

A COMPARISON OF TWO MILITARY INNOVATORS: BRIGADIER
GENERAL WILLIAM "BILLY" MITCHELL AND
VICE ADMIRAL HYMAN G. RICKOVER

by 149

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PREFACE

One of the major tasks of the military establishment is research and development. It is directly related to preparing for any possible contingency in future warfare. The usual approach to planning and procuring equipment is, or rather stems from, an analysis of the previous conflict. This, along with an appraisal of specific technological advances both during and following the last war, forms the concrete material from which plans, preparations, tactics, and weapons are developed for a future conflict. Differences naturally arise with different interpretations of what are regarded as lessons of the past war. Each service will base its analysis of the past and its projection of the future on the specific missions traditionally assigned to it. By this very fact, a difference in analysis and emphasis will exist. One service may view something as particularly significant and vital while the others may relegate it to a secondary order of importance. This is an inter-service "conflict", and in peacetime, with limited funds, it is important to convince the fiscal authorities that a certain project is important for the execution of that service's mission.

There is however another factor involved in gaining the acceptance for a new weapon or concept. This is an

intra-service factor involving what often is a clash of viewpoints and personalities as to the course to follow within the service. At times these disputes, depending on the personalities of the men involved, can become very bitter. This is especially true when there seems to be an uncalled for and short-sighted intransigence at the top. The positions of leadership in a service are usually occupied by men who were the leaders in the previous war. These men "made their fortunes" with the weapons and concepts of that past war. Since these proved successful they are often indifferent and at times even hostile to a new innovation with which they are not intimately familiar. Far too often their realm of speculation is limited to the "ifs" and "buts" of the last war. It therefore is necessary for innovators and innovations to overcome the inertia within a service and gain the support of the hierarchy before they can venture into competition among the services for financial support of an item needed for the military preparedness and safety of the country.

To obtain the general acceptance for a new concept that has met with opposition, and even if it has not, ceaseless and dedicated work on the part of a few farsighted individuals is often needed. These generally have to be persons within the military establishment who have enough influence, are of a high enough rank, and have enough time in the service so as to be fully acquainted with the inner machinations of the service. There has to be a thorough knowledge and competency on

the part of the innovator in the field that improvement is being sought in, and also the will to carry on the fight against great odds. Admittedly, few persons possess these qualities and even fewer are also good enough administrators and public relations men to be able to carry their fight outside their service to achieve the general acceptance of their program.

The purpose of this thesis is to compare two individuals who attempted to establish their concepts and innovations in their respective services against opposition; what they proposed, how they worked, and why one failed while the other succeeded. Brigadier General William "Billy" Mitchell of the Army attempted to make the airplane the primary weapon in the United States defense arsenal as well as create an independent Air Force during the years of 1919-1925. Vice Admiral Hyman G. Rickover of the Navy worked to develop nuclear propulsion and to build an atomic submarine for the Navy during the years of 1946-1952. Each officer's career and background, the state and nature of the military establishment of their times, and the peculiarities involved in the nature of the object and concepts each attempted to introduce are subjects which have so far never been explored on a comparative basis.

No attempt has been made to build an exhaustive bibliography of works on both Mitchell and Rickover. What has been attempted is to gain an insight into the problems encountered by these men in their roles of military innovators

and how each handled his problems in an attempt to achieve a satisfactory conclusion. In other words, this is a comparative study in the problems of technical innovation in the defense services.

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CHAPTER I

MITCHELL'S AND RICKOVER'S BACKGROUNDS

Brigadier General William Mitchell

William "Billy" Mitchell represented the third generation of a rather well-to-do and influential Wisconsin family. He was born in Nice, France, where his parents were vacationing, in December of 1879.

His grandfather, Alexander Mitchell, a Scottish immigrant, amassed a considerable fortune through banking and speculating in railroads, but little of this money remained by the time "Billy" could have inherited it, for John Lendrum Mitchell, Bill's father, spent well without adding to his capital while the largest share was lost in the panic of 1897. Other than being too liberal with money, the senior Mitchell was a successful politician who represented his state in the United States Senate from 1893-1905.¹

William Mitchell inherited a record of success and enviable achievement on the part of his grandfather and father that would be hard to follow. In Wisconsin the Mitchell name was sure to open doors closed to most others, while his father

¹Major Alfred Hurley, USAF, Billy Mitchell: Crusader for Airpower (New York: Franklin Watts, 1964), 2.

being a Senator also helped to assure William Mitchell of a more than average chance of success. So it seemed that the future General would only have to choose his field and family inertia would provide the initial propelling force for a rapid rise. To the dismay of his family, he chose the Army.

William Mitchell's early youth was spent on the family estate in Wisconsin where he became an expert horseman which was to be a great practical value to him during his early years in the Army. Educated at an Episcopal preparatory school and Racine College in Milwaukee, he entered Columbian University in Washington, D. C., now George Washington University, in the fall of 1895.²

When the Spanish-American War began in 1898 he was a junior and, of his own admission, was thoroughly bored with school work. The war seemed to offer him the excitement that he was looking for and over the objections of his parents, his father was against the war, he left school and enlisted as a private in the First Wisconsin, a volunteer regiment. Although they had objected to his joining the Army, this did not prevent his family from looking out for his best interests once he had committed himself. Arriving in Florida with his company, he accepted the opportunity of becoming a Second Lieutenant in the Signal Corps then commanded by General Adolphus Greeley, a family friend.³

²Hurley, Billy Mitchell, 3.

³Isaac Don Levine, Mitchell, Pioneer of Airpower (New York: Duell, Sloan and Pearce, 1943), 22.

To his extreme disappointment he did not reach Cuba until after the war had ended. While there he helped string telegraph lines to provide a communications system for the Army. But, occupation duty was not what he had in mind when he enlisted and he constantly wrote to his parents pleading with them to use their influence to get him transferred to the Philippines where the guerrilla campaign against Aguinaldo's insurrectos was just beginning. In the end Mitchell's pleading prevailed against the real wishes of his parents, and he was transferred to the Philippines.⁴

The campaign there provided young Mitchell with every ounce of excitement for which he had been looking. The rigors of the guerrilla campaign and the wild jungle terrain over which much of it was carried on was a sufficient test for any man. The young lieutenant handled himself very well and did an excellent job of providing the division of Arthur MacArthur, father of Douglas MacArthur, with telegraph communication. The high point of his service in the Philippine campaign came when he captured Aguinaldo's Adjutant General, Mendoza.⁵

Whereas the drab occupation duty in Cuba had soured him somewhat on army life, the excitement of the Philippines probably first made him give serious consideration to the Army as a career possibility.

⁴Levine, Mitchell, 37.

⁵Ruth Mitchell, My Brother Bill (New York: Harcourt, Brace and Co., 1953), 57.

With the acquisition of territories outside the continental United States the demands upon the Army increased, requiring a much larger standing army than had ever been had before. This was met by the Army Act passed by Congress in February, 1901, which increased the size of the Regular Army from 26,610 to 100,000 men. The moment of decision was at hand for Mitchell, he was offered a commission as First Lieutenant in the Signal Corps of the Regular Army. He had entertained hopes of transferring to the cavalry but the opportunity never presented itself and after little hesitation he accepted the new commission becoming a Regular Army officer on April 26, 1901.⁶

Mitchell's next major tour of duty was in Alaska. The Army Signal Corps was given the job of establishing communications in that neglected possession of the United States which was experiencing a rapid influx of settlers as a result of the discovery of gold, as well as becoming strategically important. He spent two years in Alaska supervising the laying of telegraph lines. As a result of the excellent work he and his men performed he was promoted in 1903 and at the age of twenty-four he became the youngest captain in the Army. The Alaskan expedition also gave him the material for an article which was published in the National Geographic Magazine.⁷

He returned from Alaska and married Caroline Stoddard.

⁶Hurley, Billy Mitchell, 8.

⁷Mitchell, My Brother Bill, 176.

The marriage seems to have been engineered by the mothers of the couple who had been close friends since their school days. His divorce, nineteen years later, was to be a source of embarrassment for him, coming at the time of his first "fight" with the Navy over the results of the bombing tests conducted against ships off the Virginia capes.

Mitchell's friendship with General Greeley gained him an assignment at Fort Leavenworth, Kansas, the home of the Infantry and Cavalry School as well as of the newly founded Staff College and Signal School. Mitchell served as an instructor in the Signal School and commanded the Signal Company at the Fort.

This was a very choice assignment and could not have come at a better time. He had ample field experience from his work in Cuba, the Philippines, and Alaska. What he needed now was more theoretical knowledge and this he was able to receive at Leavenworth. Also very helpful was the fact that as commander of the post Signal Company he had to provide signal support for all field maneuvers of the Infantry and Cavalry School as well as the Staff College, thus helping him to test any new ideas and concepts on the spot.

By 1907, Mitchell had held responsibilities very few officers of his age could match. He had an enviable record and to many officers who knew him, as well as to himself, he seemed to be well on his way to a high position in the Army. This conviction was furthered when, in 1907, he was the first

signal officer to attend the School of the Line and after that, the Staff College.⁸

After another two-year tour of duty in the Philippines Mitchell's promise of greatness seemed to climb on an even firmer footing when in 1912, still as a captain, he was chosen one of twenty officers to serve on the Army General Staff. His exuberance over this appointment as well as his goal can be seen in a letter to his mother: "If fortunate, I may be a general before many years have passed."⁹

By the time he arrived in Washington, D. C., Mitchell was thirty-two and had fourteen years service to his credit. He put all of his energy into the new job, one of the benefits of which, in his opinion, was the chance to cultivate social and political contacts. The high pace of his social life required more money than was available to him from his captain's salary, and he frequently had to borrow from his mother.¹⁰

It was at this time that Mitchell first took an interest in aeronautics. Since aviation was a division of the Signal Corps and Mitchell was the only Signal Corps officer on the General Staff, it was only natural that such problems as involved aviation should be referred to him. This though was not his primary job as a member of the General Staff. It is interesting to note that Mitchell fully agreed that aviation

⁸Hurley, Billy Mitchell, 12.

⁹Ibid., 15.

¹⁰Ibid.

should be kept as a branch of the Signal Corps, and with legislation restricting flying duty to unmarried officers not older than thirty.¹¹

When the war in Europe began, he wanted to go there as an official observer from the United States but his request was denied. So, when his tour of duty with the General Staff ended, in 1915, he was promoted to major and assigned to the Aviation Section. He was happy about his new assignment for it represented a return to command thus relieving him of the desk work to which he had been limited while on the Staff.

Along with building up the Aviation Section he began to take a personal interest in flying and, at his own expense, took flying lessons. At last, because of his staff background, his position in the Aviation Section, and his qualification as a pilot, Mitchell was assigned as an aeronautical observer and sent to Europe in March, 1917.¹² By the time he reached France, the United States had declared war on Germany, and he busily set out to study Allied aviation. He reached the rather obvious conclusion that Great Britain, France, and Germany had far outpaced the United States in this aspect of warfare and he became an avid student of French and English equipment, methods, and policies. In seeing the employment of the airplane on the World War I battlefield and in talking with the

¹¹Burke Davis, The Billy Mitchell Affair (New York: Random House, 1967), 24.

¹²Levine, Mitchell, 89.

Allied airmen he came to an understanding of the potentialities of airpower not yet appreciated in the United States. The chief influence upon him at this time was probably Major-General Sir Hugh Trenchard, commander of the British Royal Flying Corps, in whom Mitchell, no doubt, saw visions of himself and the possibilities of his future. Trenchard advocated use of the airplane as an offensive weapon, to be used directly against enemy forces in destroying their will and means to sustain operations in the field, rather than relegating the airplane merely to the role of an infantry observation and support weapon.¹³ Mitchell was not only exposed to this concept theoretically, but saw it in actual practice.

In the Nivelle offensive, the French had concentrated all of their fighter aircraft under the control of an air officer not attached to a ground commander in an attempt to engage the German airplanes and through a campaign of attrition drive them out of the skies. Once this end was to have been accomplished, the French airplanes would have free reins to make deep thrusts into the German rear areas to interdict their lines of communication and supply, thus effectively limiting their fighting capabilities at the front.

While the French attempt to drive the German air force out of the skies failed, Mitchell nevertheless was in sympathy with their aims and concurred in their line of thought. Mitchell of course also realized that the success of an air

¹³Ibid., 96.

forces in this type of an independent role would no longer relegate it to the role of an auxiliary of the land forces. As an arm capable of independently producing a decision on the battlefield its status would be greatly enhanced as would Mitchell's position within the American defense structures as one of the leaders of Army aviation.

Also of great interest to Mitchell was the General Headquarters Brigade of the Royal Flying Corps, established by Trenchard, which was not attached to a ground unit. Its role was, as Trenchard explained, to work against the German army's capabilities of procuring replacements, supplies, and conducting combat operations.¹⁴

Mitchell was promoted to Lieutenant Colonel in May of 1917. By September he became a full Colonel.

Pershing arrived in France in early June, 1917, and made Mitchell his aviation officer. Mitchell thereupon recommended the establishment of a tactical and strategic aviation force with the tactical giving support to ground operations while the strategic would operate much like the General Headquarters Brigade of the RFC. While Pershing did not immediately act on Mitchell's suggestion of a strategic aviation force, he did, in late June, create the Air Service of the American Expeditionary Force, separating it from the Signal Corps on the suggestion of a board he had created to study the aviation needs of the AEF. Mitchell had been a member of this

¹⁴Hurlsey, Billy Mitchell, 26.

board.

In January 1918 Mitchell was made Chief of the Air Service, First Army. His immediate superior was Brigadier General Benjamin Foulois, Chief of the Air Service, AEF. The two did not get along. One of the reasons for the animosity between the two men undoubtedly was that Mitchell felt he should have received that appointment. With the top two men in the Air Service at odds, not much was being accomplished in the way of organizing aeronautics for the AEF so Pershing appointed Major General Mason Patrick to head it. Foulois now took over Mitchell's job while Mitchell dropped to head of the air arm of the First Brigade. The drop was unbearable to Mitchell and his quarrel and disrespect for Foulois, still his superior, came into the open. Foulois backed down with the result that Mitchell regained his position as Chief of the Air Service, First Army, but his high-handed treatment of Foulois left him some enemies.¹⁵

As the air chief of the First Army he won the respect of his superiors and subordinates for his bravery in the air and also for the competent way in which he carried out his work, especially in both the St. Mihiel and the Meuse-Argonne offensives. At St. Mihiel he was the over-all commander of a joint Allied air force consisting of some 1,500 airplanes, the largest number assembled for any single battle during the war. Outnumbering the Germans eight to one, this force

¹⁵Ibid., 34.

quickly gained air superiority and this success brought Mitchell promotion to Brigadier General. But due to a German withdrawal in that sector Mitchell was unable to test his force in attacking such strategic objectives as the enemy's communication and supply system, in order to gain an objective appraisal of the effects of such an action. In the Meuse-Argonne offensive he was never able to free his force from supporting the ground forces so again he was unable to test some of his ideas.

The war ended with Mitchell fully convinced that in future wars the airplane would play a decisive, if not dominant role. While most airmen were of this opinion, they really had no concrete justification for these beliefs as they had not been able to test their advanced theories, for airplanes had been used mainly as ground support weapons. The new weapon in the air had only had time to prove itself within the existing framework of traditional organization and doctrine. It had not had time to effect its own changes on the older forms of organization. Therefore, when Mitchell returned to the United States in 1919 fully convinced of the necessity of a strong aviation policy on the part of the military and the government in civil aeronautics, his views were shared by only a few farsighted individuals while most were quite willing to keep the airplane and the air doctrine at the World War I ground support level. He was dismayed, but not disheartened, for he felt he was right and that he could convince others that

he was right. And, once the airplane was given its proper role in the military establishment of the country, at its head, his future and fame as eventual commander of that body would be assured.

Vice Admiral Hyman G. Rickover

In contrast to Mitchell, Hyman George Rickover was born to a Polish immigrant, who had settled in Chicago, on January 27, 1900. He grew up in the shadow of poverty and never knew the luxury of leisure time. When not in school he worked to help balance the family budget. While his record in high school was nothing of which to boast, he nevertheless secured an appointment to the U. S. Naval Academy at Annapolis. To the surprise of many, he passed the entrance examinations and entered the Academy in 1918.¹⁶

While at the Academy he tried on a number of occasions to break out of the isolationist shell he had built around himself. But each time he was rebuffed and finally resigned himself to purely academic pursuits. He graduated in the upper one-fourth of his class, but left his classmates with the impression of being, at best, a very mediocre person.

He graduated in 1922 and received his first assignment aboard the destroyer La Vallette. Conscientiously he set about his work and soon became the Engineering Officer,

¹⁶Robert Wallace, "A Deluge of Honors for an Exasperating Admiral," Life, XL, (September 8, 1958), 110.

somewhat of an honor for an ensign and it attests to his hard work and the favorable impression he had made with his superiors on the ship. Next came an appointment to the battleship Nevada, where he again distinguished himself by his hard work and was rewarded, while still an ensign, by being appointed the Electrical Officer of the ship, a position usually held by an officer of higher rank.¹⁷

After five years of duty aboard ship Rickover took, and passed, the Navy-wide competitive examinations for graduate school. His graduate work was in electrical engineering, an area in which he had developed quite an interest as a result of his position on Nevada. By the time he had completed his degree at the Columbia University School of Engineering he had also received his promotion to Lieutenant, Senior Grade. Rickover now decided that submarine duty would provide him the best chances for promotion and an early independent command. So, although his orders assigned him as Electrical Officer of the battleship California, he managed to get them changed to the Submarine School at New London, Connecticut.

His first duty aboard a submarine provided many challenges as S-48 experienced a multitude of difficulties because of poor design.¹⁸ But, as a result of his rebuilding

¹⁷Clay Blair, Jr., The Atomic Submarine and Admiral Rickover (New York: Henry Holt and Co., 1954), 43.

¹⁸Ibid., 50-51.

of equipment, his boat did not suffer many of the troubles associated with its sisterships. Despite this he was disappointed. He did not get an independent command and was reassigned to the Office of the Inspector of Naval Material.

While still attached to S-48 he had found time to marry Ruth Masters in 1931. He had met her at Columbia University where she was a graduate student in International Law. After leaving school Rickover had kept up a steady correspondence with her and when she received her Ph.D., they were married.

In 1934 Rickover returned to sea-duty, this time aboard another battleship, New Mexico. As Assistant Engineering Officer he won the respect of his fellow officers and the praise of the captain who noted that Rickover was one of the hardest working men on the ship.¹⁹

His first independent command finally came in 1937, but it must have seemed more like a demotion than a promotion. He became captain of Finch, a rusty old mine sweeper stationed in China whose principal task was target towing for fleet gunnery practice. His ambitions of independent command, the dream of every naval officer, had been so blunted by his failure to get a submarine command and his disappointment with Finch, that he decided to continue his career in a specialized status and abandon further attempts to get command of a ship. He applied for status as an Engineering Duty Only (EDO) officer,

¹⁹Blair, Atomic Submarine, 57.

which, when it was granted, relieved him of command of Finch.²⁰ Any hopes of a successful naval career now hinged on his making a name for himself as a specialized engineering officer. He fully realized that the opportunities for promotions were not as great for specialized as for regular line officers.

With his new EDO rating Rickover was assigned to the Philippines for work as a Planning Officer at the Cavite Navy Yard. He stayed there for eighteen months, raising its efficiency and making a general nuisance of himself by forcing individual ships to perform much maintenance that the yard had heretofore unnecessarily done for them.

Assigned to the Electrical Section of the Bureau of Ships in 1939, he became its head in 1940. While this was not command of a ship, it did provide him the measure of authority and leadership he had wanted and it was in a field in which he was thoroughly grounded. He built the Electrical Section into a personally-selected, cohesive, and close-working team, much the same as he was to do later with the men working toward the atomic submarine. His energy and technical competence soon led him to reforms of navy electrical equipment that were to be of considerable value in World War II. For example, he compiled a new catalogue of electrical equipment that cut out needless stock duplication and thereby reduced size of inventories. He also initiated the redesigning of much electrical equipment making it more compact and sturdier.

²⁰Wallace, "A Deluge of Honors," Life, 109.

He began work on anti-magnetic mine warfare equipment, and rushed to completion work on an infrared signalling device.²¹ The tactics he used in initiating and completing projects which often had not received official sanction by the Navy were highly irregular and at times approached the illegal. But, it was his ability to correctly analyze future needs and to rush to quick completion a project before it was stalled that saved his often dangerously outstretched neck.

His ability to get things done and the expansion of the Navy immediately preceding United States involvement in the war got him two quick promotions, to Commander and then to Captain.

As head of the Electrical Section of the Bureau of Ships until late 1944, Rickover was awarded the Legion of Merit. A General Electric vice-president complimented Rickover by saying he saved the government hundreds of millions of dollars. This was an exceptional compliment considering its source, for Rickover was very hard on the big industrial firms, threatening them with loss of contracts if they did not comply with the rules he set up for them in handling naval contracts and often, in effect, telling these firms how they should run their own businesses.²²

In 1944, at his own request, Rickover left the

²¹New York Times, October 23, 1953, 15.

²²Ronald Schiller, "The Strange Case of the Man Behind the Atomic Submarine," Reader's Digest, LXII, (May, 1953), 47-50.

Electrical Section for an overseas assignment.²³ Before he was sent to Okinawa to head a fleet repair base which was being prepared for the invasion of the Japanese islands he helped restore the Navy's supply depot at Mechanicsburg, Pennsylvania, to the high degree of efficiency from which it had fallen. Rickover, by this time, had gained the reputation of being able to solve difficult administrative problems, a vital attribute in directing large-scale operations.

He arrived on Okinawa in July, 1945. When the Japanese surrendered in August his job was no longer necessary and he began to supervise the return of machinery and equipment to the United States.

His next job, Chief Material Officer for the 19th Fleet saw him speeding up and assuring the proper mothballing of many of the 19th Fleet ships. He formed a team which soon became famous on the west coast for appearing at inopportune moments and checking every minute part of a ship being mothballed. Rickover became a dreaded name in the 19th Fleet. For his outstanding performance, his superior, Admiral R. S. Edwards, recommended him for flag rank.²⁴

It was at this time that the Navy and the then Army Air Force received an invitation to take part in the building of a nuclear reactor. The possibilities for the use of atomic

²³Blair, Atomic Submarine, 71.

²⁴Schiller, "Man Behind the Atomic Submarine," Reader's Digest, 48.

power in airplanes and ships was the justification for asking these services to send liaison officers to the nuclear reactor project. The Navy had mixed emotions as to the feasibility of atomic power for ships, but the general consensus was that if it did come about, it would be a thing in the distant future. Anyway, the Navy decided to send eight men to the project and began to seek volunteers. Rickover, Chief Material Officer of the 19th Fleet applied. It was a gamble, tying his career to something relatively new, untried, and untested, but he had been able to project the future needs of the Navy before and to him it seemed a fair gamble. It also may have been that he saw in atomic power for the Navy his last chance to further his career. From this viewpoint his application was not a gamble but a necessary step. He was a senior Captain in 1946 and the Navy was rapidly reverting to peace-time strength. As the size of the Navy decreased, chances of promotion also became smaller especially for a man like Rickover who had not held a combat command during the war. His talents lay in handling large administrative organizations and in getting jobs done quickly. The size and leisurely pace of a peace-time Navy did not place a premium on these attributes. In fact, his ramrodding methods were even resented as the emphasis shifted from the wartime necessity of getting a job done as quickly as possible to doing it by the proper methods and regulations. Rickover concerned himself only with the "ends" while the Navy began to emphasize the "means."

Nevertheless Rickover was chosen to head the eight-man

naval team being sent to Oak Ridge. Along with Rickover went four other navy officers and three civilians from the Bureau of Ships.²⁵

When Rickover was chosen for the Oak Ridge project in May of 1946 he was forty-six years old. Twenty-four of those years had been spent on active duty in the Navy and four more at the Naval Academy. His fitness reports had praised his work aboard ship as a junior officer and the Legion of Merit, as well as Admiral Edwards' recommendation of flag rank for him, attested to his performance during the war as a senior officer. But, he also had the reputation of being an unsociable and disagreeable officer who often worked outside the normal Navy channels of procedure and who seemed to have a knack of antagonizing the persons with whom he worked. He had openly, at times, criticised the Navy for being too tradition bound. He had made enemies within the Navy and in private industry. But, he had also earned the respect, if not the friendship, of many naval officers and the superiors under which he had worked. There was not unanimity on the choice of Rickover for the Oak Ridge job because his controversial personality was thought by some to be a handicap for the job; so, another captain almost received the appointment.²⁶ Within the next six years neither skeptics nor supporters of Rickover were

²⁵C. B. Palmer, "SSN-571, Making of the Atomic Submarine," New York Times Magazine, (October 26, 1952), 14.

²⁶Blair, Atomic Submarine, 18.

to be disappointed. He would continue antagonizing people and working outside the normal naval channels while at the same time he was to bring about a change in naval propulsion that revolutionized the Navy and profoundly affected naval strategy and the entire American defense structure.

Conclusions as to their Career Patterns
to the Beginning of their Campaigns

When Mitchell and Rickover began their respective struggles within their services they both had fairly long careers behind them, and were thus well acquainted with their service. Rickover was slightly senior to Mitchell in length of service. Not counting his four years at the academy, by 1946 he had twenty-four years in the Navy. Mitchell, in 1919 had twenty-one years in the service. Mitchell had risen from the ranks while Rickover was an Annapolis graduate. Mitchell's record though was more impressive than Rickover's. His career was highlighted by quick promotions and early independent commands. Rickover had a rather normal record, his promotions had come at expected intervals and his one command of a ship had been a discouraging and uneventful experience which led him to become a specialized "Engineering Duty Only" officer.

Both men had served in important positions during a major war. Mitchell had the fortune of occupying the top combat position in the Air Service of the American Expeditionary Force and he built a reputation as a very able and courageous commander. Rickover headed the Electrical Section of the Bureau of Ships for most of World War II. In this position

and as Inspector of the 19th Fleet he became known as a very efficient administrator. In war though, careers are not made as an administrator in rear areas. They are made at the front. Rickover undoubtedly realized this when he asked for an assignment in the Pacific in 1944. Unfortunately for him the war ended by the time he got there.

Mitchell, as a front line commander, had become a public figure and this assured him of a high position in the peace-time Army. Rickover's war record left doubts as to what his position would be in the post-war Navy. Both men had made enemies among their fellow officers during the war, but while Mitchell had also actively cultivated politicians and had some influential connections in Congress, Rickover, on the other hand, was practically an isolate, having no such connections and only the recommendations of a few superior officers to commend him.

In 1919 the future career of Brigadier General William Mitchell, Assistant Chief of the U. S. Army Air Service seemed bright. In contrast, in 1946, that of Captain Hyman G. Rickover, U. S. Navy, was an open question.

CHAPTER II

THE CLIMATES OF THE STRUGGLES

The Public and Political Climates and Foreign Policy Considerations

In order to understand the climate of opinion in which Mitchell attempted to get his ideas accepted, it is necessary to take a look at the nation, Congress, and the first two post World War I Presidents.

The spirit of the nation after World War I contrasted sharply with pre-war Progressivism and Wilson's "New Freedom." The fears of some Americans expressed before the war that participation in the war would undermine Progressivism came true. The hatreds aroused by the war, its cruelties, and the disillusionment afterwards, engendered a spirit opposite that of the humanitarian concern which had fostered Progressivism. The Progressive movement also died, in part, a normal death. Such a long liberal movement, over a generation old, was bound to falter.¹

Thus the moral and cultural relapse from Progressivism together with a series of conflicts at home--labor troubles,

¹David A. Shannon (ed.), Progressivism and Post-War Disillusionment, 1898-1928 (New York: McGraw-Hill Book Co., 1966), 273.

race riots in the summer of 1919, "Red" scares, and economic recession from 1920 to 1921--combined to focus the attention of Americans on purely domestic affairs, bringing about a desire and a demand for a return to "normalcy." The exasperation as a result of the post-war mess and the anti-Wilson attitude was clearly expressed in the election of 1920 where the slogan promising the "return to normalcy" carried Harding into the White House on an "earthquake."

The adjective "simple" which Harding used to describe the business of government can perhaps be put to better use in describing the man himself. He had little understanding of either domestic problems or foreign affairs. He candidly conceded that, "I don't know anything about this European stuff." His lack of understanding might have been excusable had he attempted to educate himself in these matters. Arthur S. Draper, of the New York Tribune, wrote that Harding's personal secretary, Judson C. Welliver, told him "how difficult it was to get the President interested in foreign affairs."²

While Harding at least managed to be interested in domestic problems, even here he did not have a sufficient understanding of the two pressing issues of the day, taxes and tariffs, to deal with either effectively. He was a man of the party. He even attempted to bring back the patronage system by issuing an executive order shifting 13,000 post-masterships

²Samuel H. Adams, Incredible Era: The Life and Times of Warren G. Harding (Boston: Houghton Mifflin Co., 1939), 224.

from the protection of the Civil Service regulations. The cabinet he chose was more interested in spoils than service to the country.³ Their best service to Harding was in providing him with a close group from which to draw players for poker games.

Unfortunately at the same time that leadership was lacking in the White House, it was not to be found in Congress either. In the Senate, Lodge, who at the head of the "irreconcilables" had managed to keep the United States out of the League of Nations, was losing his control. Factional dissensions split the Republican Party. In the House of Representatives Speaker Gillett had also passed his peak. There were enough insurgents in both Houses of Congress to "cause legislative uncertainty and, for a time, legislative impotence."⁴ Adding to the troubles caused by opposing factions within each House was a lack of agreement between the Houses. They were continuously quarreling with each other over tariff duties.⁵

The general situation was one of indecisiveness and inaction in both the executive and legislative branches during the Harding administration. The President would not initiate programs on his own. He waited for directions and orders from his party which was split and could not reach agreement on

³Ibid., 226.

⁴Ibid., 225.

⁵Ibid., 230.

major issues.

When Coolidge came to office, after the death of Harding, the "era of good feeling" had penetrated throughout America. Industry and the economy had revived by 1923. Americans wanted, above all, to be left alone to enjoy their new found prosperity. Public affairs during the Harding and Coolidge eras were considered dull topics. The White House had a complacency about it that reflected the general mood of the country. With Coolidge, the measuring stick by which the government operated became economy, and its major interest lay in maintaining the business prosperity of the country. Coolidge expressed it as "the business of this country is business." H. L. Mencken's essay entitled "Golden Age" captures this singular emphasis on business, money, and prosperity in the "twenties" better than anything else.

The United States, I believe, is the first great empire in the history of the world to ground its whole national philosophy upon business . . . no other human activity brings such great rewards in money and power, and none is more lavishly honored.⁶

Speaking of Coolidge in the same essay he wrote:

The man's merits, in the Babbitt view, are almost fabulous . . . in him the philosophy of Babbitt comes to its perfect and transcendental form.⁷

The main objectives of American foreign policy that directly affected the military in the early twenties were the

⁶Shannon, Progressivism, 290.

⁷Ibid., 291.

security of the continental United States and the Panama Canal, the defense of our possessions in the Pacific, and the continued development of economic interests on the mainland of Asia. The way in which the military would support these objectives was determined by the public desire for peace and reduction of military expenditures.

By the very nature of these objectives and the geographic location of the United States it can be seen that the Navy was to be the dominant service in the defense structure. There was little danger of an attack on the United States from a base in the Western Hemisphere. An attacking force would have to be transported by ship and thus would encounter the fleet first. The defense of our possessions in the Pacific would also rest primarily on the strength of our fleet. Our economic interests in Asia could be safeguarded by a strong American naval force in the Pacific.

Thus the Navy was given the preeminent position in the planning of the General Board of the Army and Navy which logically concluded in 1921 that the United States should have a Navy second to none.⁸ In fact, in view of the alliance between Great Britain and Japan, with whom our policies in Asia were recognized to become a source of friction soon, the desire was to build a Navy equal in size to any combination of two other powers.

⁸Raymond G. O'Connor (ed.), American Defense Policy in Perspective (New York: John Wiley and Sons, 1965), 188.

A naval building race began between the United States, Japan, and Great Britain. This, however, ran counter to the movement in the United States for the reduction and limitation in armaments of the military establishment. As a result there was Congressional stiffening in this country to the increasing naval expenditures which forced the diplomats to seek other means to reach their goal of having a Navy strong enough to support foreign policy objectives. The search for other means led to the Washington Naval Conference which established a fixed sea-power relationship between these nations in capital ships, a desirable settlement for the Harding administration in view of U. S. public opinion.

The important aspect of these policies in relation to Mitchell was that the Navy was consciously given the primary role in the defense structure while the Army was relegated to a secondary role. The United States foreign policy objectives dictated a large Navy. In arguing that the airplane made the battleship obsolete Mitchell also had to show that the airplane could support foreign policy as well as the Mahanian battleship.

The indifferent attitude on the part of the American public toward foreign affairs in the "twenties" was possible because the balance of power in Europe worked without the involvement of the United States. The United States could wait, as she did in World War I, until her vital interests were determined before she committed herself. After World War II though the old balance of power system broke down and

the United States found that she alone was left facing an aggressive Soviet Union. The realization gradually broke across America that the traditional retreat to isolation was no longer possible and that the affairs in Europe, and all over the world, were of vital concern to her.⁹

This realization did not come easy. If there was one overriding policy in the conduct of the war it was to get it over as quickly as possible and then to return home to continue what the war had interrupted. 1946 though was to prove a year of frustration for the United States. The intransigence of the Russians and their refusal to cooperate with the former allies in establishing post-war Europe on the basis of the Atlantic Charter forced the administration toward the early formulation of a foreign policy of involvement. The potential enemy of the United States was clearly the Soviet Union. Russia, as George F. Kennan had warned, was expanding its influence by military pressures throughout the world. The initial response to these pressures was, however, only a verbal firmness in dealings with the Russians. The United States could not have made a military response even if she had wanted to, for a fast dismantling of the military machine had begun immediately after the cessation of hostilities with Japan. This process could not be reversed. In 1945 the public clamored to have the "boys" back home while the "boys" staged

⁹Gabriel Almond, The American People and Foreign Policy (New York: Harcourt, Brace and Co., 1950), 102.

demonstrations demanding a quick return to the United States and discharge from the service. Congress joined the bandwagon by holding investigations to make sure that the services were doing everything possible for the speedy release of servicemen.

By March, 1946, the Navy had been reduced from its wartime peak of 3,400,000 men to less than 1,600,000. The size of the Army had shrunk even faster. The Army Air Force had 218 combat groups on V-J day while on January 1, 1946, it could count only 109 combat groups.¹⁰ Thus while the administration was attempting to take a firm stand against the Russian expansion it was losing its means to check this expansion. Foreign and military policy were travelling in opposite directions. When the State Department Policy Planning Section, created by the new Secretary of State George C. Marshall, developed three alternative measures of dealing with Russia, to fight and destroy her, to permit her indefinite expansion, or to regulate our policies to halt any further expansion, the only logical alternative, in view of our military situation, was the third.¹¹

This policy of containment, as it came to be known, produced the cold war and necessitated the maintenance of stronger peacetime military forces than at any other time in

¹⁰O'Connor, American Defense Policy, 299.

¹¹Eric F. Goldman, The Crucial Decade (New York: Alfred A. Knopf, 1959), 72.

the history of the United States. The requirements dictated to the military in the cold war were to help other nations resist aggression, to be able to retaliate effectively against the Soviet homeland should a major war develop, and to act as a deterrent to war by maintaining a high degree of readiness.¹²

By the time this policy was formulated, the American public had become sufficiently roused by world instability, the well publicized Soviet threat, and the failure to reach any agreement on the control of nuclear weapons, to support an enlargement of the military establishment. In fact, pessimism about our relations with the Soviet Union and the increasing sense of imminence of war caused a majority of persons to desire such an increase. An American Institute of Public Opinion (AIPO) survey sent out on February 4, 1948, after the tax costs of military increases were made clear, indicated that 63 per cent still favored a larger Air Force, 55 per cent a larger Army, and 55 per cent a larger Navy.¹³ An independent Fortune survey released in June 1948 showed that over eighty per cent of Americans favored an increase in military strength.¹⁴

Thus the general attitude toward defense and what was

¹²Samuel P. Huntington, The Common Defense: Strategic Programs in National Politics (New York: Columbia University Press, 1961), 35.

¹³Almond, Foreign Policy, 104.

¹⁴"The Fortune Survey," Fortune, XXXVII, (June, 1948), 5-12.

expected of the military was very different after World War II from what it was after World War I.

The Army in the Late "Twenties" and the Navy
in the Late "Forties"

That the 1920's were years of disillusionment in the United States was nowhere more evident than in the opinions expressed about the World War and the general establishment of the armed forces. The almost unanimous public feeling was that participation in the last war had been a mistake. The result of this climate of opinion was an immediate and sharp cutback in the size of the Army. As was noted, the size of the Navy was also curtailed by the Washington Naval Conference of 1921. The Army though suffered more than the Navy. Since the prevailing opinion was that the United States would never again involve itself in a war outside the Western Hemisphere, no need was seen for an Army competitive in size with the European models. The ideal was again expressed of a small Army whose primary function was to be a training nucleus in the event that war should somehow be forced upon the country.¹⁵

Thus, by 1920, the Army found itself, in the space of a few short months since the end of the war, in a fight for survival. The very enviable position occupied in 1918 was gone by 1920, though not without a fight. The end result of the Army's attempt to maintain some of its strength was the National Defense Act of 1920. Written largely by the General

¹⁵O'Connor, American Defense Policy, 215.

Staff of the Army, it became law on June 4, 1920, but without a general provision for compulsory military training that both the General Staff and Secretary of War, Newton D. Baker, wanted and had included in the original draft of the bill. Nevertheless, the act initially seemed a victory for the Army and had its provisions been carried out in full it would have provided the basis for a strong peacetime Army.

Within a year of the passage of the Act, however, appropriations had reduced the strength of the Regular Army from the authorized 280,000 officers and men to 150,000. This reduction continued until by 1935 the strength of the Army was only 118,750 officers and men.¹⁶ Not only was the strength of the Army drastically reduced by the lack of sufficient appropriations, equipment also suffered. The Army had to make use of all the obsolete and worn out 1918 equipment as meager appropriations could not be stretched for the purchase of new material. Although the Army actively sought more money, Congress could not be shaken out of the isolationist tradition to which it had returned or out of the belief that the two oceans separating the United States from the continents of Europe and Asia were the best defenses of the country. The Mead Committee of 1946, investigating America's unpreparedness for World War II, has attempted to shift some of the blame for the inter-war deterioration of the Army onto the Army itself.

¹⁶Gordon B. Turner, (ed.) A History of Military Affairs Since the Eighteenth Century (New York: Harcourt, Brace and Co., 1956), 474.

It has suggested that a lack of initiative on the part of Army representatives resulted in the low Congressional appropriations. It intimated that many persons in the military were complacent and willing to rest on their laurels until retirement.¹⁷ Therefore, "largely as a result of this attitude [complacency] Congressional appropriations for the support of our national defense were reduced to a dangerous minimum."¹⁸

Certainly after a budget had been approved the Army did little to get more money than they were allocated for a particular fiscal year. Major General Dennis E. Nolan, in testimony before the House Appropriations Committee in 1925, made the position of the Army clear by stating that:

. . . we are prohibited by law from asking Congress for anything except the amount that is allowed here in the budget . . . because Congress passed a Budget Law, in which there is a provisio prohibiting any official of the government coming before a committee of Congress and arguing for more money than is permitted under the Budget sent up by the President. That is a matter of law.¹⁹

But, while representatives of the Army felt, by law unable to attempt to get more money once the budget had been set, they often vigorously expressed their views from other platforms.

In his annual reports of 1921, 1922, 1923, Secretary of War John Weeks gave warning that "our present combat

¹⁷Turner, History of Military Affairs, 470.

¹⁸O'Connor, American Defense Policy, 217.

¹⁹Ibid., 218.

strength will be insufficient to fulfill the functions required by our national defense policy."²⁰ In 1925, General John J. Pershing complained that "under our very eyes there have already been serious reductions made by Congress."²¹ Army officers testifying before the numerous boards of inquiry into the armed services in the 1920's always stressed the fact that lack of funds was lowering their operating efficiency to a dangerous level.

In 1921 the Army asked for appropriations amounting to \$982,800,020. This was reduced by Congress to \$377,246,944.²² In 1922, the same thing happened. The War Department presented a budget of \$699,275,502.93, but only received \$386,824,212.41.²³ The Army appropriations for 1923 amounted to \$330,074,738.74.²⁴

By 1926, the appropriation was still only a meager \$332,616,631.²⁵ From 1927 until 1930, there were small increases each year. In 1930, War Department expenditures had

²⁰Turner, History of Military Affairs, 471.

²¹O'Connor, American Defense Policy, 217.

²²"War Department Appropriations Bill, Fiscal Year 1921," U. S. House of Representatives Report No. 821, 66 Cong., 2nd Sess. (April 13, 1920), 1.

²³"War Department Appropriations Bill, Fiscal Year 1923," U. S. House of Representatives Report No. 791, 67 Cong., 2nd Sess. (March 13, 1922), 2.

²⁴Ibid.

²⁵"War Department Appropriations Bill, Fiscal Year 1927," U. S. House of Representatives Report No. 197, 69th Cong., 1st Sess. (February 4, 1926), 2.

reached \$454,089,362. The feelings of the Army regarding these low appropriations have already been noted in the quoted statements of Secretary of War John Weeks and General Pershing. Obviously the Congress, and it must be assumed the general public, felt quite the opposite. The attitude in Congress is probably best expressed in a House Appropriations Committee Report of 1923:

Never in the history of this country has it had so great a military strength in time of peace as it has today. Never before has the country possessed so many military resources in trained men and material.²⁶

The general anti-military attitude can be seen in the unsuccessful attempt by the Army in 1922 to institute a program of vocational training for its enlisted men. This was looked upon as a devious plot on the part of the War Department to enter into the field of education and thereby indoctrinate those it taught with a spirit of militarism. Representative Thomas U. Sisson of Mississippi stated in the House that this was an attempt by the Army at "Prussianization" of the American people.²⁷ The entire program for vocational training met with such staunch opposition that the Army dropped it.

As seen by its officers, the Army of the 1920's was in dire straits. The large and efficient military machine

²⁶War Department Appropriations Bill, Fiscal Year 1924, "U. S. House of Representatives Report No. 1,397, 67th Cong., 4th Sess. (January 12, 1923), 7.

²⁷U. S. Congressional Record, 67 Cong., 2nd Sess., LXII, part 4 (March 22, 1922), 4272-4274.

built during the war had disappeared. The National Defense Act of 1920, if carried through, would have at least provided a solid nucleus for rapid expansion in time of need. Even this objective was lost when appropriations reduced the size of the Army from the projected 280,000 to around 120,000 officers and men. The effect this had on the efficiency of the Army was described by General George C. Marshall in 1940, when he was Chief of Staff.

During this period [early 1920's] I commanded a post which had for its garrison a battalion of infantry, the basic fighting unit of every army. It was a battalion only in name, for it could muster barely 200 men in ranks when every available man, including cooks, clerks and kitchen police, (was) present for the little field training that could be accomplished with available funds. The normal strength of a battalion in most armies of the world varies from 800 to 1,000 men . . .²⁸

But, while the Army was extremely small, it remained professional, and this is especially true of its officer corps. The small core of high ranking officers that remained in the post-war emaciated Army was a tight clique. It shielded itself from the adverse criticism the armed forces establishment received from the outside by a solidarity on the inside. There was a strongly conscious feeling of unity among the officers. They could be attacked from without and do little. An attack from within however could be squarely met. While the Army was fighting for its very existence against external pressures, internal dissention approached the

²⁸O'Connor, American Defense Policy, 220.

treasonable in its eyes and could not be tolerated.

This was the framework in which General William "Billy" Mitchell began his fight for more funds and recognition of the airplane as the primary weapon for the military needs of the country. His rank of Brigadier General was only a temporary one. He had not reverted to his permanent rank of Colonel because he occupied the position of Assistant Chief of the Air Service, which carried with it the rank of Brigadier General.

The most important change occurring within the Navy after 1945 was the emergence of a new leadership elite. The wartime combat leaders returned to Washington to replace the old wartime chiefs. These older Admirals such as Edwards and Horne were thoroughly schooled in Mahan's concepts and believed that the primary purpose of a navy was to engage and destroy another navy. Thus they had emphasized the battleship as the backbone of the fleet. The war in the Pacific however brought into existence a new creation, the carrier task force whose principal element was the aircraft carrier. It was naval aviators, along with their champion, the new Secretary of the Navy James Forrestal, who were inheriting command of the Navy after the war.²⁹

From 1941, to mid-1945 the number of aviator admirals

²⁹Vincent Davis, Post-War Defense Policy and the U. S. Navy, 1943-1946 (Chapel Hill, N. C.: University of North Carolina Press, 1962), 150.

had increased by six times, while the number of non-aviator flag officers had increased only slightly more than two times the number of 1941.³⁰ This increasing influence of the aviators continued after the war. In 1945, 27 per cent of the Navy flag officers were aviators, while 23.2 per cent of all regular Navy officers were fliers. By 1947, 34 per cent of the flag officers were fliers and 31 per cent of all officers were from aviation.³¹

Submariners were also rising to higher positions in the Navy throughout the war. By 1945, 20 per cent of the flag officers were submariners.³²

The aviators enjoyed an organizational advantage, the Office of the Deputy Chief of Naval Operations for Air, which aided them in their rise. In 1942, DCNO (Air) got control of the distribution of aviators and all training relating to aviation personnel. It also had the authority to specify the number of flag officers needed in the air arm. Thus the control of air officers in the Navy was completely in the hands of aviators rather than being subject to the Bureau of Naval Personnel.³³ As the percentages show, they made full use of their authority to promote officers to flag rank.

To these aviators the lessons of Coral Sea and Midway were clearly that the aircraft carrier was more powerful and

³⁰Davis, U. S. Navy, 125.

³¹Ibid., 126-127.

³²Ibid., 133.

³³Ibid., 124.

more flexible than the traditional "big-gun" battleship. Airplanes from carriers could be used much more effectively against ground forces as well as striking at targets deep in enemy territory. Therefore, in their new position of prominence the aviators speeded up the process, which had begun in 1942, of turning Navy thinking away from a battleship-dominated fleet. They were helped in this, as might be suspected, by the submariners who had performed splendidly in the war and were also demanding a larger position in the post-war Navy.

Another important factor in changing naval strategic thoughts away from the battleship was the service unification controversy and the related Navy-Air Force dispute that raged throughout the late 1940's.

In both of the above controversies the Navy felt that its very existence was being challenged. It was afraid that it would be gradually reduced in size and influence by a coalition of the Army Air Force in a unified defense establishment with a single military chief of staff. The Air Force also implied and often openly stated that the atomic bomb had made navies obsolete, particularly surface ships, and that any future war would begin and end by an exchange of atomic weapons delivered directly on the enemy homeland through the air. Therefore, the Navy was asked, and itself felt the need, to present justification for its continued existence as a major segment of the military establishment of the country. It solved this, in part, by developing an atomic

delivery capability from carrier based planes and emphasizing that in some cases strategic bombing would be more effectively carried out by carrier based planes. They also emphasized that the aircraft carrier allowed the Navy to participate directly in operations against land forces. Thus the cause of the naval aviators was aided by the dispute with the Air Force which forced Navy thinking into new channels, away from the battleship concept. The National Defense Act of 1947 ended the threat of the Navy being absorbed in a defense structure dominated by the Army and the Air Force. But, the Navy still felt it necessary to strengthen its case as a vital service and contributor to the defense of the country. It began to look for new roles and new concepts for seapower.

So, while the pre-war Navy, certain of its role, had resisted technological change, the post-war Navy, unsure of its role, began to promote it. A feeling gradually came about that its future was dependent on being fully aware of, and in step with, all technological changes. With the emphasis on technology a number of high priority projects were begun in aviation and submarine development. The interest in submarine development was a natural continuation of the many improvements that had been made in them during the war. It was also a direct response to the contingency that the atomic bomb may have, after all, made surface ships obsolete and that the future of the Navy lay in warfare under the sea.

Conclusions as to the Respective
Environments of Struggle

The Army in the 1920's had changed little from what it was before the war. The officers who were in high positions during the war largely remained in control after the war. They were traditionalists and came from the old established branches as Infantry, Artillery, and Engineers. The two post-war chiefs of the Air Service were from the Infantry and the Engineers. The Army's doctrine had undergone no radical change as a result of the war. The airplane could not claim a decisive role in defeating the enemy. One only needs to note that the horse still had its place as an integral part of the army while spurs were still very much a part of the uniform of every officer, to see how little the war had influenced traditional thinking.

The Navy, on the other hand, had a decisive change in leadership after World War II. Control of the post-war Navy had passed to the aviators and to other young high ranking officers returning from the combat theaters. The aircraft carriers and the submarines had clearly been more decisive than the battleship. There had been a major technological breakthrough in the war, the atomic bomb, recognized by everyone as a major new factor in warfare thus necessitating a reinterpretation of the functions carried out by each service in light of this new factor. The Navy, having its continued value questioned, began to look for new roles and to encourage technological innovations to keep current with the defense

needs of the country and insure its continued existence.

The Army after World War I, although not of its own choice, had quickly reverted to its traditional place in the defense establishment which was a small force whose function it was to provide the organizational framework for expansion in case another war was thrust upon the United States. The Navy after World War II was uncertain as to its role in the defense structure. More important, it could not continue its preoccupation with the Pacific which had dominated its planning in the 19th and 20th centuries until 1945. It therefore had to develop new strategic concepts which recognized the Soviet Union as the enemy and corresponded to a foreign policy of containment and retaliation.

Congress and the public in the "twenties" were indifferent to developments outside the United States which might effect the defense of this country. They were definitely hostile to the idea of increased taxation and expenditures for the military. After World War II the United States was forced to focus its attention on foreign affairs and the feeling grew that events in other parts of the world were of direct importance to the over-all security of the United States. The public was conditioned to think in terms of a large defense structure thus money was generally available for experimentation and development in a number of varied fields.

In Forrestal the Navy had a civilian leader who was aware of the needs of the service and who continuously worked for and supported expansion of the Navy. He vocally and

effectively promoted the welfare of the Navy in the government. The Army in the 1920's did not have a civilian Secretary of War equal in stature or ability to Forrestal.

In general terms, the Army in the "twenties" was dormant, it had even regressed since the war. The Navy in the late "forties" was in a period of transition. It was moving ahead, not in any specific direction or toward a clearly defined goal, but because it realized that its traditional concepts were no longer valid.

CHAPTER III

METHODS EMPLOYED BY EACH IN HIS ATTEMPT TO ESTABLISH HIS CONCEPTION OR INNOVATION

Mitchell and the Frontal Assault

Mitchell, as has been noted, returned from the war convinced that the airplane would be one of the decisive weapons in any future war and that as such it should be given a prominent place in the post-war defense structure. He was somewhat dismayed when he did not get the top position in the Air Service after his wartime chief, Major General Mason Patrick, left the Air Service to return to the Engineers. Instead, Major General Charles Mencher, an Infantry officer, was appointed to head the Air Service. Mitchell's quarrel with Foulis during the war which had caused resentment against him on the part of some air officers was, no doubt, one reason he failed to get the job. Mencher though quickly reverted to nominal head as he recognized Mitchell's superiority in aeronautics and let him dominate the service as head of the Training and Operations Group.¹

By the middle of 1919 Mitchell began his fight both for an expanded air arm, which he felt was needed for the

¹Hurley, Billy Mitchell, 41.

military strength of the country, and also for his personal ambition of becoming head of an independent organization for aeronautics. This was probably the primary reason he stayed in the Army in the 1920's even though the low pay forced him to turn to his family again for additional financial support. Thus, Mitchell's goal in 1919 was to convince his superiors in the Army and in the government that the airplane had added a new dimension to warfare which could be best exploited in an independent military aeronautical organization. He urged the establishment of a Department of Aeronautics to control both civilian and military aviation. In the military sphere this department was to be equal in rank and authority to the War and Navy Departments. It was to control all military aircraft, detailing units to the other two services as they expressed their needs. It was also to maintain a force for independent operations, not necessarily in conjunction with the other services. The rationale for combining civilian aviation with military was that it would insure its steady and quick growth as each would complement the other. Also, it would be much easier to mobilize civil aviation for war in this organizational arrangement.²

From 1919 until the passage of the National Defense Act in 1920 Mitchell's efforts to gain the acceptance of his ideas were largely exerted within the existing framework and channels for change available to him in the Army. When he

²Hurley, Billy Mitchell, 45.

failed to achieve satisfactory results with these he attempted, through public pressure, to force an expanded air policy on the Army and get an independent air organization.

Opposition to an air arm independent of the Army and the Navy came, in 1919 and 1920, from high quarters in both services. General Pershing, General John Harbord, Pershing's wartime chief of staff, and General J. L. Hines acting chief of staff of the Army in 1919, made known their opposition to a unified Air Service. Secretary of War Newton D. Baker was opposed to Mitchell's proposals as was Major General Patrick who went so far as to write to General Pershing of what he thought were Mitchell's personal ambitions in pursuing a separate air arm. The basic reason for their objection was expressed in the Dickman Board which met in April, 1919, to consider the lessons learned from World War I and how these should affect post-war tactics and organization. This board concluded that airpower should be given an independent organization only when it had the capability for decisive action by itself, as the Army and the Navy.³ Since airpower had shown no such ability in the last war these leaders naturally concluded that a separate air arm would only violate the principle of "unity of command."

Before the Army Reorganization Act, which emerged as the National Defense Act, became law in 1920, Mitchell testified for several Congressional Committees investigating the

³O'Connor, American Defense Policy, 206.

feasibility and desirability of a separate Department of Aeronautics. While he, of course, supported the establishment of such a department he did not at this time attack or question the motives of those in opposition to an independent Air Service. He probably felt that he could convince Congress of the need of such an organization by selling it his advanced theories of airpower so obvious to him that he thought everyone else would readily grasp them. Even though his tone was very moderate as compared with his later appearances, his testimony before the Senate Military Affairs Committee in August, 1919, and the House Committee on aviation in December, 1919, aroused the antipathy of many other officers in both the Army and the Navy. After Mitchell testified on Naval Aviation he was indirectly rebuked by Newton D. Baker who ordered Army officers not to make statements "with reference to other co-ordinate executive departments which may reasonably be questioned or which will serve to discredit or to reflect upon the work of these departments."⁴

The National Defense Act of 1920 kept the Air Service within the Army. Mitchell now felt that he could not convince his military colleagues or his civilian superiors in the War Department of the importance of the air arm and of its need for an independent organization to fully exploit all of its latent capabilities. He had several courses of action

⁴S. F. Wells, "William Mitchell and the Ostfriesland: A Study in Military Reform," The Historian, XXVI, (August, 1964), 540.

open to him. He could end all attempts to bring about an independent Air Service. He could perform well within the limits of his job and attempt to reach a high enough position in the Army from which he could force his views on others. Or, he could become a "rebel" within the service by seeking help from outside in putting through his reforms.⁵

Mitchell's personality ruled out the first alternative. He was too deeply committed and convinced of his views to just drop them. He was ambitious in wanting to become the head of a new independent Air Service. He had been in the center of the stage throughout his military career and he could not take a back seat in the Air Service or have it relegated to a supporting role in the Army.

The second alternative was too much of a gamble for Mitchell. At least the odds were not as favorable as they were for the third alternative. It was very doubtful that Mitchell would have ever reached a commanding position in the Army so that he could force his views on it from the top. His peacetime rank was Colonel, and promotions to General would probably be very slow in the small Army. It is very likely that Mitchell thought he would never reach General rank because he was in a relatively new branch while all of the older officers who sat on the promotion boards were from the more established branches of the service to which they were loyal and which they viewed more important. Had he somehow attained

⁵Ibid., 562.

the rank of a General officer he still would not have become Chief of Staff because he was from the Air Service.

This left Mitchell with the third alternative of becoming a military "rebel," forcing a change on the military through external pressures. These pressures were to come from the American public and Congress. Mitchell fully understood the dangers involved in this course of action and that if he failed, his career would be ended. But he felt he had a better than average chance for success. The airplane was the weapon of the future. He was convinced of this and he felt that he could and would prove this. Once this was shown the Army would be forced into an expanded air policy through pressure from Congress and the public and gradually this would evolve into an independent Air Service. His role as the apostle of airpower would make him the only logical choice, acceptably to Congress and the public, as military head of the new service. If he were out of the Army when this happened he would get the top civilian position in a Department of Aeronautics. So, Mitchell consciously set out to enlist the American public and Congress on his side. He became a publicist and a crusader for airpower, convinced that he could force a change in the Army "through the pressure of public opinion."⁶ Mitchell failed to notice the fate of the last crusader who had taken his campaign to the public, Woodrow Wilson.

⁶Levine, Mitchell, 317.

The first step in Mitchell's fight was to prove that the airplane was indeed a decisive new weapon. He shrewdly began emphasizing the defensive capabilities of the airplane thus bringing it in line with the isolationist sentiments. He stated that the airplane had made the battleship obsolete and needlessly expensive for defensive purposes because it could defend the country's coasts better and far cheaper. He took pains to dwell on the monetary aspects, emphasizing the differences in costs between battleships and airplanes.⁷

Gradually Mitchell's challenge to the Navy began to be felt as various newspapers began to call for tests of his theories.⁸ The Navy conducted tests of its own in October and November of 1920. Navy pilots dropped bombs from airplanes on the battleship Indiana, a relic from the Spanish-American War. In the published report of the tests the Navy concluded that bombs from airplanes could not put a battleship out of action.⁹ Still Mitchell kept up his verbal attacks against the battleship and forced the Navy to concede to bombing tests carried out by the Air Service against ships. Congress voted its approval for the tests and provided money.¹⁰ These were carried out in June and July, 1921, against ships

⁷Hurley, Billy Mitchell, 60.

⁸New York Times, January 31, 1921, 8.

⁹Davis, Mitchell Affair, 68-69.

¹⁰Roger Burlingame, General "Billy" Mitchell: Champion of Air Defense (New York: The New American Library, 1956), 87.

stationed off the Virginia capes which included the German super-dreadnaught Ostfriesland. The climax of these tests came when Mitchell's bombers attacked the "unsinkable" Ostfriesland on July 22, 1921. Newly acquired 2,000 lb. bombs by the Air Service quickly sank the ship to the amazement of all present. The Navy rightly claimed afterward that Mitchell had violated the rules set down before the test and that he should have stopped bombing the Ostfriesland to let Navy inspectors board her and assess the damage after she had been injured by the bombs. But Mitchell's plan was to sink the ship as quickly and spectacularly as possible.¹¹ Some of Mitchell's most avid supporters had not expected him to sink the Ostfriesland so quickly and even the staunchest battleship supporter admitted that the airplane had added a new element to naval warfare although they declined to speculate exactly as to what its effect would be.

Mitchell hoped to reap a revolution from these tests. So, he was disappointed when the report on the bombing tests by the Joint Army and Navy Board stated simply that the importance of air warfare to both the Army and Navy had been shown, but that the tests did not make the battleship obsolete. This report went on to state that "the development of aircraft, instead of furnishing an economical instrument of war leading to the abolition of the battleship, has but added to the

¹¹Hurley, Billy Mitchell, 67.

complexity of naval warfare."¹² In its conclusion the report seemed heartening to many air enthusiasts by stating "the experiments conducted have proved that it has become imperative as a matter of national defense to provide for the maximum possible development of aviation in both the Army and the Navy."¹³

Still Mitchell wanted more. He was disappointed by the comment made by his superior in the Air Service, Major General Menoher, that he did not think the tests doomed the battleship.¹⁴ In late September, 1921, he began to attack publicly the board findings, stating "the problem of destruction of seacraft by airplanes is finished. It has been solved."¹⁵ Then he claimed "the First Provisional Air Brigade could have put out of action the entire Atlantic fleet in one attack."¹⁶ He again showed what his goal was by suggesting "the scheme of national defense should be revised at once on the following basis: A Department of National Defense, with sub-secretaries for Army, Navy, and Air."¹⁷

Mitchell's publicity campaign brought about a crisis

¹²"Report on Bombing Tests," Aviation, XI, (September 5, 1921), 276-278.

¹³Ibid.

¹⁴"Ostfriesland Sunk by 2,000 lb. Bombs," Aviation, XI, (August 1, 1921), 128-132.

¹⁵"General Mitchell Attacks Bomb Findings," Aviation, XI, (September 26, 1921), 367.

¹⁶Ibid.

¹⁷Ibid.

within the Air Service in September, 1921. Menoher was beginning to resent the almost constant publicity which Mitchell was getting. This may help to explain Menoher's somewhat reserved position on the results of the tests.

In June, before the bombing tests began, Menoher had recommended the removal of Mitchell as Assistant Chief of the Air Service to the new Secretary of War in the Harding cabinet, John W. Weeks.¹⁸ Mitchell did not lose his job at this time because Weeks was new and probably was not fully acquainted with the situation and just before the tests it would have seemed that the Army was trying to shut Mitchell up before he had a chance to prove his case.¹⁹ The breaking point in the conflict between Menoher and Mitchell came when Mitchell went on another publicity stunt shortly after the completion of the bombing tests. On his orders Air Service bombers carried out war game air raids on several cities, after which Mitchell stated to the press that these cities were vulnerable to air attacks without an adequate air defense which in turn meant protection by the Air Service. Menoher demanded the removal of Mitchell or that he, himself, be removed.²⁰ Menoher lost his job, but Mitchell was not promoted to it. Instead, Major General Patrick, wartime head of the Air Service, was called

¹⁸New York Times, June 10, 1921, 2.

¹⁹Hurley, Billy Mitchell, 67.

²⁰"Bombing Raids on Eastern Cities," Aviation, (August 8, 1921), 160-161.

to take Menoher's place. Patrick, as was noted, had written to Pershing earlier concerning what he thought were Mitchell's personal ambitions in pursuing an independent Air Service.

By late 1921, in view of what he had hoped to accomplish, Mitchell had gotten very little. Menoher had been removed, but Patrick kept a much tighter reign over Mitchell and made it clear that he was head of the Air Service in fact as well as in name. The dispute with Menoher and his publicity campaign had only served to make him more enemies within the Air Service and the Army. While the leaders in the Army were finding their appropriations getting smaller and were attempting to meet this external threat to their existence, they were beginning to see in Mitchell an internal threat because he was demanding larger shares of the relatively small amount of money available to the other branches of the Army. This did not help his already tarnished reputation. Once Mitchell made the headlines, he also became trapped by them. His actions had aroused sufficient opposition against him in high echelons of the Army, Navy, and the government, that he could not advance his career and his personal ambitions by normal means. His only hope of advancing himself and an independent Air Service was to continue the publicity campaign so that public pressure would eventually force a change on the Army and the government.

For the next two years though, Patrick kept Mitchell out of the spotlight as much as possible. He sent Mitchell on inspection tours to Europe and the Pacific. When he was in

the country he was kept busy inspecting air bases. But, instead of solving the Army's "Mitchell problem," Patrick's efforts only postponed it for a time, and when Mitchell began his publicity campaign again in the fall of 1924, he was much harsher and also better prepared. In talking with foreign airmen and noting the progress of aeronautics in Europe he became even more convinced that airpower would be the key in any future war, while his inspection trips in the United States emphasized to him the pitiful state of American aeronautics.

Mitchell was by no means the only person in the Air Service working for its improvements at this time. While he was out of the capital, Patrick was moving along more normal channels within the government to get support for an expanded air policy. As a result of his efforts the Lassiter Board, headed by Major General William Lassiter, was convened in Washington, D. C., in March, 1923, to determine the proper strength and organization of the Air Service both in material and personnel. This board concluded that the condition of the Air Service was critical. It stated that private air industry was not developed enough, that equipment was predominately old, and that appropriations for new airplanes were too small. In the end it recommended that the Air Service be increased to three times its present strength.²¹ Earlier in the same year, General Patrick, in his annual report on the

²¹"Army Committee Finds Air Service Situation Critical," Aviation, XV, (November 5, 1923), 572-573.

Army Air Service, had also stressed "the inadequacy of appropriations", and the "rapid deterioration of war produced equipment."²²

In a report entitled "Industrial Mobilization and Aviation" the Assistant Secretary of War, Mayhew Wainwright, stated that "our most notable deficiency at the present time is in the matter of aircraft . . . the situation in the Army Air Service is most critical."²³ No concrete progress was however obtained by any of these efforts. But these efforts do show that the Army and the War Department recognized the need for improving the condition of the Air Service. Mitchell was not opposed so much because of his ideas, but because of the methods he used in attempting to get reform.

The Lassiter Board had recommended the preparation of legislation for introduction in Congress to keep steps with the evolution in aviation and to end the alarming and critical condition of the Air Service. Nothing became of this and other attempts to get more funds for the Air Service because Congress would not raise military appropriations.

Mitchell returned to Washington from a tour in the Far East in July, 1924. The Lassiter program had failed and Mitchell's tour in the Pacific had convinced him that war with Japan was coming and that the best way to be prepared for this

²²"Annual Army Air Service Report," Aviation, XIV, (January 8, 1923), 42-43.

²³J. Mayhew Wainwright, "Industrial Mobilization and Aviation," Aviation, XIV, (March 26, 1923), 344-345.

was to have a strong air force. While he had been out of the lead for a time in the fight for more airpower, his goals for himself and for the Air Service had not changed. The second publicity campaign that he now began ended in his court-martial one year later.

He violated an order from Secretary of War, Weeks, that he submit all articles he intended to publish to the War Department for clearance. Without doing this he had five articles published in the Saturday Evening Post between December, 1924, and March, 1925. In these he severely criticised and even attacked the integrity of all those who disagreed with him. He went so far as to accuse the Navy of letting water into the Ostfriesland to keep her from rolling over under the impact of the light bombs that his planes dropped. He went further and brought these charges into Congress, gradually attacking the Navy and War Department as joint plotters in keeping the Air Service down.

There were two sets of Congressional hearings in the House at this time. Mitchell appeared before both. The Lampert Committee, was investigating contracts, settlements, and audits of the Army and Navy Air Services and the other was concerned with the Curry Bill, introduced into the House by Representative John F. Curry, to bring about a unified Air Service. Mitchell definitely wanted to bring the whole air policy issue before the public again. He probably felt that this would be his last chance to act in the official capacity of Assistant Chief of the Army Air Service. His term expired

on March 26, 1925, and it seemed unlikely that he would be reappointed. This would mean that he would revert to his permanent rank of Colonel. If, however, he could get a change in the Air Service before his appointment was up, he might be able to keep his position and even be in line for a higher position. If he failed he could retire in 1928, with thirty years service to his credit, after which his publicity would serve him in good stead as the prime candidate for the top position in a Department of Aeronautics which he felt would eventually be established.

So, Mitchell gradually broadened his attack to gain publicity, public support, and Congressional support. He created a sensation in testifying for the Curry Bill on January 31, 1925, that it was impossible for the committee to obtain correct information on aviation from the services because officers testifying were afraid of indirect disciplinary actions from their departments.²⁴ Secretary of War, Weeks, immediately asked Mitchell to explain the testimony he had given. He publicly stated that this action on the part of the War Department was not unusual and that many times officers were called upon to clarify or substantiate their publicly expressed views, especially in cases where they may be challenged by other departments of the government.²⁵ This may have been the last chance for Mitchell to save himself from a

²⁴New York Times, February 1, 1925, 27.

²⁵New York Times, February 4, 1925, 1.

strong reaction by the Army. He chose instead to widen his attack. In testimony on February 6, he answered Weeks. He made no attempt to prove his assertion that officers were afraid to speak before Congress; instead, he launched into a severe attack against both the War and Navy Departments. He censured unsparingly what he characterized as "the system" now in operation in those departments, saying that aviation had consciously been denied the place commensurate with its military importance and its prospective future.²⁶ He accused the War Department of limiting the ability and effect of aviation in a military way, saying it had done little to develop aviation commercially which was necessary in a well balanced governmental organization.²⁷ Then he charged deliberate falsification of other Army testimony given before the committee on the number of serviceable airplanes. "I believe," he said, "that there has been woeful ignorance and in some cases plain distortion of facts by some of the witnesses before this committee, tending to confuse the country and Congress."²⁸ It is interesting to note that Mitchell was very consciously trying to disassociate himself from the Army at this time. He gave this testimony in a civilian suit while all the other Army officers present wore their uniforms.²⁹

²⁶New York Times, February 7, 1925, 1.

²⁷Ibid.

²⁸Ibid.

²⁹Ibid.

The confrontation was now clearly set, it was Mitchell against his superiors in the Army and in the War and Navy Departments. He was swinging as hard as he could. He occupied the center of the publicity stage. Newspapers were selling many extra copies by carrying Mitchell's testimony on the front pages. It was as much of a public spectacle as any major prize-fight. But this was the problem for Mitchell and one that he evidently did not understand. The public kept its interest in the case because of its spectacular nature. They were cheering for him because he was the "underdog", a David fighting a Goliath. The public was far less concerned about the real issues involved, it was mainly enjoying a good fight.

The Navy now entered the fray against Mitchell. Captain A. W. Johnson, Assistant Chief of the Navy's Bureau of Aeronautics, testified before the House and accused Mitchell of disobeying orders and rules in the 1921 battleship tests, and held to the opinion that there was no need for a unified Air Service. He acidly commented that "England, Japan, and General Mitchell and his advocates are the only ones who want to limit our battleships."³⁰ Mitchell had not only roused the Navy and War Departments into assailing him, some members of Congress were now openly against him. Representative Butler of Pennsylvania, Chairman of the House Naval Affairs Committee, said he had never heard of a Secretary of the Navy who tried to hamper the expression of opinions by naval

³⁰New York Times, February 8, 1925, 25.

officers before a Congressional committee. Representative Britten, also a member of that committee, called Mitchell "an energetic dreamer."³¹ The Army and the War department began building their case against Mitchell. Secretary Weeks testified that Mitchell violated instructions from the War Department and from President Coolidge when he failed to submit the Saturday Evening Post articles to the War Department for approval.³²

When Mitchell's reappointment as Assistant Chief of the Air Service came up, which also carried with it the temporary rank of Brigadier General, Weeks failed to recommend him to continue serving in that position. In a letter to President Coolidge, Weeks explained that "Mitchell's whole course has been so lawless, so contrary to the building up of an efficient organization, so lacking in reasonable teamwork, so indicative of a personal desire for publicity at the expense of everyone with whom he is associated that his actions render him unfit for a high administrative position such as he now occupies."³³ President Coolidge appointed Lt. Colonel James E. Fechet to the position and Mitchell reverted to his rank of Colonel and was transferred to Fort Sam Houston, Texas, to become Air Officer of the Eight Corps.³⁴

³¹New York Times, February 11, 1925, 22.

³²New York Times, March 1, 1925, 1.

³³Burlingame, General "Billy" Mitchell, 110.

³⁴New York Times, March 7, 1925, 1.

At this time there were speculations that the Army would bring charges against Mitchell, but these never came probably because the War Department wanted to get the whole case out of the public spotlight. Mitchell knew he was finished in the Army, he had lost the second round in his attempt to get public and Congressional support for his ideas, but this did not prevent him from trying again. In fact, short of giving up his ambitions, this was the only course of action left to him.

On August 28, 1925, it was announced that Mitchell's Winged Defense was to be published in September. Through it he once more attacked the policies of the War and Navy Departments.³⁵ Again he did not submit the manuscript for approval to the War Department, and the feeling was that upon its release he would be faced with a court-martial. Before the Army could act on the book however, a series of events took place which left it no alternative but to press charges against him.

The Navy, in a publicity drive, had scheduled the longest flight over water. Three planes were to cover the distance from San Francisco to Hawaii. Only two planes left San Francisco. One of these two came down at sea with engine trouble while the remaining one, after having covered four-fifths of the journey, was lost. On top of this, the Navy dirigible Shenandoah, making a good will trip through the

³⁵New York Times, August 29, 1925, 6.

mid-west to give those people a glimpse of the Navy, was caught in a violent electric storm over Ohio and destroyed, killing its captain and thirteen members of the crew.³⁶ There were big headlines throughout the country, and Mitchell had a ready-made platform again.

In a prepared statement of seventeen typewritten pages he lashed into the War and Navy Departments again on September 5, 1921. He stated that the Navy's loss of the plane and of the Shenandoah "are the direct result of incompetency, criminal negligence, and almost treasonable administration by the War and Navy Departments." "As far as aviation is concerned, the conduct of these departments has been so disgusting in the last few years as to make any self-respecting person ashamed of the clothes he wears. Were it not for the great patriotism of our air officers and their hope for a change in conditions sooner or later, I doubt if a real man would remain with the colors under existing conditions."³⁷

Mitchell undoubtedly had decided that he would force the Army to court-martial him thus making him a martyr in the view of the public. That he expected action to be taken against him is shown in an interview after issuing his statement where he said he expected the War Department to order his arrest.³⁸ He again made a crude attempt to drive a wedge

³⁶Burlingame, General "Billy" Mitchell, 114-115.

³⁷New York Times, September 6, 1925, 1.

³⁸Ibid.

between the War and Navy Departments on one side and Congress on the other, and to enlist Congressional support on his side by stating:

The great Congress of the United States, that makes laws for the organization and use of our air, land, and water forces, is treated by these two departments as if it were an organization created for their benefit, to which evidence of any kind, whether true or not, can be given without restraint. Officers and agents sent by the War and Navy Departments to Congress have almost always given incomplete, misleading, or false information about aeronautics, which either they knew to be false when given or was the result of such gross ignorance of the question that they should not be allowed to appear before a legislative body.³⁹

The reaction of the War Department was quick. The new Secretary of War, Dwight F. Davis, told the Associated Press that it "wouldn't do to get in a public discussion with a subordinate . . . actions and not words" were needed to deal with the situation.⁴⁰ Mitchell's outburst only served to dramatize his complete alienation from the Army. Many persons who had heretofore supported Mitchell, or generally agreed with many of his ideas, now left his side. He was clearly marked as a radical and few persons, especially in the service, wanted any connection with him.

President Coolidge now moved behind the scenes to deal with Mitchell, whom he had tolerated during his previous statements, but he was no longer willing to take more of the bad publicity his administration had been burdened with from the case. He appointed Dwight Morrow, a friend of his and

³⁹New York Times, September 6, 1925, 1.

⁴⁰Ibid., 6.

senior partner in the J. P. Morgan bank, to head an inquiry into the Air Service and the general situation of American aviation. The persons chosen for the board were all well respected and well known. Mitchell himself conceded that it would be a "painstaking and fair investigation."⁴¹ This was an adroit move by Coolidge to take some of the steam away from Mitchell. The very existence of the board seemed to show that the administration was concerned about aeronautics. Now Mitchell's charges could be weighed against the findings of the board.

In the meantime the Army had also moved against Mitchell. On September 8, Major General Hines, Chief of Staff of the Army ordered the Inspector General to make a complete investigation surrounding the issues of Mitchell's statements at San Antonio, while he was temporarily relieved of his duties. On October 20, the War Department announced its decision to begin court-martial proceedings against Mitchell on October 28, under the 96th article of war which stipulated that:

. . . all disorders and neglects to the prejudice of good order and military discipline, all conduct of a nature to bring discredit upon the military service shall be taken cognizance of by a court-martial and punished at the discretion of such court . . .⁴²

The date of Mitchell's court-martial coincided with the announced beginning of hearings before the Morrow Board.

⁴¹New York Times, September 11, 1925, 1.

⁴²New York Times, October 21, 1925, 1.

Thus Mitchell's court-martial would be in competition for publicity with the actions of, and testimony before the board.

Mitchell chose Frank Reid to defend him. Reid was a Congressman from Illinois who was one of his declared supporters in the House and who was acquainted with airplanes and aeronautics. What worried Mitchell though was that he felt a court-martial under the 96th article would not permit him to espouse publicly his views again, and the only testimony allowed would be, in his words, whether he "called the War Department and the Navy Department into disrepute."⁴³ Before his trial began, Mitchell was allowed to testify before the Morrow Board. The War Department did not want to make it look like it was trying to shut him up.

On October 28, the court-martial began and the attention of most of the country was focused on it, with few doubting the final verdict under the 96th article. The crucial stage, for Mitchell, came when the defense asked to be allowed to prove the charges that had been made by Mitchell. The court acceded to the request even though the issue had been made clear as one of breach of discipline. It now seemed again that Mitchell was on trial for his ideas as he was allowed to present his views and to summon more than seventy witnesses who agreed with him. The question remains as to why the court-martial let the case be thrown open to a debate of the air issues. Possibly the officers on the board felt that

⁴³New York Times, December 18, 1925, 1.

he would not be able to substantiate his charges, or that it was a matter of fair play to a fellow officer with whom they were all acquainted. The most logical answer though is that it was a shrewdly calculated move to settle the issue within the boundaries of the Army. If Mitchell had been silenced and routinely tried on the discipline issue, a Congressional investigation might well have taken up his charges. But with him being able to voice his views it showed that the Army was willing to listen to the air issue, and his inevitable guilty charge would have made it seem that the officers on the court-martial board had objectively weighed his views and disagreed with them.

Another point in the Army's favor was the report of the Morrow Board which came out two weeks before Mitchell's trial was over. Its conclusion, very comforting to the Army, was that:

We do not consider that air power, as an arm of the national defense, has yet demonstrated its value. We believe that such independent missions as it is capable of can be better carried out under the high command of the Army or Navy as the case may be.⁴⁴

The court-martial closed on December 17, finding Mitchell guilty and sentencing him to a suspension from rank and forfeiture of pay and allowances for five years.⁴⁵ It was obvious that Mitchell could not remain in the Army under these circumstances and he resigned. There were some rumblings in

⁴⁴Burlingame, General "Billy" Mitchell, 124.

⁴⁵New York Times, December 18, 1925, 1.

the House in support of Mitchell, but the steps introduced to aid him stood little chance of success. The most ludicrous attempt came from Representative Thomas L. Blanton of Texas who proposed by joint resolution the abolition of all court-martial trials in both the Army and Navy in time of peace, and the restoration of Colonel Mitchell to the rank of Brigadier General. His resolution also called for the suspension from the Army for five years of the Assistant and Acting Chiefs of Staff, and of Generals Grave and King, members of the court-martial that declared Mitchell guilty.⁴⁶

After the court-martial Mitchell did not rest. He wrote a lot and went on a stumping tour across the country. His audience though diminished fast. Once the spectacular aspects surrounding his case were gone, most of his listeners deserted him. People were not interested in hearing about the next war and the changes that should be made in the defense establishment. Mitchell's last hope for a change in policy was with the democratic administration of Franklin Roosevelt in 1932. He had some hopes that a separate Department of Aeronautics might be established in which he would get the top civilian position. This never came about, and Mitchell died in 1936, having failed to build an Air Force that would be his monument, but indirectly having advanced the cause of aeronautics in this country.

⁴⁶New York Times, December 19, 1925, 1.

Rickover and the Indirect Approach

The Monsanto project at Oak Ridge, to which Rickover had been sent by the Navy as one of its representatives, was the first major effort toward developing a practical use for atomic power. It was designed to be a cooperative effort between the armed services, industry, and the government in building a nuclear reactor. The Navy was interested in the project because, at some time in the future, atomic power might be used to propel ships. It was conceded by almost everyone in the Navy that this would not occur for some time and that therefore there was no sense of urgency surrounding the project.⁴⁷

Before reporting to Oak Ridge, Rickover went through the secret files of the Bureau of Ships in Washington looking for any material that might help him prepare for his assignment. He read a report submitted by a Dr. Philip Abelson, who had worked for the Naval Research Laboratory and had visited some Manhattan District projects, on the possible uses of atomic power for submarines. It was a detailed paper and included a description of a nuclear power plant, a coolant for the reactor, and other important and enlightening details. It is impossible to point to an exact time when the idea of working to build an atomic submarine developed in Rickover's mind, but this undoubtedly made a lasting impression on Rickover. He already had a practical knowledge of submarining as a result

⁴⁷Blair, Atomic Submarine, 15.

of two years service on S-48. Also, he had translated from the German, in 1936, Hermann Bauer's The Submarine, Its Importance as a Part of a Fleet, Its Employment in War, Its Future, which, no doubt broadened his understanding of the strategic uses of submarines. The advantages a "true" submarine would have over other ships because it could remain submerged indefinitely as atomic power required no oxygen, were self evident. Probably a combination of the above factors with some others made Rickover decide that the first use for atomic power in the Navy should be in a submarine.

He was the first member of the Navy team to arrive at Oak Ridge and he managed to secure an appointment as Assistant to the Director of Operations. From this position he was able to gain a quick understanding of the administrative structure and the work being carried on, which gave him an important head-start over the officers yet to arrive.

When these officers finally appeared Rickover was shocked to find out that they had not been assigned to his command but just to study with him in a loose group of equals. The Navy's purpose in sending officers to the Monsanto project was to have them become familiar with the building of a nuclear reactor so they could use this knowledge in helping to build an atomic power plant for a ship. But, Rickover had already taken a step beyond that. He had his mind set that he was going to take the lead in providing the Navy with nuclear power and that this was to be in a submarine. He realized that only a concentrated effort in the same direction

on the part of the entire group would assure the earliest attainment of this goal. To get this he had to do two things. He had to get these men to recognize his authority so that he could direct their studies, and he had to convince them that the study should be toward a reactor for a submarine.

He called the officers together one day and let them know that as senior naval officer at Oak Ridge he would assume the task of filling out their fitness reports. That was enough to transform the loose study group into a team controlled by Rickover who now directed their study into specified areas. These officers soon came to realize the potentials of an atomic-powered submarine and began to believe in it as much as Rickover did.⁴⁸

But, as soon as Rickover had established his authority over this group, he was faced by another and more serious challenge to his authority and to his goal. Instead of being directly under the Chief of the Bureau of Ships and the senior officer immediately concerned with nuclear power as he thought, he found that the Navy had given him a new boss. A Captain Albert G. Mumma had been made head of nuclear power work in the Bureau of Ships, while a Captain Harry Burris had been sent to General Electric to begin preliminary planning with them for a ship's nuclear reactor. Rickover had thought that after the Monsanto project was completed, he and his group would supervise the construction of a nuclear engine plant.

⁴⁸Blair, Atomic Submarine, 30.

But now, Captain Burris was already doing this with G. E. Even more disturbing, G. E.'s plans called for a reactor to fit into a destroyer. To further complicate the problem, Captain Mumma told Rickover that all reports by the Naval Group at Oak Ridge had to be sent through his office.⁴⁹ Rickover shrewdly managed to counter this by stating that he was working for the Army, since the Manhattan District was a branch of the Army, and that Mumma would have to get permission from the Army to see those reports, whereupon Mumma dropped the subject. The officers working with Rickover remained loyal to him at this time because he had succeeded in instilling in them the desire to build an atomic reactor for a submarine and also because he still filled out their fitness reports.⁵⁰

The next problem Rickover faced was the slowing down of the Monsanto project. This was partly a result of the organizational change which was in progress in the control of atomic energy. During the war and immediately following it, the Army had been in control of all atomic research. In 1947 however, this was taken from the Army and all matters relating to atomic energy were put into the hands of a new civilian agency, the Atomic Energy Commission.⁵¹ As this change was in

⁴⁹Blair, Atomic Submarine, 32.

⁵⁰Ibid., 33.

⁵¹Commander Craig Hosmer, USNR, "Nuclear Power for the Navy," U. S. Naval Institute Proceedings, LXXXIV, (May, 1958), 61.

progress, work slowed at Oak Ridge because of an uncertainty as to how the change would affect the reactor project. It also slowed because, Rickover felt, not enough attention was being paid to the engineering problems of a reactor and that too much time was being devoted to the theoretical-scientific aspects of it.⁵²

The organizational change which was taking place did help Rickover indirectly. The new Atomic Energy Commission wanted a statement from the Navy as to its aims in atomic propulsion for ships and asked Rickover, since he was the senior officer of the Navy team at Oak Ridge. Rickover took this opportunity to express his views on atomic power for the Navy. He predicted that the Navy would have a nuclear powered ship in five to eight years and that in ten to fifteen years it would have nuclear powered ships of every variety.⁵³ This report was forwarded to the Bureau of Ships and, while Captain Mumma and Admiral Mills were startled by these predictions, they let them stand. This was due to their relatively small knowledge of atomic power which points out one of the major differences between Mitchell's and Rickover's campaigns, to the advantage of Rickover. While Mitchell was one of many persons in the field of aeronautics, Rickover was one of a very select few in the field of atomic energy. Because of the secrecy surrounding all projects concerned in any way with

⁵²Blair, Atomic Submarine, 84.

⁵³Ibid., 83.

atomic energy very few persons even knew that such work, as Rickover's, was going on. While only a handful of experts could disagree with Rickover on the technical aspects of the atomic submarine, many "experts" could voice opinions contradictory to Mitchell's.

With work slowed on the reactor project at Oak Ridge, Rickover decided to go to Schenectady, New York, where Captain Burris and General Electric were working on plans for a naval reactor. The work there was only slightly better than that of the Monsanto project. At least G. E. was further along on the application of a power reactor for a destroyer than Oak Ridge was with its power reactor. But again, Rickover felt that the engineering aspects of the reactor were being ignored by the scientists, as at Oak Ridge. Moreover, General Electric had become interested in the idea of a breeder reactor that would produce fissionable material as it was operating. They began to put most of their efforts into research in this direction.⁵⁴ Rickover then set out trying to convince Captain Burris and General Electric that they should build a smaller reactor than the one they had planned for a destroyer, concentrating instead on one that would fit into a destroyer escort or possibly a submarine. The most convincing argument which he used, and the one which caused the change to a smaller reactor, was that fissionable material was scarce and a reactor of the size they

⁵⁴Blair, Atomic Submarine, 84.

were planning would consume too much.⁵⁵

Thus again, Rickover, on his own initiative caused a change at General Electric without the knowledge or permission of his superiors and he indirectly enlisted General Electric in the work toward an atomic submarine. The lack of anyone other than Rickover to supervise atomic work allowed him to establish his concepts without any visible opposition. The importance of this factor in his eventual success cannot be overstressed.

Next came a series of events that nearly doomed Rickover's plans. The only thing that saved him and the atomic submarine was his dogged determination to carry out the project. The Naval Group at Oak Ridge was disbanded and assigned to other duties while Rickover was given a meaningless position and title as "Special Assistant" for Nuolear Matters and transferred to Washington. At the same time the Monsanto project had further deteriorated as Dr. Farrington Daniels, head of the project, left it. The news from General Electric was equally discouraging. It had decided to push the breeder reactor at the expense of other projects.⁵⁶ The Navy was not really concerned because it did not have the sense of urgency or immediacy for the reactor project as Rickover did. Rickover understood the problem of lead-time--the time which elapses between conception of a new idea, its development, and

⁵⁵Blair, Atomic Submarine, 84.

⁵⁶Ibid., 87.

finally its fruition in the completed new article rolling from the production lines--which was either not recognized or fully understood by the Navy at that time.⁵⁷

By mid-1947, Rickover was in much the same position as Mitchell was in 1920, when the National Defense Act kept the Air Service within the Army in a position secondary to ground forces. Rickover had to map a new strategy for the attainment of his goal. The fresh plans he developed called for convincing his superiors in the Navy, the government, and in the Atomic Energy Commission of the necessity for building an atomic ship as soon as possible. It is interesting to note that he did not attempt to dramatize his case for an atomic submarine in public. One reason for this was the secrecy of the project. But it is doubtful whether Rickover ever considered this as one of his options for bringing about a nuclear powered ship. He undoubtedly considered this as a purely service problem which would have to be solved within the Navy. Rickover did have one plus factor on his side when he began his fight to convince his superiors of the need of a nuclear ship, and that was that he enjoyed the complete confidence and support of his superior in the Bureau of Ships, Admiral Mills. Rickover also conceived an ingenious plan. He knew most of the men who were working on the Moneanto project. And, although it was stalled, he thought he might be

⁵⁷Rear Admiral Hyman G. Rickover, "Lead Time and Military Strength," Vital Speeches, XXII, (March 15, 1956), 339.

able to convince these men to put their lagging efforts into working toward a naval submarine reactor. He went to Oak Ridge and got these men to channel the money remaining in the project to a naval reactor.⁵⁸ Again, this is illustrative of the knack Rickover had for doing what probably no one else would even have thought of attempting. When normal channels were blocked he refused to be stopped; instead, he searched until other avenues were opened to his goals. Another important point that bears mentioning is that Rickover was able to describe to these scientists in detail what they should be working toward and the type of reactor he felt the Navy needed. Thus Rickover was not only an administrative "genius," but he was also thoroughly grounded in the field of atomic energy so that he knew in detail what the end product of a Navy reactor for a submarine should be like. He was able to explain the special problems that would need consideration in putting a reactor in a submarine, and the many safety features which would have to be included.

Only a few persons ever realized that what had begun at Oak Ridge as a project to build an industrial reactor had now been turned, by Rickover, into a Navy project. Admiral Mills learned of this switch but did not say anything because he liked Rickover and because this was actually a boon to the Navy to get, in effect, free research.

Now Rickover set out on a definite course to get his

⁵⁸Blair, Atomic Submarines, 98.

superiors to endorse the idea of an atomic submarine. One of his major goals along the way was to get the Secretary of the Navy to declare publicly that an atomic submarine was both desirable and necessary for the Navy. To do this he had to get the Chief of Naval Operations to endorse the idea. It can be seen that Rickover was attempting to stay within the proper channels of command which prevented unnecessary angering of anyone by attempting to bypass their authority in a direct appeal to the Secretary of the Navy. He was fortunate that the Chief of Naval Operations was Admiral Chester Nimitz, a submariner. Rickover prepared a letter for Admiral Nimitz to endorse and who, upon indorsal, would forward it to the Secretary of the Navy who, hopefully, would then approve the Navy's seeking to build an atomic submarine. It took Rickover more than two months to get the letter moved along the chain of command until it reached Nimitz. This painfully slow procedure shows that Rickover knew when to step out of the normal operating channels and when to remain within them. Finally, because of the support of Admiral Mills and a few other far-sighted officers, the letter reached Nimitz who quickly gave the project his support. With Nimitz's endorsement it seemed that the project was being pushed by the Chief of Naval Operations and many people in the Navy who had been only vaguely interested in the idea began to take more notice of it.⁵⁹

⁵⁹Ronald Schiller, "The Strange Case of the Man Behind the Atomic Submarine," Reader's Digest, LXII, (May, 1953), 48.

Rickover's letter, with Nimitz's approval was forwarded to the Secretary of the Navy who, to Rickover's surprise and pleasure, quickly gave the project his backing. Now Rickover had the official sanction of his superiors in the Navy. His next step was to get the support of the Atomic Energy Commission which was needed as all matters relating to atomic energy were under its control and required its approval. AEC approval might also mean some financial support for the project which would help speed work and prevent possible intra-service friction resulting from competition for funds with other projects. In his attempt to get AEC support Rickover had the full support of the Bureau of Ships. He drafted a letter which Admiral Mills signed and forwarded to the AEC. It stated that no time should be lost in proceeding with the building of a nuclear powerplant for a submarine. The letter stressed that the achievement of this goal was vital for the Navy to be able to carry out its mission. It further stated that:

The problems to be solved are so intimately connected with both the Atomic Energy Commission and the Navy that neither activity can make separate engineering decisions regarding them, and the program must be coordinated in the closest manner between the Navy and the Atomic Energy Commission.⁶⁰

This letter, dated January 20, 1948, did not move the Atomic Energy Commission in support of a nuclear submarine. The AEC was still, at this time, mainly interested in the

⁶⁰Blair, Atomic Submarine, 106.

atomic bomb. However, a second chance soon presented itself.

On April 2, 1948, the Bureau of Ships was invited to send a speaker to the Undersea Warfare Symposium. Rickover wanted to use this as a chance to stress the Navy's desire to build an atomic submarine and to charge the Atomic Energy Commission with handicapping its efforts by not lending its support to the project. He got Admiral Mills to present a speech which he had written. The speech would have more of an impact coming from the head of the Bureau of Ships. Mills said that:

. . . less than one per cent of the work which will ultimately be required to design a submarine plant has now been accomplished. . . There is another point which I feel I must make clear to this audience, and that is that to date the Atomic Energy Commission has never recognized the atomic submarine power pile as a project, nor has it given official status or priority to such a pile. I mention this because the impression is abroad that considerable work is being done on a submarine pile and that this project enjoys a high priority.⁶¹

Though this was an open attack upon the Atomic Energy Commission, it was not directed against any individuals or to anyone within the services which is an important difference from the attacks Mitchell made in trying to further his cause.

Mills' attack was not followed by any favorable developments on the part of the AEC and Rickover decided it was time to force the latter's hand. He wrote the Atomic Energy Commission that the Navy vitally needed the atomic submarine and that it would proceed on its own to develop it if

⁶¹Blair, Atomic Submarine, 109.

no help was to come from them. Rickover had carefully built a solid backing for himself before doing this. It was a bold move, but not an irrational one. With the head of the Bureau of Ships, the Chief of Naval Operations, and the Secretary of the Navy all stating the atomic submarine was vital to the Navy, Rickover could easily summon support for a charge that the AEC was hindering the progress of national defense by stopping him or by refusing to sanction and support the Navy project.

Finally, by May, 1948, the AEC agreed formally to undertake a Navy reactor program and it moved the small group from the Monsanto project, which it realized was unofficially working on a naval reactor, to its new laboratories at Argonne. This completed Rickover's first phase in bringing about an atomic submarine. He had obtained the support of his superiors in the service and the government. Now, in order to complete the project as soon as possible, his task became one of assuring that the program would not bog down as the Monsanto and General Electric projects had done. General Electric, it is to be remembered, was still putting most of its efforts into research on a breeder reactor rather than a naval reactor. Rickover's most useful tool in bringing the project to a successful conclusion was to be his administrative genius of being able to cut corners. His low point had come in June of 1947, when his group at Oak Ridge was disbanded. By May, 1948, eleven months later, he had cleared most of the administrative problems in the path of building the atomic submarine.

Rickover now began a successful effort to broaden industrial interest and support for the atomic reactor project. This was to serve a dual function. First, with business involved, more money would be available for research in a reactor. Also, he was undoubtedly aware of the positive benefits that would accrue to the program if the powerful industrial lobby were enlisted on the side of atomic reactor development. He began to prod Westinghouse into taking an active interest in atomic energy. He did this through personal acquaintances with many Westinghouse officials whom he knew through his earlier position as head of the Electrical Section of the Bureau of Ships, and also by giving them small contracts to gradually build up an interest and experience on their part in the atomic field.⁶² He finally managed to interest Westinghouse enough to get it to accept a contract from the Navy, which he arranged, for research on a heat-exchange system for an atomic reactor. With Westinghouse joining General Electric in the atomic field, Rickover had enlisted, indirectly, two of the most capable, wealthy, and respected electrical giants in his work for an atomic reactor and an atomic submarine.

These successes only drove Rickover to push his project faster. He realized that bureaucratic "red-tape," engineering problems, and the lag between the conception of a component for the reactor and the submarine and the

⁶²Blair, Atomic Submarine, 115.

production of that component by industry were the only limits on the time it would take to develop an operational nuclear powered submarine. In his characteristic fashion, he immediately set out to deal with all these problems. He threw away the Navy's traditional ways of working. His goal was the only guide for his actions. This alienated a lot of persons who fully agreed with the worth of his project but who did not approve, and in many cases resented, the way he went about pushing his project. The full reaction against his unorthodox methods and his bulldozing tactics came to the surface in the early 1950's and contributed to a move which nearly ended his career in the Navy at a time when the atomic submarine was near completion.

Rickover had clearly established himself as the man in charge of atomic propulsion for the Navy and he took over Captain Mumma's job as head of the Nuclear Power Division of the Bureau of Ships. His first act in this position was to reassemble the members of the original Navy team at Oak Ridge which had been disbanded the year before on Mumma's orders. After doing that, Rickover managed one of the cleverest "anti-bureaucracy" moves of his career. He decided that he should have a position in the AEC chain of command as head of its newly established Naval Reactor Branch which was made a part of the Division of Reactor Development. With the support of Admiral Mills once more, Rickover got the appointment. He now held a command in the AEC and in the Navy. Had this not been done there would have been a civilian to whom Rickover

would have been responsible. This would not only have been inimical to him, but it would also have placed an extra man in the command structure which might have lowered the efficiency of operation as well as causing friction in the leadership.⁶³

The establishment by the AEC of a Division of Reactor Development in September, 1948, was the signal private industries had been waiting for and they realized that atomic power for peaceful uses would not be far in the future and they began to take a more active interest. Westinghouse, already in the field because of the small contract set up by Rickover for a heat-exchange system, wanted to expand its efforts to work on a complete reactor. Rickover was overjoyed. To do this however, Westinghouse needed fissionable material which was still tightly controlled by the Atomic Energy Commission. Rickover would not let this chance slip by to bring Westinghouse fully into the atomic reactor program. He not only got the AEC to let Westinghouse have fissionable material, he also got it to allocate money for Westinghouse to build an atomic laboratory which they then would staff with their own scientists and engineers. Thus, Rickover got the benefit of having many of Westinghouse's top men work on the project which was definitely specified as being a submarine reactor.

The Navy, of course, was fully behind the project by this time. When it was discovered that no money had been

⁶³Wallace, "A Deluge of Honors," Life, 110.

directly appropriated for the Navy's share of the atomic submarine project for 1949, \$3,000,000 was quickly diverted from a general fund to the submarine project.⁶⁴

Rickover had an almost free hand in his work to develop the atomic submarine from this time on. The Navy and the Atomic Energy Commission wanted to see the project completed as soon as possible. The Navy of course wanted to get a nuclear powered ship which would not only revolutionize ship propulsion, but also provide it with a "true" submarine which would dramatically indicate to everyone that the Navy had joined the atomic age, a very useful propaganda device in view of its conflict at that time with the Air Force. The Atomic Energy Commission wanted to show that atomic energy could also be used for peaceful and practical purposes.

In order to prevent any time lag between the completion of the reactor, which Rickover judged would take five years from 1949, and the completion of a submarine to house the reactor, he got the Bureau of Ships to start designing an "atomic" submarine. He wanted to enlist the Portsmouth Navy Yard to build the atomic submarine. But, when it declined on the grounds that it did not have a large enough staff to undertake the project, Rickover got the Electric Boat Company of Groton, Connecticut, the only other experienced submarine builder in the United States, to enter the project.⁶⁵

⁶⁴Blair, Atomic Submarine, 123.

⁶⁵Palmer, "SSN-571," New York Times Magazine, 14.

The remaining story of the development of the first atomic powered ship, the submarine Nautilus, is largely one of overcoming technical and scientific problems as well as being a further example of Rickover, the administrator par excellence, at work. Of more interest to this paper is the treatment of Rickover by the Navy when Nautilus was on the verge of completion.

A selection board to promote Navy officers from Captain to Rear Admiral met in July of 1951. Rickover's name was on the list because he was a senior Captain. He was not promoted at this time.⁶⁶ Navy rules state that an officer twice passed over for promotion will automatically be retired from the service. When a selection board was ready to meet again in late 1952 to consider senior Captains for flag-rank, Secretary of the Navy, Dan Kimball made an obvious gesture on Rickover's behalf so he would not be forced into retirement. The day before the nine senior Admirals were scheduled to convene, he presented Rickover with a gold star to add to his Legion of Merit. Before this, the chairman of the Atomic Energy Commission had sent a letter to the board in which he stated that Rickover had been the man instrumental in the atomic submarine project. Senator Brien McMahon of Connecticut, Chairman of the Joint Congressional Committee on Atomic Energy, had also written a letter to the Chief of Naval

⁶⁶Schiller, "Man Behind the Atomic Submarine," Reader's Digest, 50.

Operations praising Rickover and the work he had done.⁶⁷ To almost everyone's surprise, when the promotions were announced in January, 1953, Rickover had been passed over again. According to Navy regulations he had to retire even though he had just performed a most outstanding job for the Navy and the country. It is impossible to determine exactly why Rickover was passed over by the promotion board as its deliberations were customarily confidential and no minutes of proceedings were kept. But, Rickover's unorthodox methods probably did not endear him to the Admirals on the board. Also he was not a line officer. He had no combat experience and had not served in a combat theater during the war. The fact that he was Jewish may also have detracted from his cause.

Nevertheless, it seems that as soon as Rickover was passed over the Navy set out on a deliberate course to minimize his role in the development of the atomic submarine. Perhaps his failure to be promoted was just one aspect of this larger policy. One cannot determine which came first, but it is quite obvious that the Navy was openly attempting to make it look as if the atomic submarine project was charted and nursed along in its entirety by the Bureau of Ships. This was made easier because Admiral Mills, one of Rickover's staunchest supporters, had left the Bureau of Ships and was in retirement by this time. Articles appearing in the Bureau

⁶⁷Schiller, "Man Behind the Atomic Submarine," Reader's Digest, 50.

of Ships Journal on the atomic submarine failed to make any reference to Rickover. The official line in the Navy clearly was to discount Rickover's development of the atomic submarine and to credit the Navy instead. It is very probable that the Navy wanted to use the development of the atomic submarine and the first practical use of atomic power for propaganda and public relations purposes. To do this, the role of the individual, Rickover, would have to be played down, while credit to the Navy as a whole would have to be emphasized. The correlation desired was Navy-atomic submarine, not Rickover-atomic submarine. As it seemed that Rickover would now be retired, criticism against him became more frequent by those who had been opposed to him all along because of his non-conformity to Navy rules or because he had angered them in the past. It was obvious that Rickover had little support for himself within the Navy.

Rickover's forced retirement however aroused immediate opposition in Congress where he had built a strong following on the Senate Armed Services Committee and the Joint Committee on Atomic Energy, both of which were acquainted with the atomic submarine project and Rickover's decisive role in it. Representative Sidney R. Yates of Illinois attacked the Navy's promotion system and asked the Senate Armed Services Committee to hold up action on confirmation of Navy promotions until it could discover whether Rickover's retirement placed the atomic

submarine program in jeopardy.⁶⁸ This the Senate Armed Services Committee did. The Navy now publicly defended its action by stating that an officer's entire career was considered for promotion to flag-rank not just one assignment or achievement. Aware of the bad publicity the Navy was getting and of the opposition to Rickover's forced retirement on the part of two powerful Congressional Committees, the new Secretary of the Navy of the Eisenhower administration, Robert B. Anderson, stepped into the picture and announced that he had arranged for Rickover to be kept on active duty for another year while a special promotion board would meet in July to reconsider Rickover's promotion.⁶⁹

This board recommended Rickover's promotion to Rear Admiral. The very opposite of what the Navy wanted began to happen. The press had become aware of Rickover's case and it was now dramatized. Every story that came out emphasized Rickover's decisive role in Nautilus' development. Thus, inadvertently, by attempting to hush-up Rickover's achievement, the Navy actually helped him get all the public credit that he deserved.

Rickover managed to stay in the Navy because of the support he received in Congress and the Secretary of the Navy's office both of which recognized his service to the country. He remained an outsider though within the Navy even with his

⁶⁸New York Times, February 13, 1953, 7.

⁶⁹New York Times, March 10, 1953, 19.

high rank. His unorthodox methods, his anathema to most regulations, and his source of power and support independent from the Navy made him even more suspect. He would be tolerated but not rewarded. Probably any other man that accomplished what Rickover did would have become Chief of Naval Operations.

In 1958 Rickover faced a similar problem to that in 1952. He either had to get his third star or again face retirement. Rumors in Washington were that the Navy planned to retire Rickover. When the Joint Committee on Atomic Energy questioned Secretary of the Navy Thomas S. Gates about this, he told them that the Navy had no Vice Admiral spot open for Rickover. Once more Congress rallied to the side of Rickover and put pressure on the administration and the Navy to promote Rickover. He then got his third star.⁷⁰

The Navy's mandatory retirement age for all officers is 64.⁷¹ January 27, 1964, Rickover's 64th birthdate and retirement date was fast approaching in late 1963 when the question again arose as to his value to the Navy and the country's atomic projects. It was decided that he was still needed. On December 17, 1963, President Johnson nominated Rickover for retirement at the permanent rank of Vice Admiral. His permanent rank at that time was Rear Admiral. At the same time,

⁷⁰"Rickover Rescued Again," Newsweek, LII, (August 25, 1958), 23.

⁷¹"For Rickover: Retirement or Action by Congress," U. S. News and World Report, LIV, (February 25, 1963), 14.

Secretary of the Navy Paul H. Nitze announced that Rickover would be recalled to active duty after he had gone through the motion of retiring on February 1, 1964.⁷² So, through a technicality in the retirement laws Rickover has been retained on active duty, year by year since 1964, at the pleasure of the Secretary of the Navy.⁷³

At present, Rickover commands the Naval Ships Systems Command, and is still chief of the Naval Reactors Branch of the Atomic Energy Commission.⁷⁴

⁷²"People of the Week," U. S. News and World Report, LV, (December 30, 1963), 10.

⁷³"Let's Solve the Rickover Problem," Saturday Evening Post, CCXXXVI, (March 16, 1963), 80.

⁷⁴Army Times, June 21, 1967, 26.

CHAPTER IV

WHY MITCHELL FAILED AND RICKOVER SUCCEEDED

In analyzing the causes of success of any particular person or project and the reasons for the failure of one of a similar nature, it is always easier to establish the reasons for triumph. Success seems to prove that the methods employed were the right ones to achieve the desired end. On the other hand, the reasons for failure are often difficult to determine and many and perhaps various theories, all valid, may be used to explain why a particular project failed.

In comparing Mitchell and Rickover one has primarily to be aware of the differences in the Service in which each operated and at the same time the different eras in which each worked toward change.

The Army in the 1920's was small and in the first half of that decade declining appropriations were forcing it to become even smaller. While the Army was fighting with Congress and the Administration for more money Mitchell was trying to get the Army to divert more of its limited funds into the Air Service. This could only come at the expense of the older and more established branches whose officers were in command of the Army. Thus, Mitchell almost automatically, by demanding more money for his service, was

setting himself against the chiefs of his Service. The Navy in the decade after World War II had much more money than was available to the Army in Mitchell's time, and it was also in the hands of leaders who were generally favorable to innovation and recognized the need for progress and development in all fields, particularly in the new atomic field. Thus the Navy was much more receptive to new ideas and new projects. Mitchell had to convince people that his ideas were right before he could get anything done toward implementing them. Rickover never really had to do this. The Navy was quite willing and agreeable to the idea of atomic propulsion. Rickover just had to convince it that this should be done as quickly as possible. Mitchell was attempting to establish a relatively new weapon while Rickover was only bettering something the Navy already had and knew worked. Thus while Mitchell never could get over the first step of convincing his superiors of the value of the airplane, Rickover was more fortunate in not having to do this for the submarine.

Mitchell also faced another problem that Rickover was fortunate enough not to encounter. The theories of airpower that Mitchell proposed and the basis for giving the airplane such an important position in the defense structure as he wanted, was based on the airplanes of the future. Technology never caught up with Mitchell's ideas which made them much harder to accept than if the airplane he was talking about had been operational. To many who were not as farsighted as he was, he seemed little more than a visionary dreamer of the

Buck Roger's variety. After 1945 however, atomic power was a fact. The only thing that had to be done was to harness this power and energy to some useful purposes other than bombs, which few doubted could be done.

Mitchell had to arouse a public which was apathetic on issues of national defense. He had to convince not only the public, but Congress and the President of the value of the airplane and then that this value could be best exploited in a separate organization for aeronautics. This done, he would have had to get more money out of a very frugal administration. The public in the late 1940's was very much aware and concerned about the problems of national defense and Congress was willing to spend more money to insure that the United States would be ready and protected in case war did come. There was a rather potent pacifist opposition to any increases whatsoever in either the military establishment or spending in the "twenties" which Mitchell had to face.

Mitchell's campaign of continuously stressing the airplane as the cure-all for the American defense problem threatened to put many of his military colleagues out of a job. Not only did he thus create opposition to himself and his ideas within the Army, he also enlisted the Navy on the side opposing him. His strategic doctrine made the air force and the airplane the first line of defense against an enemy, a place traditionally reserved for the battleship and the Navy. His constant stressing that naval aviation should be combined

with military aviation in a separate defense establishment alienated many Navy fliers who wanted to help push the general cause of aviation as Mitchell did, but would not support him because their loyalty was to the Navy and they wanted to remain a part of the Navy.

Rickover and the atomic-submarine, along with atomic propulsion, carried with them no new strategic concepts that would reduce the importance or threaten the existence of other military organizations and men. In fact, it did the exact opposite. The Navy, being questioned as to what role ships would play in the atomic and missile age was presented with an answer by Rickover. It would have faster moving ships that could be wider dispersed because atomic propulsion would minimize the refueling problem. And, if surface ships were driven off the seas entirely it could still function beneath the seas in submarines that could stay submerged for months and position themselves off the shores of a potential aggressor ready to deliver an atomic retaliatory blow without ever surfacing.

The methods Mitchell used in carrying on his campaign lacked both tact and taste and in the end had just the opposite effect of what he wanted to achieve. Instead of gaining him supporters for his concepts, they alienated many persons from him both within and outside the service. Mitchell evidently did not believe in "honest" disagreements, and when anyone disagreed with him he openly attacked their motives and character. In challenging the honesty and integrity of his superiors he invited and eventually received their censure

and on further verbal attacks left them no alternative but to dismiss him from the service. He removed his argument from the level of what defense structure was best for the nation to one of disrespect and disobedience of a subordinate. The question evolved into a disciplinary matter. An officer in the Army could not get by accusing his superiors of "criminal negligence" without damaging Army discipline forever. This had to be met with a quick and decisive response. If his court-martial was a calculated move on his part to rally public support behind him, Mitchell misinterpreted public opinion entirely. He was regarded as an energetic and a very capable officer, but this certainly did not exalt him above the General Staff of the Army and the General Board of the Navy which were unanimously lined up against him. Also, the air controversy had been in the news so much in the twenties with Mitchell at its head that a saturation point seems to have been reached by the time of Mitchell's court-martial. People were not interested in the air issue any more. They were only interested in the case because of its spectacular nature. Mitchell's unprovable accusations had also tagged him as a radical which in turn took away some of the validity and reliability of his testimony on aeronautics. In general, Mitchell was a militant reformer and he suffered from the characteristics of all militant reformers. He quickly became exasperated with those who disagreed with him because he was so certain of his case, he could see no compromise, and his sense of urgency and constant attacks and criticism built a

strong opposition to him, not only because of his ideas but also because of his methods.

Rickover lined up his superiors in support of his innovation and then got the support of the Atomic Energy Commission. He even got industry involved in the project, something Mitchell could not do because there was no big industrial concern involved in aeronautics in the 1920's. In fact, big industry may have been actively lobbying against Mitchell. Much less steel and equipment of all kinds was required to build airplanes as opposed to ships.

As has been indicated several times, Rickover's innovation, atomic propulsion and the atomic submarine, was never really opposed by the Navy. He was opposed because of his unorthodox methods, his refusal to work by the rules, because the Navy desired to get more credit for building the atomic submarine, and for a host of smaller and harder to establish reasons. But, Rickover had quite inadvertently, built a solid base of support for himself in Congress. At the same time he had not built any opposition to himself in Congress as Mitchell had done through his general attacks on the Army, the Navy, and the administration. Mitchell appealed to Congress to help him whereas Rickover's case came into Congress on the initiative of some Congressional members themselves. Had Congress decided to act in favor of Mitchell there is little they could have done to hurt the Army. Appropriations were already so low that any further reduction would have been improbable as that would endanger the very existence of

the Army. In the "fifties" there was quite a lot of money for the defense establishment. The Navy was in heated competition with the other services for this money so they courted the favor of Congress. The Navy also did not want to incur the wrath of Congress because this might have an adverse effect on its case in the service unification controversy. After Congress showed that it was supporting Rickover it did not take long for the Navy to announce his promotion.

While Mitchell never had the pleasure of being honored for his ideas in his lifetime as Rickover has been, he has nevertheless been honored to some extent since his death, as a "prophet" of air power. He has also been reinstated to the Army and promoted posthumously to Major General although the original court-martial conviction has not been changed despite the efforts of his family. Congress has also voted him a special Medal for Honor. It remains to be seen whether Rickover will be promoted to Chief of Naval Operations posthumously.

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A COMPARISON OF TWO MILITARY INNOVATORS: BRIGADIER
GENERAL WILLIAM "BILLY" MITCHELL AND
VICE ADMIRAL HYMAN G. RICKOVER

by

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This thesis deals with the general problem of innovation in the military services and does this by comparing General William "Billy" Mitchell and Admiral Hyman G. Rickover. Mitchell wanted to make the airplane one of the primary weapons of the Army and of the entire American defense establishment; he failed. Rickover had more limited objectives. He wanted to bring atomic propulsion into the Navy by building a nuclear powered submarine; he succeeded.

The two men worked in different services and at different times. Mitchell worked to establish the airplane in a very small Army which had limited funds in the early 1920's. His views on the importance of the airplane were not shared by his superiors in the Army or in the Government. Therefore, Mitchell turned to the public for help. He began a publicity campaign whose purpose it was to emphasize the airplane as a cheap defensive weapon to an isolationist public and a frugal Congress. With public and Congressional support for the airplane he hoped the administration would force the Army to adopt an expanded aeronautics policy. The logical development of such a policy, in Mitchell's view, was the control of all aircraft in a new service, an Air Force, which he would then head.

Mitchell's scheme failed. He could not arouse a public which was indifferent and apathetic to any subject involving the armed forces establishment. He gradually became more irritated and more militant as he made little headway in gaining acceptance of his views. In a last desperate

gamble to enlist public opinion in his support he launched a verbal attack against his superiors which brought about his court-martial. He was found guilty of conduct detrimental to the good order and discipline of the Army and suspended from rank and pay for five years. This left him no choice but to retire from the service.

Rickover's work in developing the atomic submarine came at a time when the Navy was receptive to new ideas. The development of atomic weapons during World War II had introduced a new element into warfare which necessitated a reinterpretation of traditional roles and strategic and tactical concepts on the part of all of the services in view of this new factor. The newly independent Air Force claimed the predominant role in the defense establishment with a concept of strategic nuclear bombing. The future usefulness of the Navy was questioned. Thus Rickover had the support of his superiors in working toward atomic propulsion which would dramatically usher the Navy into the atomic age.

His difficulties were mainly in overcoming administrative bottlenecks and scientific problems. But, while the Navy was receptive to innovations in the years following the war, it remained traditional in its biases and methods of working. Rickover did not correspond to the normal design of a Naval officer. He shunned social activities, he disagreed with tradition as a guide for action, he was an engineering specialist, and he was Jewish. Furthermore, his unorthodox methods in pushing the Nautilus program to a rapid conclusion

were resented by many other officers. When the time came for him to be promoted or retired, the Navy chose to retire him. Rickover however had built a base of support in Congress by this time, which was independent of the Navy. His competency had been recognized by both the Senate Armed Services Committee and the Joint Congressional Committee on Atomic Energy. These powerful committees combined to pressure the administration and the Navy to promote Rickover and keep him in the Navy.

Innovators in the military, by the very fact that they are attempting to establish new ideas, are outside the mainstream of their service which relies heavily on tradition as a guide for action. A major innovation will often invalidate many traditional concepts and doctrines upon which a service has been trained and upon which the chiefs of the service have based their plans. Unless there is absolute certainty of a necessity for change, as in the case of a major technological breakthrough, the change will usually be resisted. Thus, while individualism and personal initiative have their merits in the military, they are not favorably looked upon when related to breaking with tradition and established doctrine.