

## CHAPTER 4

### WORLD WAR II AND THE RECONSTITUTION OF THE INDUSTRIAL COLLEGE OF THE ARMED FORCES, 1940 - 1947

The bizarre emergency which no one thought would ever come, that Donald Nelson (1946, p. 32) spoke of, did indeed come, of course. In a now familiar series of aggressions in Europe, Adolph Hitler, in September 1938, demanded that Czechoslovakia cede the German-speaking Sudetenland to the Reich. In March 1939, the Nazis seized the rest of Czechoslovakia. Then on September 1, Hitler's troops invaded Poland. Great Britain and France responded by declaring war (Garraty and McCaughey, 1966; Morison, 1965).

The impact of these events on the Army Industrial College, as elsewhere throughout the United States and its military community, soon became evident. Notwithstanding the isolationist feelings which pervaded the country earlier in the decade, the rapidly changing national mood was reflected in a short history written on the occasion of the College's 25th anniversary (Industrial, 1949, pp. 12-13): "By this time, the threat of [eventual American involvement in the] war in Europe was apparent to everyone and the course reflected to an increasing degree the effort made by the College to orient its instruction in terms of practical mobilization planning considerations."

#### A COLLEGE IN THE 'WINDS OF WAR'

Colonel Francis H. Miles, Ordnance Corps, who had been appointed Commandant of the College on August 21, 1938, presided over the College through much of this pre-war period to November 16, 1940 (Scammell, 1946, p. 124; Bauer, 1983, p. A-1). For the academic year 1938 - 1939, Miles was able to secure 10 regularly assigned instructors -- the largest number of permanent faculty level attained by the college up to then (Industrial, 1949, pp. 12-13).

Students in the class of 1940 began their studies in the fall of 1939, just two weeks after the German invasion of Poland. Instruction was directed into "immediately productive channels," as students were tasked to prepare a written report on the 1939 revision of the War Department's Industrial Mobilization Plan, analyzing it in terms of intended means and estimated effectiveness. Field trips were focused on studying military production as plants in America's industrial complex, now increasingly turned to war production (Industrial, 1949, pp. 13-14; Scammell, 1946).

By the following spring, the intensity of the war in Europe had increased. On June 10, 1940, as President Roosevelt was departing the White House to speak at the University of Virginia in Charlottesville, he was informed that Italy had just entered the war on the side of the Germans (Goodwin, 1994, p. 67). Later that day in Charlottesville, he told the graduates and the nation, "We will extend to the opponents of force the material resources of this nation; and at the same time we will harness and speed up the use of those resources in order that we ourselves in the Americas may have equipment and training equal to the task of any emergency and every defense" (Clem, 1983, p. 37).

### Curtailed Classes

The reaction in the War Department and its educational community was almost immediate. The next morning, on June 11, the Adjutant General of the Army signed a letter suspending classes at the Army War College (subsequently, each year, the Secretary of War suspended classes through the duration of World War II) (Fort, 1954, p. 11).

At the Army Industrial College, instruction for the Class of 1940 was expedited, and the students were graduated a week later on June 19. Meanwhile, immediate preparations were underway to initiate a series of curtailed four and a half month courses (Industrial, 1949, p. 14; Bauer, 1983).

The first of the new curtailed courses began later that summer on August 12, 1940. The Navy asked for an increased student allotment and was invited to assign 15 officers to the course. The Army, meanwhile, made plans to assign 75 Reserve officers as students (Industrial, 1949 p. 14). The emphasis of the new courses, and seeming return to a decidedly training orientation, was reflected in the way the College publicly articulated its mission at this point:

The Army Industrial College trains commissioned personnel of the Army and the Navy for duties in connection with procurement planning; the supervision of procurement both in peace and war; and planning for industrial mobilization, the wartime use of national resources, and economic warfare. The objective of the College is to so train student officers that they may think logically and dynamically in these same areas (cited in Scammell, 1946, p. 70).

Later that winter, the College went through a rapid series of changeovers in its senior leadership. Colonel Miles was relieved as Commandant by Lieutenant Colonel John E. Lewis on November 16, 1940. Little more than a month later, however, Lewis was assigned to command a regiment of Field Artillery in the 4th Armored Division, and Colonel Frank Whitehead, United States Marine Corps was appointed Commandant in

his place. Whitehead was the first officer outside the Army to head the College (Scammell, 1946, p. 124; Industrial, 1949, p. 14).

Meanwhile, in December, as President Roosevelt, in one of his famous fireside chats, summoned the American people to become "the great arsenal of democracy" (Goodwin, 1994, p. 195), Whitehead and the Army Industrial College were making preparations to respond to a further increased demand for officers trained in procurement and economic mobilization. Working with the War Department, they concluded that a further acceleration in tempo was necessary. Plans were made to begin a series of shorter courses of four months duration in January (Industrial, 1949, p. 14; Bauer, 1983).

### Short Courses

The first of the new short courses opened on January 2, 1941. Most histories of the College refer to these as "four month" courses, but in reality, actual graduation records in the Archives of the Army Industrial College reflect that they were shortened to three months duration. In concert with the need to accelerate the training of officers, by the time Colonel Whitehead took over as Commandant on February 1, the permanent faculty and staff had increased in size to 16 (Industrial, 1949, February 25, p. 14; Bauer, 1983, p. II-8).

A second short course opened on April 7, 1941 and graduated three months later on Friday, July 4. Immediately, on the following Monday, July 7, the third short course began and "the planning activities at the College became increasingly geared to actual operations in the War and Navy Departments, [with] student officers participating in many operating problems" (Industrial, 1949, p. 15).

The acceleration of officers through the Industrial College reflected the buildup that was going on throughout the War Department in this period. Secretary of War Henry L. Stimson had obtained authority to appoint an Under Secretary of War, and he named Assistant Secretary Robert P. Patterson to the new post in July 1940 with new duties to supervise procurement. Patterson's staff, which had consisted of roughly 50 officers under Assistant Secretary Louis Johnson in 1939, grew almost immediately to over 180, and soon thereafter to a staff of over 1200 officers and civilians (Huston, 1966, p. 404). In fact, by early 1941, the Army alone had grown "from 7000 civilian employees to 41,000, spread through 23 buildings" in the District of Columbia, Maryland, and Virginia (Brinkley, 1988, p. 70). The size and tempo of War Department activity intensified further that spring as the Lend Lease Act was passed in March, committing material aid to countries fighting the Axis powers (Clem, 1983, p. 39).

Several changes in the physical location of the College also occurred in this

turbulent pre-war period which are further indicative of the rapid growth of War Department personnel and the commensurate crowding of government facilities throughout Washington. Since its inception in 1924, the College had occupied space in the Munitions Building. By December 1940, however, the Office of the Assistant Secretary of War notified the College that it must vacate all space there except its main lecture room and move to the Potomac Park Apartments on 21st and C Streets, Northwest. Registration, lectures, and library reference work continued in the Munitions Building. Seminar discussions and study room activities were held in the Potomac Park Apartments, and opening exercises for each class were held in the Public Health Service Building. Then, immediately following the graduation of the Class of August through December 1940, the College was moved again to the Social Security Building at 4th Street and Independence Avenue, Northwest. By late 1941, just before the College was closed, discussions were underway in the War Department to move the institution again, this time to either Georgetown University or American University (Scammell, 1946, pp. 60- 63; Williams, 1955, February 11, p. 11).

#### CLOSING AND RE-OPENING A NEEDED RESOURCE

That fall, on October 3, 1941, the fourth (and what would become the last) short course opened at the College, "in full realization of the fact that American involvement [in the war in Europe] might come at any moment" (Industrial, 1949, p. 15).

#### Pear Harbor and the Last Class

Colonel Whitehead, the Commandant, spoke to the class in an Orientation address on the opening day of the course. He told them that they were being educated to be part of "the national defense job in which the nation is now engaged. As we see it, the job consists of doing just one important thing. The economy of the nation must be so organized that the many and varied items required for national defense will be produced in adequate quantities and on time" (Whitehead, 1941, October 3).

The class was devoted to studying the economic structure of major industries and involved special group studies of labor, power and fuel, transportation, shipping, finance, price, profit and wage control, and economic warfare (Whitehead, 1941, December 24).

As the final month of their study began, the students and faculty departed on Thursday, December 4 for a field trip to Martin Aircraft Company and the Bethlehem Steel Company (Whitehead, 1941, December 24). The group returned to Washington, D.C. in time for the weekend. That Sunday, December 7, in Washington, the Redskins were playing the Philadelphia Eagles at Griffith Stadium. Amidst the din of victory

cheers, few heard the loudspeakers paging government officials. As they left the stadium, however, newspaper headlines told the crowd that Japan had bombed Pearl Harbor. The next day, the United States declared war (McClellan, 1993, p. 156).

When students returned to their classes at the Industrial College on Monday morning, America was at war. The following day the class listened to a lecture on "Plant Protection" by a representative from the Office of Civilian Defense, and on Friday, December 12, students attended their last guest presentation, a lecture on "Financing Hemisphere Solidarity" by the Deputy Administrator of the Federal Loan Agency (Whitehead, 1941, December 24).

The following Monday, December 15, the Commandant received a letter dispatched from the Office of the Under Secretary of War that morning, notifying him that the Army Industrial College was to be closed "during the present emergency":

Due to the requirements for both personnel and space, it has been decided to close the Army Industrial College from the date of graduation of the present class until further notice. [The Library and its personnel were to be kept intact (transferred to the Administrative Branch of the Office of the Under Secretary), but] ...all other military and civilian personnel now assigned to the staff of the Army Industrial College will be absorbed in the Office of the Under Secretary of War. (War Department, 1941, December 15)

Thus, on Tuesday, December 23, the 75 officers comprising the fourth and final short course class graduated from the Industrial College. Graduation exercises were held in the auditorium of the Social Security Building at 10:00 a.m. The Honorable Robert P. Patterson, Under Secretary of War, addressed the graduates and presented them with their diplomas (Whitehead, 1941, December 24).

The Commandant, Colonel Frank Whitehead, USMC, prepared his final report to the Adjutant General on the following day, Christmas Eve. The course was officially "terminated," and the College closed, he wrote, effective December 24 (Whitehead, 1941, December 24).

For the next two years, as the United States and the War Department turned its attention to fighting the war, the Army Industrial College was "officially inactive" (Bauer, 1983, p. II-8). Scammell (1946, p. 43) notes that only a token "office of record" for the College was retained within the War Department.

Throughout this period, the War Department and the American industrial home front were heavily engaged in procuring equipment, material and supplies in support of the war. As Nagle (1992, p. 427) points out, there was "contracting chaos" for a time as the War Department retained wide-ranging authority over wartime procurement.

That authority was reinforced with Roosevelt's appointment of Donald Nelson as head of the War Production Board in January 1942. As Goodwin (1994, p. 398) points out, one of Nelson's early decisions was "to leave procurement in the hands of the military, rather than place it in the hands of a civilian agency, "even though some complained that "the Army was trying to take over the entire civilian economy." Ultimate control of production, however, he believed was a civilian matter. By early 1943, amidst a "continued pulling and hauling between military and civilian priorities," Nelson ultimately won out in "his insistence on civilian control of the production process" (Goodwin, 1994, p. 411; Schwarz, 1981).

### A Need for Courses During Wartime

Eventually, by 1943, the enormity of the procurement challenge began to take on an added dimension, as people started to think about the problems associated with contract termination whenever hostilities finally drew to a close. Many recalled that, at the close of World War I, the federal government had not prepared for demobilization. Abrupt termination of contracts caused chaos and a number of bankruptcies. As early as November 1943 as the tide began to turn in World War II, however, government procurement leaders began to prepare for the reductions which would inevitably come (Nagle, 1992, p. 62).

As a short history of the College written after the war reflected:

During this time, the problem of war contracts had become increasingly confused and, at the same time, increasingly important in the prosecution of the war. It became clear that with the approach of the conclusion of the hostilities there would be a tremendous task involved in the termination of contracts and the readjustment of the economy to peacetime operation. It was suggested that the Industrial College would be an effective agency for the training of military and civilian personnel in the duties relating to contract termination and negotiation." (Industrial, 1949, p. 15)

Bauer (1983, p. II-8) notes too that, during the war, "certain military and civilian leaders were already looking ahead to the re-opening [of the College]."

The pressure to reopen the Army Industrial College built up in 1943 as the Army developed demobilization plans. There were also broader concerns about educating officers in the supply field after the war. As in the 1920s, some suggested courses at Harvard Business School, but Under Secretary of War Robert Patterson rejected that proposal. Instead, he favored re-instituting the Army Industrial College.

### Echols Board

Thus, on November 27, 1943, the War Department commissioned a board, headed by Major General Oliver P. Echols to advise on this matter (War Department, 1943, November 27). Echols had attended the Army Industrial College as a student (then a captain) in the fifth class which graduated in June 1926 (Scammell, 1946, pp. 145, 213; Industrial, 1949, pp.16, 27). His expertise in industrial mobilization was widely recognized. He had been called upon to serve on two committees under the War Production Board (Nelson, 1946, p. 386).

Actually, the War Department had already decided that the Industrial College should be re-opened. As Armstrong (1946, p. 6) indicates, by the end of 1943, "the need for trained officers for demobilization became evident, and the Under Secretary of War decided to reopen the Army Industrial College. A board was appointed to study the organization of the College and to determine the subjects to be included in the curriculum."

Thus, the Echols Board was convened "in connection with the re-establishment of the Army Industrial College," and was tasked to make recommendations only about an Advisory Board to the College, its location, the qualifications of the Commandant, etc. (War Department, 1943, November 27).

The Board quickly confirmed Patterson's desire to re-open the College. It convened only six days after having been chartered, and the members submitted their final report that same day (War Department, 1943, December 3; Masland, 1957, p. 157).

Colonel Frank Miles, former Commandant of the Industrial College, was designated as the Recorder on the Echols Board and, although the Board eventually recommended the College be headed by a general officer, Miles was designated Commandant when the College reopened. Among the Board's other findings were that the College, in its pre-war years, had suffered from a lack of prestige within the War Department, had been unable to convince superiors its activities were essential to national defense planning, had suffered from inadequate equipment and housing, and had lacked sufficient teaching and research personnel to fulfill its mission (War Department, 1943, December 3; Scammell, 1946, p. 125; Industrial, 1949).

### The College Re-opens

Three weeks later, on December 28, 1943, War Department Circular No. 337 was published, noting that, "At the direction of the Under Secretary of War, the Army Industrial College is re-opened, with location in The Pentagon." Colonel F. H. Miles, Jr. was formally announced as Commandant (War department, 1943, December 28, p. 1).

Most histories of the College cite December 28 as the reopening date of the institution. Actually, the official Adjutant General Order, number 352, was signed effective December 24, 1943 -- Christmas Eve -- exactly two years to the day after the College was closed (War department, 1943, December 28, p. 1; Williams, 1955, February 11, p. 11).

When the College reopened, its new mission was articulated in these terms: "...to train personnel to assist in closing the war effort, and involves ...training for adjustment and renegotiation of contracts, the termination of contracts, and reconversion of industry to peacetime operation" (Scammell, 1946, p. 70). At the same time, the institution re-stated its desired long term objective as "the study of industrial mobilization...with emphasis on the political, economic, and social issues" (Scammell, 1946, p. 70).

On January 3, 1944, the Army Industrial College began the first of a series of new short courses on contract termination and renegotiation. Officially titled "War Readjustment" the courses were conducted through November 2, 1945 (Industrial, 1949, p. 16; Scammell, 1946, p. 98). As the War Department said at the time, the courses were designed "to meet the problem of post-war termination and reconversion to peacetime production" and was intended for "key officers and civilian employees now engaged in termination functions" (War Department, 1943, December 7, pp.1-2).

These short courses were primarily attended by Reserve officers, some women in the armed forces, and some civilians as well, including representatives from the Treasury Department, the Maritime Commission, and other federal agencies (Scammell, 1946, pp. 70, 98, 149).

The courses were conducted by the College in its new home in the Pentagon and typically ran for three weeks (six days a week, Monday through Saturday). A sampling of subjects from one such course, conducted in March 1944, is illustrative (Course, 1944). They included:

1. Legal Aspects of Terminations
2. Accounting aspects of Terminations
3. Problems of the Subcontractor
4. Disposition of Property and Facilities
5. Review and Appeals
6. Segregation of Sales
7. Renegotiation
8. Overall Settlement



Of this period in the College's history and the importance of these short courses in contract termination, Armstrong wrote (1945, p. 6):

At present the instruction must be directed to the specific objective of teaching officers how to apply the laws and regulations governing the termination of contracts and the disposal of surplus property. This course now covers a period of four weeks with an average number of approximately three hundred carefully selected officers and civilian employees of the Army, Navy, and many civilian agencies such as the Reconstruction Finance Corporation, War production Board, Smaller war Plants Corporation, Maritime Commission, and the Treasury Department.

Nagle (1992), in his comprehensive work on the history of government contracting, confirms the importance of this effort. On November 1, 1944, the Army and Navy issued the Joint Termination Regulations as a handbook for administering the Contract Settlement Act. As Nagle notes,

Terminations were to be negotiated as orderly and as rapidly as possible. The regulations' effectiveness were proven on V-J Day when, within five minutes of the announcement of Japan's surrender, previously prepared telegrams were dispatched directing the procurement districts to terminate war contracts. Within two days, 60,000 contracts totaling \$7.3 billion, had been cancelled. In all, the government terminated \$20 billion in contracts and minimized litigation. The orderly termination helped avoid a general post-war depression. (Nagle, 1992, pp. 462-3)

In fact, the magnitude of this effort and its associated costs were almost staggering. Through 1944, the War Department and Navy Department contracted with some 18,539 firms, spending some \$264 billion (of the nation's total \$315.8 billion wartime expenditures). Interestingly, 100 corporations received 2/3 of the contracts; 30 corporations received almost one-half (Koistinen, 1980, p. 70; Nagle, 1992, p. 424).

The Industrial College's contract termination and demobilization classes were, by any standard, tremendously successful. Enrollment increased with each class. By the time these courses concluded in November 1945, more than 4,700 students had attended (Industrial, 1946/1947, pp. 7, 16). Earlier that year, in March, Armstrong (1945, pp. 3-4) reflected upon the College's responsiveness and contribution to the war effort and national economic strength at home:

The Under secretary of War, Judge Robert P. Patterson, on 3 January 1944, re-established this Army school for a specific and limited objective. No longer as in the years before Pearl Harbor does the Army Industrial College have the leisure to offer a liberal education in the economics of war that include the mobilization

of industry and the efficient use of our national resources. The present needs are urgent. Now the College is a four-weeks vocational school, which, by constant reiteration of its purpose to get labor and industry out of war production with the maximum speed, as soon as the victory is won, proves that it is conscious that the Army is a social institution with social responsibilities. ...The Army firmly believes that after it has won a military victory in Europe and the Pacific it must help insure an economic victory on the home front." (Armstrong, 1945, pp. 3-4)

The wartime courses are an often overlooked, though significant part of the history of the Industrial College. On the occasion of the College's 25th anniversary in 1949, the College took pride in reflecting that, "there can be no doubt that this activity represents one of the most useful services rendered by the College in its history, the savings to the government resulting from the work of the contract termination and renegotiation groups being beyond estimate" (Industrial, 1949, p. 16).

## PLANNING FOR POST-WAR EDUCATION

Even as the wartime short courses were in progress, plans were being made to re-establish the regular course of instruction at the College. As a short history of the College written on the occasion of its 25th anniversary noted, "It was realized that the changed military and economic patterns resulting from World War II must be taken into consideration in the preparation of the new curriculum and organization. It was felt also that a thoroughgoing examination of the entire higher educational system of the Army would be desirable" (Industrial, 1949, p. 16).

### Dewitt Board

Thus, in January 1944, about the time that the Industrial College was re-opening for its specific short course mission, a new board was commissioned to consider the broad issues associated with post-war officer education throughout the armed forces. Lieutenant General Dewitt, Commandant of the Army-Navy Staff College and former Commandant of the Army War College from 1937 to 1939, was named as Chairman. Dewitt added two civilian representatives to the Board: John Hancock and Bernard Baruch (Masland, 1957, p. 158; McClellan, 1993, p. 151).

The Dewitt Board proposed a national university of three colleges: a State Department College, a Joint War College, and a Joint Industrial College (Scammell, 1946, p. 250). Interestingly, the goal of constituting a "national university" would eventually be realized some thirty years later with the creation of the National Defense University -- comprised of the National War College and the Industrial College of the

Armed Forces -- in the 1970s.

It was, coincidentally, during this period, that on June 6, 1944, the Allied D-Day Invasion at Normandy took place (Morison, 1965). Later that same month, on June 22, "President Roosevelt signed into law the Serviceman's Readjustment Act, popularly known as the 'GI Bill of Rights" (Stubblefield and Keane, 1994, p. 244).

Meanwhile, later in 1944, while the Dewitt Board recommendations were still under consideration, steps were underway to create another study to specifically address the future of the Industrial College.

### Hancock Board

On November 29, 1944, Secretary of the Navy Forrestal (1944, November 29) proposed to Secretary of War Stimson that their respective Departments establish courses in procurement and logistics to meet their common needs. Stimson agreed (Stimson 1944, December 21), and the two began plans to create a joint board to be composed of three Army, three Navy, and three civilian members. Subsequently, Stimson nominated General Donald Armstrong, who had been named Commandant of the Industrial College on September 1, (Scammell, 1946, p. 126), and Forrestal nominated Captain Lewis L Strauss, US Navy Reserves, to meet to develop "details of the precept for this board" (Scammell, 1946, p. 371; Masland, 1957, p. 159).

On May 25, 1945, before the Board officially convened, Armstrong seized the initiative by preparing a proposal to the Under Secretary of War to keep the College open with an "interim mission" (Armstrong, 1945, May 25; Bauer, 1983, p. III-12). The special courses in contract termination were expected to end soon, and Armstrong envisioned that many months would pass "before the economic system of the country is readjusted and the Armed Forces reorganized on a permanent basis." He recommended, therefore, an interim course of six months duration to study the experience of mobilization in World War II as seen by government, industry, labor, and the military.

One month later, the Board on Postwar Army - Navy Training in Industrial Mobilization, as the Hancock Board was officially known, convened on June 15, 1945. Mr. John M. Hancock served as its chairman. Hancock was a former Secretary of Navy (Huston, 1966, p. 409) and had served on the War Resources Board (Nelson, 1946, p. 88). Hancock was highly regarded for his expertise in both industrial mobilization and de-mobilization. In early 1944, he and Bernard Baruch were commissioned by James Byrnes, head of the Office of War Mobilization, to conduct a study of the problems of industrial reconversion to civilian production following the war (Schwarz, 1981, p. 455). In fact, in the letter to Byrnes which accompanied their report, both

noted that in the challenges which lie ahead, "it is an easier task to convert from peace to war than from war to peace" (Nelson, 1946, pp. 392-3).

The Board's purpose was to consider an interim mission for the Industrial College for approximately two years (Bauer, 1983, p. III-8) Armstrong spoke before the Board and reiterated his recommendation. The Board met again in July and October and ultimately adopted Armstrong's proposal. Plans were made to begin the interim course in early 1946, and the Board's final report was issued in February of that year (Masland, 1957, p. 159).

As the Hancock Board met in 1945, a number of significant events occurred, culminating in the eventual end of World War II. In March and June, Iwo Jima and Okinawa fell to the Allies. In the midst of those campaigns, on April 12, President Roosevelt died of a cerebral hemorrhage and was succeeded by his Vice President, the former Senator Harry S. Truman of Missouri (Morison, 1965; Garraty and McCaughey, 1966). One month later, on May 8, Germany surrendered, and as Brinkley (1988, p. 276) reports, that evening, "the lights on the United States Capitol were lit. For the first time since December 9, 1941, the great white dome gleamed splendidly in the night sky."

Later that summer, on August 6, the Enola Gay dropped the atomic bomb on Hiroshima, and a second bomb was detonated 3 days later over Nagasaki. On August 15, Japan formally surrendered and World War II came to a close (Morison, 1965; Garraty and McCaughey, 1966).

### Gerow Board

With the war ended, in December 1945 the War Department commissioned a major study of post-war officer education. The Board chartered to conduct this comprehensive review was headed by Lieutenant General Leonard T. Gerow, then Commandant of the Army's Command and General Staff School. Gerow (then a Brigadier General) had been Chief of the War Plans Division in 1941 when the United States entered the war (Masland, 1957, p. 135; Houston, 1966, p. 407).

The group's report was heavily influenced by the Joint Chiefs of Staff in emphasizing the need for joint education, the need for educating officers in broad areas beyond their specialties and beyond the realm of conventional military affairs. While the Board assessed military education for both junior and senior officers, at the highest levels it proposed five joint colleges which would collectively form a National Security University. One of the five would be "an industrial college, to insure the most efficient mobilization and demobilization of our industrial resources and to study other nations' industrial capabilities for war." The Board submitted its report in February

1946 and it was approved in concept by General Eisenhower, although not all of its provisions were actually put into operation. The plan for a National Security University was not realized (until the 1970s), but two of the proposed Colleges were formed: The National War College, on February 4, 1946, and the Industrial College of the Armed Forces, which would be chartered effective April 26, 1946. The proposed Joint Administrative College, Joint Intelligence College, and Department of State College were not established. Later, in August 1946 Armed Forces Staff College -- to prepare officers for joint staff assignments -- was established at Norfolk, Virginia (Masland, 1957, pp. 135-7, 141).

## A NEW COLLEGE FOR A NEW ERA

### Interim Course

Meanwhile, as ideas and plans for post-war military education began to take form, the new interim course at the Industrial College, which had been recommended by Armstrong and the Hancock Board, opened on January 4, 1946. Six months in duration, the course was comprised of 81 students including eight Navy officers and 1 Marine Corps officer (Industrial, 1949, p. 17; Bauer, 1983, p. III-13).

This interim course ran through June 28, 1946. The mission statement for the course indicated it was "for the purpose of analyzing and evaluating experience in industrial mobilization and demobilization, production, and procurement in World War II" (Scammell, 1946, p. 71).

General Eisenhower returned to his alma mater in January 1946, now as Chief of Staff and spoke at the convocation ceremony of this interim course, which was also attended by such dignitaries as the Secretary of the Navy and the Chief of Naval Operations. Referring to his association some 15 years earlier with the College, Eisenhower said:

Had I [then] ...told the Industrial College that in 1946 two civilian secretaries of the Army and Navy and the military heads respectively of the Navy and Army would all simultaneously attend one of your convocations, I would have received nothing but a long and earnest Bronx cheer (Eisenhower, 1946, January 4; Scammell, 1946, p. 354).

Admiral Nimitz, who spoke at the same ceremony, told the students, "The

graduates of this college have exerted noteworthy influence on naval procurement and planning and have helped industry make its great contributions. Grand strategy and joint action in military matters are the province of the Army and Navy Staff College. The field embraced by the Industrial College in its studies of the industrial and economic structure for war, is at the same level of importance" (Nimitz, 1946, January 4, pp. 2, 5).

### Industrial College of the Armed Forces

While the interim course was underway, on March 3, 1946, War Department Circular No. 91 announced that the first *regular* postwar course of the Army Industrial College, ten months in duration, would convene later that fall on September 3, 1946 (Bauer, 1983, p. III-13). Coincidentally, it was that same month that Winston Churchill delivered his famous 'iron curtain' speech at Westminster College in Fulton, Missouri, warning that, "From Stettin in the Baltic to Trieste in the Adriatic an iron curtain has descended across the continent" (Morison, 1965, p. 1050).

The exact intended nature of the new, regular post war course, however, was still unclear. Thus, after a series of meetings over the next several weeks, on April 11, 1946, "The Under Secretary of War and the Assistant Secretary of the Navy entered into an agreement regarding joint departmental participation in the activities of the College" (Industrial, 1949, p. 18).

While the Navy had participated in the Army Industrial College since 1925, this agreement codified the intent to officially recast the College as a joint institution. Two weeks later, on April 26, 1946, Adjutant General Order 352 was published to this effect. On May 3, General Eisenhower, Chief of Staff, signed War Department Circular 130, officially publishing that, "the Army Industrial College is hereby redesignated The Industrial College of the Armed Forces" Brigadier General Donald Armstrong, United States Army, was designated Commandant. The order provided for two Assistant Commandants as well, one Army and one Navy (War Department, 1946, May 3, pp. 1-2).

That summer, on July 1, 1946, General Armstrong retired as Commandant. Often cited as the "principal architect of the modern Industrial College of the Armed Forces," he was replaced by Brigadier General Edward B. McKinley who was designated as the new Commandant (Scammell, 1946, p. 127; Industrial, 1949, p. 18; Bauer, 1983, p. III-14).

In August, the College moved to new quarters on the War College grounds (renamed Fort Lesley J McNair in January 1948) in Washington, DC. The new Industrial College of the Armed Forces moved into a temporary building, T-5. Built in

1942, T-5 was expected to have a useful life of five years, although the College would occupy it until 1960. The building had been erected for the Army Ground Forces headquarters staff in 1942 and was subsequently vacated, along with the adjacent Army War College building in November 1945 (Fort, 1954, p. 13; Bauer, 1983, p. IV-23).

On September 3, 1946, the first regular postwar course of the Industrial College of the Armed Forces convened. The faculty and staff (including a new Department of Research) now totaled some 66 officers & civilians -- by far the largest in the College's history up to that time. Given its adjacent proximity, the Industrial College worked in close coordination with the new National War College (NWC). In fact, the students in the class of 1947 (which began in that fall of 1946) attended approximately 75% of the NWC lectures (Industrial, 1949, pp.17-18; Bauer, 1983, p. III-13).

The mission of the College articulated at the inauguration of this new course was stated in three objectives:

- a. Training of officers for duty with those activities of the armed forces concerned with industrial mobilization and procurement planning.
- b. Evaluation of the economic war potential of the United States and foreign nations.
- c. Study and Analysis of the current Industrial Mobilization Plan, and such other studies as may be useful to the procurement planning agencies (Scammell, 1946, p. 71).

But as the new catalogue for the College noted (Industrial, 1946/1947, p. 1), "it is not enough to learn, as we must, the lessons of World War II and of preceding periods of peace and war on both military and production fronts. It is essential that we anticipate the lessons and envisage the problems of a possible future national emergency."

Graduation ceremonies for the first regular post-war course of the new Industrial College of the Armed Forces were held Thursday, June 26, 1947 at 10:00 A.M. in the auditorium of the National War College. The graduating class consisted of 98 military officers: 68 Army, 26 Navy, 2 Marines. Secretary of War Robert P. Patterson and Secretary of Navy James Forrestal spoke and presented diplomas to the graduates (War Dept, 1947, p. 1).

The War Department Press Release, issued two days before the event, described the newly re-constituted ICAF this way: "It stands now, with the National War College, on the top level of military education institutions. ...The mission of the Industrial College calls for the training of officers of the armed forces for duties

involving all aspects of mobilization of the national economy, economic warfare, procurement planning, procurement, and the study of the war potentials of foreign countries" (War Dept, 1947, p. 1).

## ASSESSING EVENTS OF THIS PERIOD

### The Decision to Close the Army Industrial College

The wisdom of the decision to close the Army Industrial College in December 1941 became somewhat of an issue as various policymakers began crafting plans to re-open and perhaps re-structure the institution for the post-war period.

On the face of it, there was little controversy at the time. As Armstrong assessed the situation, the Army Industrial College suspended operations in December 1941, "because its staff was needed for actual operations in the War Department and officers could not be spared as students in the course of instruction" (Armstrong, 1945, p. 5).

Kreidberg & Merton (1955) note too that War Department plans actually called for closing most of the military colleges in just such an emergency, although, in retrospect, it created a serious void in trained manpower. The Army's Protective Mobilization Plan (prepared and subsequently updated in 1938, 1939, and 1940) "prescribed that the Army War College, the Army Industrial College, and the Command and General Staff School would discontinue their normal school missions at the beginning of the mobilization." Command and Staff School would discontinue normal courses and give three-month abbreviated courses instead. No provision was made, however, for wartime courses at the Army War College or the Army Industrial College, which were the top level schools in the hierarchy of the Army educational system.

The void in adequately trained officers in procurement, however, was not apparent at first. "With the country's peacetime still recovering from the Depression,...industry suffered from much idle capacity, and the public sector suffered from high unemployment. The situation eased the transition to a war-supportive economy. Production did not expand to very high levels until 1943..." (Gill, 1984, p.7).

Similarly, Clem (1983, p. 35) reports that the void went initially unnoticed for two reasons. "The national economy in 1939 was characterized by a great deal of slack, which permitted major increases in war production and military mobilization without initially generating those pressures and scarcities that make close government direction mandatory"....and, the U.S. had partially mobilized before Pearl Harbor.

As the war, progressed, however, the need became more and more apparent. In



the war's aftermath, in January 1946, Admiral Nimitz told the students attending the Industrial College's post-war interim course, "if there has been any mistake in the conduct of this College, I would say it occurred in the discontinuing of the College during the years of the war" (Nimitz, 1946, January 4, p.2).

Kreidberg and Merton (1955, pp. 613-14) summed up the dilemma in these terms:

The greatest weakness of the school program as planned and as executed was the discontinuance of the Army War College and the Army Industrial College for the duration of the mobilization and the war. The shortage of officers trained for high staff and command assignment became acute before the first year of the war was over. ...[The] sudden elimination [of these two schools] was an error in judgement in which the current need for officers was allowed to outweigh the eventual greater need for officers trained for higher staff levels." (Kreidberg & Merton, 1955, pp. 613-14)

That assessment notwithstanding, it is difficult to see, given the context of the times (with the Army War College having been shut down and the Japanese having bombed Pearl Harbor), how, in December 1941, any decision other than to close the Industrial College could have been made.

### Demobilization

The initial decision to re-open the College seems to have been part of a larger effort to insure that the nation, including its economy, industrial base, and defense establishment, would be demobilized carefully from the massive war effort which had consumed the country for some four years. The scope of the potential problem was considerable. The "...growth of the defense share of the gross national product from 11% in 1941 to 45% in 1944, after which it fell to 39% in 1945" (Vawter, 1983, p. 7).

Grave concerns accrued from these dynamic shifts in the changing composition of the economy. John Snyder, the head of the Office of War Mobilization and Reconversion reported to Truman two weeks after V-J Day that the end of war production would dislocate the economy and cause unemployment to rise to eight million by the spring of 1946. Fortunately, nothing like that happened (Brinkley, 1988, p. 280).

Many had foreseen the potential dangers, however, and had taken steps to avert a national economic crisis. The Serviceman's Readjustment Act (GI Bill), for example, enacted in June 1944 "gave returning veterans generous unemployment benefits while they sought work, job preferences to help them get it, loans to start a business, buy a car, or purchase a home, medical care for the disabled, and tuition and allowances for

those receiving occupational training or a college education. Three times the anticipated number of veterans seized the latter opportunity" (Abrahamson, 1983, p. 160).

The Industrial College saw itself as part of this critical effort to conduct a careful national demobilization. Writing about the wartime short courses in contract termination, Armstrong (1945, p. 6) framed the issue in these words:

...How important are these problems of contract termination and property disposal? They are so large that if they are handled badly, they might wreck the national economy and cause a depression that would make 1929 and its aftermath fade into insignificance.

The entire government effort in demobilization was, in fact, admirable, although it was not without its flaws. Unfortunately, a number of government production facilities were not sold and were allowed to deteriorate (and were thus not useful several years later to support the Korea conflict). One glaring example of government shortsightedness was "the War Assets Administration's dumping of government owned machine tools at 15 cents on the dollar, resulting in the closing of 34 machine tool companies because of loss of business. Thus, in 1951, the U.S. machine tool capacity was ostensibly only one-third what it had been at the start of World War II" (Clem, 1983, p. 52).

### An Expanding Federal Government

The re-opening and eventual re-constitution of the Industrial College of the Armed Forces seems to have been a small but significant part of the overall expansion of the size and role of the federal government which occurred both during the war, and continued on a somewhat lesser scale in the post-war years.

As Abraham (1983, p. 132) observes, World War II saw the federal government "dominate the American scene as never before in all the years of the Republic. The government told businesses what they could produce, the prices they would charge, and the profit they might make." It was under this environment, that the Industrial College began expanding its student body to include representatives from a number of federal agencies beyond the War Department. For the private sector's part, Abraham notes, "Industry clearly felt the heavy hand of government, which closed certain lines of civil production and provided labor and scarce raw materials only in exchange for doing essential work. But it also enjoyed the wartime return of prosperity" (p. 168).

Many took note of this total involvement of the public and private sectors in the war. As, Admiral Nimitz told a post-war class at the Industrial College, "Modern war is total. No nation can wage successful war which fails to utilize its industrial capacity to

the fullest extent. It is not enough to have a great industrial plant. That plant must be mobilized, supplied, and made an integral part of the war machine" (Nimitz, 1946, January 4).

General Eisenhower made a similar observation before an audience of students and faculty at the Industrial College. Speaking at the opening ceremony of the January 1946 post-war interim course, he said, "...all of us have awakened to a livelier realization of the fact that nations, and not merely armies and navies, fight wars. ...You must integrate the Army and navy to the industry and economy of the country. ...Always remember that it is the nation that fights a war" (Eisenhower, 1946, January 4).

The totality of the involvement of the nation in the war was indeed reflected in its economic aftermath. As wartime controls lifted, a period of rapid inflation followed. Food prices rose more than 25% between 1945 and 1947. Workers, in turn demanded higher wages. The result was a wave of strikes -- nearly 5000 in 1946 alone (Garraty and McCaughey, 1966, p. 829). Through 1946 and 1947, President Truman was contending with massive strikes in the steel, railroad, automobile, and rubber industries -- "the largest work stoppage in American history" (Brinkley, 1988, p. 281).

In the face of these and other domestic and international post-war events, the federal bureaucracy which had grown substantially during the war, did not diminish as much as many had assumed it would. As Brinkley (1988, p. 280) observed, "...with the wartime innovation of the withholding tax, previously unimaginable amounts of money were being extracted from the American people with relatively few complaints. Federal tax collections in 1940 had totaled \$5 billion. In 1945, \$49 billion." Moreover, postwar tensions with Russians and military occupation to save what was left of Western Europe heralded continued spending on American military power.

One glimpse of the post-war defense establishment was seen as early as February 1945, when reports were leaked to the press of a proposal by the military not to vacate the Pentagon after the war's end (as Roosevelt and others had envisioned), but rather to build a 24-story office tower which would rise out of the Pentagon's six-acre interior courtyard (Brinkley, 1988, p, 283).

It was in this era that the Industrial College of the Armed Forces was reconstituted in a size and scope that dwarfed its pre-war existence.

### A New Era of Adult Education in the Military

The war and its aftermath seem to have heralded a new era of interest in adult education in the American military, particularly among its officer corps. Both the Dewitt

and Gerow Boards had recommended a "national university" within the defense community and upward of five professional colleges for senior military officers and State Department officials.

The interest in military education was not unlike that observed throughout American society at large, through the passage of the GI Bill and a rapidly growing new middle class. Goodwin (1994, p. 625) captures the essence of the period in these words:

The war had radically changed the shape of the American economy, exerting a profound impact on the everyday lives and expectations of people in all parts of the country. In 1940, only 7.8 million Americans out of 132 million made enough money to pay taxes; in 1945, that figure had risen to nearly 50 million in a population of 140 million. ...The society of a few haves and a multitude of have-nots had been transformed. Because of the greatest -- indeed, the only -- redistribution of income downward in the nation's history, a middle class country had emerged.

Moreover, as Blum (1976, p. 25) observed, "The war had demonstrated, alike in the armed services and in private industry, the advantages of training and education" (Blum, 1976, p. 25). Thus, modern military education, begun in earnest in the mobilization years which preceded World War II, "accelerated in the postwar period" (Stubblefield and Keane, 1994, p. 263).

The Industrial College was reconstituted in this era of renewed interest in military education. Initially, there appears to have been some resurrected concern about the role and stature of the College in this new educational community. Scammell (1946, p. 167), for instance, noted that in the pre-war years,

...the College lacked prestige within the War Department, did not convince those in high authority of the importance of its instruction in economic planning for war, and largely failed in its long struggle to have graduates placed in appropriate divisions of the War Department General Staff.

Similarly, Masland (1957, p. 157) observed that:

ICAF had to compete for prestige...not just with National, but with other Service Colleges (as in pre-war years). "Planning and conducting combat operations had long been regarded as more important than supporting combat operations. Strategists and field commanders had long enjoyed greater prestige than supply officers....On the other hand, the supply function was of great importance in the scale of values of civilian industrialists and service secretaries. Inevitably they

lent strong support to the Industrial College.

Nonetheless, the diligent work of the College and her graduates and faculty gradually became recognized beyond the confines of the institution. In the years immediately leading up to American entry in the war, officers in the Army and Navy educated at the Army Industrial College made Lend Lease purchases for the Allies and provided advice on procurement and production. As characterized by the Chairman of the Board of Bell Telephone Laboratories in early 1941, "Twenty years of hard, quiet, unadvertised work of the Army Industrial College has given the military establishment a large corps of officers in commanding positions who have a real understanding of industry" (Scammell, 1946, p. 275).

That kind of recognition persisted at the war's end. When the Hancock Board met to consider the future of the College, it reported that the school's graduates in the Army and Navy had served with particular distinction in key roles during the war effort (Scammell, 1946, p. 162).

## CONCLUSIONS

Events surrounding the American entry into World War II made the closing of the Army Industrial College, as other senior military educational institutions, virtually inevitable. Even as the war continued, however, it soon became apparent that the institution offered a singularly unique and valuable contribution to both military contract support and national economic security. Thus, in retrospect, it is not surprising that the College was re-opened in late 1943 to conduct courses in contract termination, eventually reaching over 4700 military and civilian students. By most accounts, this effort contributed significantly to an orderly de-mobilization of the military, the sizeable defense industrial base, and the national economy as a whole.

As the nation, along with the defense establishment, began to turn its attention to various post-war concerns, education emerged as a critical priority. The Industrial College was re-constituted in this environment, rooted in its original, defining foundations, but soon to become the educational arm of a far more expansive concept of national and economic security.

Bernard Baruch, variously credited as having been part of the impetus which created the original Army Industrial College, alluded to this expansive mission when he addressed the first regular post-war ICAF graduating class on June 26, 1947: "It is not enough," he said, "to mobilize the nation's military strength. There must be a mobilization of her full economic resources -- industrial, agricultural, and financial" (Baruch, 1947, p. 11; Baruch noted that his words here were taken from a similar admonition which he and the War Industries Board had sent to President Wilson

concerning American participation in World War I).

He added the following advice -- which has since been captured on a plaque that hangs beside Baruch's portrait in the modern day ICAF auditorium named in his honor:

The armed services today have to be versed not alone in war but in government, politics, the humanities -- economic, social, and spiritual (Baruch, 1947, p. 12).

His words have guided the College in its evolving mission for a half century.