ceorge Schwarzenberger, A Manual of Intermational Law, 5th edition New York: Frederick A. Praeger, 1987), p. 104. A copy of the text of the Convention and other relevant documents may be found in S. Huston Lay, Rohin Churchill, and Myron Nordquist. editors, New Directions in the Lau of the Sea, Dorumenks, vol. 1 (Dol hbs Ferry. N.Y.: Oceana Pultications, Ince, 1973): see in particular "Convention on the Territoriad Sea und the Contuguous Zone," (. Geneva, 1958). pp. 1-10. and "Convention on International Civil Aviation," (Chkago. 1944). pp. 11-12.
    2. C. Jahn Calnmbos. The International Law of the Sea. ©th revised edition (New York: David McKay Co., Inc., 1987), Pp 197-98.
    3. Leigh S. Ratiner. "United States Oceans Policy: An Analysis," foumal of Muritime Law and Commerce. II, 2 (January 1971). pp 232-33.
    4. J L. Brierly, The Law of Nations, Bith edition (New York: Oxford Uni versity Pres, 1963), p. 208.

[^4]:    5. Ratiner, p. 228.
    6. Ihid. p. 283
    7. Friedhelm Kruger-Sprengel, The Role of NATO in the Use of the Sen
    and the Sealped (Washington: Woodrow Wison International Center for Scholars, 1972). p. 24 f.
    8. Hxd
    9. Louis Henkin, "The General Assernhly und the Sea," The Law: of the Sea. The United Nations and Orean Management, Aroceedings of the Fifth Annual Comferenice of the Law of the Sea Insttute (Kingston, R.I.: Univer-
    sity of Rhode Island, 1971), p. 10.
    10. H. Gary Knight. "Law of the Sear Negotintions 1971-72-From In temationalism to Nationalism." San Diego Law' Revjeu: IX. 3 (May 1972), pp 385-86.
[^5]:    Notes
    1 Manpower Administration Order No. 2-88. Fehnury 8, 1988.
    2. Ruth Sheeffer, "Nondiscrimination in Employment: Changing Perspectives, 1903-1972" The Conference Board. Inc.., 1973, p. 3.
    3. Anthony C. Camphell, "An Unsentimental Joumey into the Hardcore." The Conference Board Record, 1971. p. 9.
    4. Education, Training, and Employment of the Disadvantaged, Studies in Public Affairs, No. 4. 1999, p. 4.
    5. Darwin W. Bolden. "Black Business Development-lts Role in the Minority Economic Empowerment." speech hefore the American Bar Association, Sheraton-Hotel, Chicago, April 1989.
    8. H d d
    7. Alen R. Langer and Ruth G. Shaeffer. A Research Report from the

[^6]:    Conference Board. No. 219. 1970. p. 5.
    8. Studies in Public Affairs. No. 4. A Research Report from the Conference Board 1909, p. 8.
    9. "Industry"s Aid to Education," Studies in Public Affatrs, No. 1, 1909.
    10. Anthony C. Campbell. The Conference Board. Inc.. 1971. p. 9.
    11. A Research Report from the Conference Board, 1969. No. 4. pp. 11. 58.
    12. Ibid, p. 58.
    13. James S. Spain. "Black Executives: The Darkie at the Bottom of the

    Stairs," MBA Enterprises. Inc., 1970, p. 36.
    14. Captain Drue L. DeBerry. "Vietnamese Air Force Technical Training 1970-1971." Air Universify Review, January-February 1973, pp. 43-51.

[^7]:    Notes
    1 Mesage dated 021.50IZ Feb if. from CSAF WASH DC to AIC; ALMAJCOM "For: Personal for Communders. Subject: Restriction ort command of flying unts In USC 8577. The Chief of Staff has reviewed the past decisons that have leeen made with respect to proposals to amend or repeal the statute which prohibits the utilization of navigaton as commanders of hying units 10 USC $\$ 5 \mathrm{Si}^{7}$. After considering all aspects, including the fact that this legal prohibition can be viewed by some lnoth within and outside of the ib Jorce as discriminatory, he has decided that initiative should he taken to repeal the prohibition Accordinglv, action was taken on 29 Januarv to advise Mr. Hebert and other members of Congress of Air Force intent to seek repeal of 10 USC 8571 . You will be advised when this action has been completed at which time appropriate publicity will he handled hy this Headquarters."
    2. Sec, 8577 . Title 10, US Code, as quoted hy George Fonter in "Lalw' Limits Commands." Air Forre Times. June 6, 1973, p. 1.
    3. Air Force Manual 36-23. Officer Career Management. 1971, p. 8-1.
    f. Thid., p. 9-1.
    5. AFM 36-1. Officet Classifucation Manual, 1971. p. 9-3.
    6. Of 375 rated general officens lout of $411 \%, 35996$ ) are pilots, 16 :4\%) are navigators iSource: Ceneral Officer section, DCS Personnel, Hq USAF. 12 December 1973.1 Compare these figures with the total rated-force distribution: pilot $72 \%$ : navigator 28 .

    - Air Forer Times. 13 Februarv 1974. p. 19. The remaining $7 \%$ it officers were 2 fight surgeons. I fight nurse, I Alight observer.

    8. Ceneral offeere if navigators ifm, 32 nonrated (990). Sew nnte (8. ludeed. It is highlv inlikely that a navigator crould have heeome a liSAF Vice Chief of Staff, yet a nonrated officer has held the position.

    9 dinalyms of FY 1971 Timporary Majon Prmotions. USAF Vilitary Pers. wonnel Center, undated. FY 1972 results show a slight increase in favor of navi-

[^8]:    gutors: $34 \%$ of those selected for serondary promotion were navigators. Source: Air Force Times, January 5, 1972, p. 4,
    10. Figures provided by the Promotion Secretariat. USAF Military Personnel Center, Randolph AFB. Texas, 11 December 1973.
    I1. While it is recognized that the navigator thortages are "offeially" attributed to a greater demand for navigators than planners anticipated in the 1900s (long life of the B-52 force. the use of navigators in the back seats of fighters, etc.1, it is argued here that the shortages are due to navigator disaffection.
    12. The Air Fnrce Offirers' Carper Newsletter, August/September 19\%1. P I
    13. "Letters to the Editor." Air Forre Times. September 1. 1971. p. 64. See also Air Firce Times, Septemlier 27. 1972, p 60.
    14. IViul., August 4. 1971. p. 52.
    15. Ihid., Novemher 21, 1973.
    16. D. F H. Grocott. 'Navigators' Careens," letter to Lieutenant Colonel Robert O. McCartan. Hq USAF AFPIRR, 13 July 1970. Photostatic copv
    17. P Plans I a RAF. "Specific questions posed by Capt. C. L Jefferies USAF," Letter to Capt. C. L. Jefferies, 8 Feh 1971
    18. Grocotl.
    19. P Plans Ia RAF!. In addition, an indication cun the infested by comparing the numiwrs of one-star navigators in the two air forces to therr total officer strengths: As of Juls 1970, there were six one-star navigators out of a total of $20,0 \mathrm{ON}$ offices in the R.AF, or a ratio of $1: 3333$. In the USAF, there are presently In one-var navigators out of atotal officer force of 113,500 , or a ratio of $1: 11.350$ ).

    20 Air Force Times, "Letters," Octoleer 11. 1972. p. 13.
    21 AFM 36-23, p. 8-1, referring to qualifivations for 1 FSC: Mast i Aır Commander).

