

## CHAPTER 8

### SUMMARY AND CONCLUSIONS

The historical antecedents of professional education for American senior military officers can be traced to 19th century European academies such as the Kriegsschule in Berlin. In the decades following the American Civil War, interest in these institutions in this country eventually led to the creation of the Naval War College in 1884 and the Army War College in 1901. Dedicated to educating senior officers in the operational art and science of war, these two colleges were joined by a third "war college," the Army Industrial College, established in 1924. The Industrial College, however, was, and remains, unique among American senior military educational institutions. Originally founded to train officers in the complexities of mobilizing the nation's industrial resources for war, its mission has evolved over the years to a broader charter for graduate education of military and civilian officials concerned with national and international economic resources and their contribution to national security.

It is the evolution of the mission of the Industrial College over the past 70 years which provided the central focus for this study. The problem investigated in this historical research was to analyze how and why the institution's mission changed over time within the context of internal and external forces and events which shaped that evolution. It considered influential individuals and stakeholders, bureaucratic power structures, governmental agencies, numerous special review boards, and a variety of associated political, economic, military, and social factors.

Based upon the historical method of research, this study identified six periods through which the institution's mission evolved with the development of the College from its inception in 1924 to the 70th anniversary of its founding in 1994: the origins of the College in the aftermath of World War I during the period 1918 to 1924; its early development in the interwar years, 1924 to 1940; the institution's temporary closure and subsequent reconstitution as the Industrial College of the Armed Forces during and after World War II, from 1940 to 1947; a formative period in the maturation and growth of the College during the Cold War in the years 1947 to 1962; its continuing evolution throughout the Vietnam era from 1962 to 1974; and finally the College's modern development as a joint service educational institution under the National Defense University in the post-Cold War years from 1974 to 1994.

Primary archival source material provided the basis for much of this study. Original papers, correspondence, annual reports, historical records, and the proceedings and findings of various review boards and commissions furnished much of the information for analysis. In addition, the relatively few written accounts of early

periods and select aspects of the College's history by Scammell (1946), Bauer (1983), and Gest (1990) provided some further basis for examining and assessing historical trends. Finally, well-documented secondary sources of related events in American political, military, and economic history, provided the means of analyzing the contextual basis for the evolution of the institution's mission.

## SUMMARY

When the Army Industrial College opened its doors in 1924, its express mission was to train Army officers in procurement and industrial mobilization. Over the course of seven decades, the institution was reconstituted as the Industrial College of the Armed Forces and its mission, after numerous iterations and change, has evolved to one of providing graduate education for senior civilian officials and military officers of all services. The 70-year odyssey of that historical evolution has been influenced by a variety of forces both in and out of the institution.

### Origins: 1918 - 1924

The origins of the Army Industrial College can be found in the aftermath of this country's experience in World War I. Inadequately structured to quickly mobilize its industrial capacities for military needs, the country sent its soldiers to war largely with British and French equipment and arms. In the years following the war, a Congress critical of unchecked industrial war profiteering and two Presidents sympathetic to build closer and more informed ties between government and industry, created a climate highly conducive to the creation of a public sector institution dedicated to fostering enlightenment in this area.

Bolstered by the combined efforts of influential industrialists like Bernard Baruch, a small cadre of dedicated and imaginative military officers who had first-hand experience in the war and recognized the need to fill a serious professional void, and supportive political leaders like Dwight Davis in the War Department's newly created Office of the Assistant Secretary of War, the Army Industrial College was formally established on February 24, 1924 in offices within the Munitions Building at the corner of Constitution Avenue and 19th Street in Washington, DC. From its humble beginnings with a class of only nine Army officers as students, the College developed in both size and character in the years which followed.

### Interwar Period: 1924 - 1940

The interwar period in American history was underpinned by two major developments: a strong national sentiment of isolationism bent on keeping the country

out of European conflicts and a severe economic depression unprecedented in scope and duration. As the nation de-mobilized and turned its attention from most things military, it then languished in economic stagnation and the U.S. industrial base withered.

The new Army Industrial College, however, grew modestly but steadily throughout this difficult period. Under a series of ambitious Commandants and faculty, the institution articulated a more expansive educational mission for itself concerned with postgraduate education in government planning and potential control of the nation's resources in time of war -- virtually the only institution in the country concerned with such matters in this period.

In this same period, the course increased in both duration and size. The original four-month course was extended to ten months beginning in 1927. By the mid-1930s, student enrollment averaged 50 to 60 officers in each class and would rise to over 80 by 1941. Student composition broadened as well. While officially chartered to train Army officers, the College began enrolling Navy officers in 1925, and by 1933, along with officers from the Marine Corps, they constituted some 25% of that year's class -- marking the unofficial but nonetheless practical beginning of joint service military education in the United States.

Prompted in part by its unique and defining mission, the College also inaugurated what would become its long standing practice of conducting industrial field studies. Beginning in 1927, faculty and students visited steel mills, coal mines, electric power plants and other productive facilities to gain a first-hand understanding of the nation's economic and industrial wherewithal. Building upon this expertise, the College also began to assist the War Department in reviewing a series of Industrial Mobilization Plans published between 1930 and 1939. The College's association with these plans, though somewhat limited, later became a source of controversy over the institution's mission in education versus war planning, when President Roosevelt declined to implement them as the country moved inexorably closer to its direct involvement in World War II.

#### World War II and Reconstitution: 1940 - 1947

By early 1940, the expanding war in Europe made some form of eventual American participation seem increasingly likely. That spring, while the Secretary of the Army closed the Army War College, the Industrial College remained open, although its courses were shortened -- first to four and a half months, then later to three months. Following the bombing of Pear Harbor, the Army Industrial College graduated a class on December 23. Then, by direction of the Under Secretary of War, the College was closed on Christmas eve, 1941.

The College's closure was relatively short-lived, however. As senior government officials began to foresee the eventual end of the war and the concomitant impact on the nation's wartime economy, concerns mounted over the need for individuals trained in demobilization and terminating government contracts. Thus, following the recommendations of the Echols Board, commissioned by the War Department, the College was re-opened two years later on December 28, 1943 in the Pentagon. The following month, it began conducting a series of short training courses in contract termination and renegotiation. By late 1945, some 4,700 military and civilians had graduated from these courses, and the College was subsequently credited with helping the nation successfully transition to a post-war peacetime economy.

The post-war era also witnessed a pronounced re-awakening of interest in professional military education throughout the defense establishment. A series of special boards -- the Dewitt, Hancock, and Gerow Boards -- were convened in 1944 and 1945 to assess post-war professional education needs among the military services. Each group, among its various findings, re-confirmed the need for the unique role played by the Industrial College, and it was officially re-constituted as the Industrial College of the Armed Forces effective April 26, 1946. That summer, the College moved out of the Pentagon and into a temporary building at Fort McNair.

Following a six-month interim course designed to assess industrial mobilization in World War II, the College began its regular 10-month course in September 1946 guided by a mission which called upon the institution to train officers in industrial mobilization, procurement, and the economic war potential of the United States and other nations around the world.

#### Cold War Formative Years: 1947 - 1962

The years following World War II saw the United States become involved in another kind of prolonged conflict, which Bernard Baruch termed a Cold War. Adapting to this changing international environment, the Congress enacted the National Security Act of 1947, providing a new architecture for the national military establishment and the Joint Chiefs of Staff which, among other things, became responsible for the oversight of the Industrial College.

The Joint Chiefs of Staff issued their first formal charter of the Industrial College on September 3, 1948. Formally commissioned as a joint educational institution at the highest level in the defense establishment, the College was also given a new mission. This mission called for the College to conduct courses for both military officers and civilian officials in the political and military dimensions of the national economy to include joint planning in peacetime and effective controls in time of war.

Over the next 13 years the Joint Chiefs of Staff issued a series of changes to the mission of the College. One change, for example, provided for a variety of external education programs, and the institution subsequently initiated both a correspondence course and a seminar program which provided two-week seminars to military reservists and civic leaders in various cities around the country. The College also began a cooperative Master's degree program with George Washington University in this period. Other mission changes expanded the College's role in education to include policy making, State Department affairs, joint and combined planning, science and technology, and authorized the enrollment of foreign nationals in the correspondence course.

It was also in this period that another special review board was commissioned to review senior education, particularly that provided by the Industrial College as well as the National War College which had been established in 1946. Convened by the Joint Chiefs of Staff in April 1954, the Baxter Board made a variety of recommendations calling for greater collaboration between the two senior joint institutions and a new building for the Industrial College.

Throughout this era, the fundamental character of the College changed rather dramatically. The curriculum increasingly took on the trappings of graduate-level education with added studies in international economic analysis and politics. Industrial field studies were conducted throughout the United States, and, beginning in 1960, at various international locations. Student enrollment increased from 98 in the Class of 1946 to 159 in the Class of 1962. Moreover, civilian government students began attending the regular resident course for the first time in 1949 and their numbers increased steadily throughout this period. By 1960, the College moved into a new facility constructed at Fort McNair with a dedication ceremony at which President Dwight Eisenhower presided. In honor of this distinguished former student and faculty member, the facility was named Eisenhower Hall.

In spite of these rather impressive developments, one perennial issue which had surfaced periodically in the 1920s and 1930s, persisted in varying degrees throughout this era: prestige. Institutionally envious of perceptions that the National War College was construed by many as the preeminent senior military educational institution, Commandants and others expressed concerns about the misleading image of the College as a "logistics school" whose graduates might not attain general and flag officer ranks in appropriate numbers.

#### Vietnam Era: 1962 - 1974

After the 1962 Cuban missile crisis, President Kennedy sought to defuse

potential superpower confrontation and adopted a policy of flexible response to contend with various kinds of crises around the globe. At the same time, Kennedy's Secretary of Defense, Robert McNamara, embarked on a campaign to instill rigorous management practices throughout the defense establishment. Reflective of this environment, a change in the mission of the Industrial College issued by the Joint Chiefs of Staff in 1962 called for the institution to become the capstone educational institution concerned with the management of resources. In fact, the College began publishing a professional journal, Perspectives in Management, in this period, and continued the publication through 1976.

The College's shift in focus toward management practice was hastened by the appointment in 1964 of a new and forceful Commandant, Lieutenant General Schomberg. Convinced that the institution needed to go much further in making management a dominant theme, he directed sweeping changes in both the curriculum and organizational structure of the College. Some of the changes Schomberg put in place, such as the unpopular curtailment of international field studies, were reversed almost immediately following his retirement in 1967. Several innovations, however, have persisted to modern times, such as the introduction of electives courses and the initiation of a formal student evaluation system, both begun in academic year 1965 - 1966.

Throughout this period, the United States found itself increasingly embroiled in Vietnam. As American involvement escalated from 1965 through 1968, the influence on the College's mission was subtle but unmistakable. While the Joint Chiefs of Staff issued no formal change in the institution's charter during these years, it nonetheless directed the College to substantially increase its curriculum coverage to counterinsurgency. Moreover, in response to direct guidance from the White House, the College also began to address issues associated with youth movements in developing countries.

In spite of the ongoing conflict in Vietnam, President Johnson simultaneously championed his hoped-for Great Society, and this endeavor too was reflected in developments within the Industrial College. Increasingly, the institution devoted more attention to science and technology, computers, and even experimented for a time with a Great Books program. The College also continued to conduct an active external education program with both its correspondence course and seminar programs conducted in cities around the country. Finally, student demographics in the main resident program eventually changed. Exclusively white male to this point, the College graduated its first woman and African American students in 1973.

With the gradual end of the Vietnam era, the country began to once again curtail military expenditures. By 1974, Congressional pressures were mounting to find

economies throughout the defense establishment, including its educational institutions in general, and the Industrial College in particular.

#### Post-Cold War ICAF and NDU: 1974 - 1994

Budgetary pressures throughout the Department of Defense in the mid-1970s were reflected in calls to consolidate institutions like the Industrial College and National War College into some form of university structure. A 1974-1975 study under the purview of Deputy Secretary of Defense Clements recommended preserving the identity of the two colleges, but realigning them under a University. The study also recommended that the curricula at all senior military colleges consist of common core subjects, mission specific subjects, and electives -- prescriptions which are evident today at the Industrial College and elsewhere in the defense educational community.

The proposed National Defense University became a reality in 1976. With its establishment, the Joint Chiefs of Staff issued a new mission statement to the Industrial College, which called for the institution to conduct courses of study and research in the management of resources to prepare select senior military and civilian officials for positions of high trust in the Federal Government. Increasingly focused on its resident educational mission, the College's external educational programs -- seminars conducted in cities around the country and the correspondence course -- were transferred to the University in 1976 and 1977 respectively. While the College's formal mission remained unaltered into the 1980s, the Joint Chiefs of Staff periodically issued guidance to the institution, for example directing it to place more emphasis on areas like mobilization and coalition warfare.

By the mid-1980s, however, a more significant series of events affected the College. The loss of Marines in Lebanon, cross-Service military interoperability problems in Grenada, and public pronouncements about inadequate authority structures by a former Chairman of the Joint Chiefs of Staff all led to the eventual enactment of the Goldwater-Nichols Defense Reorganization Act of 1986. A landmark piece of national security legislation, its provisions, among others, called for substantially increased attention to joint military education.

In response to this mandate, a series of reviews between 1987 and 1989 -- the Dougherty Board, the Rostow-Endicott Report, and the Skelton Panel -- were commissioned by the Joint Chiefs of Staff, the Office of the Secretary of Defense, and the U.S. Congress. The collective result of these initiatives was a prescribed program of joint military education codified by the Joint Chiefs of Staff in 1990. The Industrial College added joint military planning to its existing curriculum and was accredited by the Joint Staff in 1994 for its educational program in this new area in addition to its traditional areas of interest in national security resource management.

With the advent of the 1990s came a profoundly changing world marked by the tearing down of the Berlin wall, the dissolution of the Soviet Union, and the end of the Cold War which had dominated American national security for nearly half a century. Amidst these changes, the Industrial College continued to develop in new directions as well.

At about this same time, the Congress, in 1990 enacted legislation to create a new Defense Acquisition University. The Industrial College was tasked to provide the Defense Department's senior course as a consortium member of this new University, while simultaneously remaining part of National Defense University. The resultant course, begun in academic year 1991-1992, includes a select number of Industrial College students who complete the regular resident course along with electives and research in the field of defense acquisition. This new mission has, in many ways, been a logical extension of the College's long-standing educational programs in this area which began with its original 1924 mission emphasis on procurement.

Finally, in 1993, the Congress passed legislation authorizing the Industrial College, along with the National War College, to begin awarding Master's degrees. The culmination of longstanding moves toward graduate-level education in both institutions, the Colleges began awarding these degrees starting with graduates of the Class of 1994 and has since embarked on the process of securing accreditation from the Middle States Association.

## CONCLUSIONS

Just as the world has changed profoundly over the past 70 years, so too has the Industrial College evolved in directions that few present at its inauguration in 1924 might ever have guessed. Over the course of events like World War II, the Korean conflict, the Cold war, Vietnam, and the relatively recent post-Cold war era, American national security concerns have changed dramatically. With them, so too has progressed the thinking and practice surrounding the ways in which the national security establishment has sought to provide education in these matters to the best and brightest among each new generation of its most promising senior leaders. At the Industrial College, in particular, these changes have been manifest in an institution which has endured over time, but whose mission has evolved -- at times by explicit, formal decree, and occasionally by implicit direction and practice -- in markedly different directions, driven by a variety of internal and external forces, individuals, and groups.

### An Evolving Mission

The mission of the College has indeed changed considerably over the past seven decades. In examining precisely *how* it has changed, at least five discernible patterns emerge.

First, the institution's mission has evolved from a relatively *narrow* to a more *broad* focus. Initially concerned with procurement and industrial mobilization, the College's charter gradually expanded to include economic and political analyses. Today, the institution addresses the entire range of resource management issues and their contribution to national security in both peace and conflict.

Second, the College has evolved from an institution dedicated to *training* to one which fairly early sought to provide more scholarly levels of *education*. Beginning in 1994, it was authorized to begin awarding Master's degrees to its graduates.

Shifting emphases between *internal* and *external* education characterize a third aspect of the College's evolving mission. Initially providing only a resident program through the 1920s and 1930s, the institution was chartered to initiate expansive external education programs shortly after being reconstituted following World War II. In subsequent years it developed popular correspondent and seminar programs, although both were transferred to the National Defense University by the late 1970s. Since that time, the College's educational focus has once again become primarily internal.

A fourth manifestation of the College's changing mission is found in the varying emphasis in educational programs addressing *military* concerns and *national* concerns. Soon after its inception, the College expanded its interests beyond military procurement and industrial mobilization to support wartime needs, to the analysis of the nation's industrial base and its overall economic strength. Following World War II, those trends continued, as the institution broadened its interests to include national political concerns. In contemporary times, that focus has persisted, although joint military requirements have prompted a return to renewed attention on joint planning issues.

Finally, the College's mission has evolved from one concerned primarily with *domestic* matters to one equally concerned with *international* issues. In its first 35 years, the Industrial College primarily concerned itself with domestic military and economic affairs, limiting its field studies exclusively to the United States. Over the years, it made only limited assessments of the economic and industrial wherewithal of foreign nations to wage war. Beginning in 1960, however, the College initiated more serious inquiries into international economics and politics and, for the first time, included foreign sites in its field studies. By the 1990s, the growing reality of an

increasingly interconnected global economy had made international concerns a staple of the institution's focus.

### Forces Impelling Change

Given that the Industrial College and its mission have changed significantly over the years, why has this been so? What forces have impelled these movements? Clearly, a variety of political, military, economic, and social forces have contributed to these changes. So too have various internal and external stakeholders along with the many educational review boards convened over the years influenced the directions in which the College has developed.

Political forces. Political forces have certainly shaped the College. Even in the years leading up to its original founding, the cooperative climate between government and industry engendered under Presidents Harding and Coolidge created a conducive climate for establishing the institution. Franklin Roosevelt's decision to not formally adopt the War Department's Industrial Mobilization Plans of the 1930s (in which the College played a part) served to subsequently steer the institution away from actively participating in future war planning. Directions from the White House to the College during the Vietnam era to include in its curriculum youth movements in developing countries provide another example. Finally, legislation by the U.S. Congress under the Goldwater-Nichols Act has put in place new requirements for joint military education.

Military factors. Military considerations have played a similar role in the College's development. Those officers who urged the original establishment of the Industrial College had experienced first-hand the lack of American military equipment at the disposal of our forces in World War I. By contrast, the nation's relative success in mobilizing to meet military needs in World War II, reinforced the need for preserving the unique educational institution devoted to this area of interest. Over time, military interests in the new atomic age encouraged the College to turn its attention increasingly towards science and technology in the 1950s and 1960s, and the unconventional nature of conflict in Vietnam prompted greater emphasis on counterinsurgency. Similarly, the more recent shift towards a culture of joint warfighting in the American establishment has been accompanied by a similar change in direction at the Industrial College.

Economic forces. Just as economic considerations are part of the defining interests of the Industrial College, so too have these forces influenced the institution's development. Difficulties in mobilizing the nation's economy for World War I, subsequent Congressional criticisms of industrial war profiteers, and the apparent lack of economic and industrial mobilization expertise within government and the military were all factors contributing to the creation of the Industrial College in 1924. As the

nation endured a severe economic depression in the 1930s, the College served as one of the few government institutions which continued to assess declining American industrial capacity. In more contemporary times, with the growing view of economic strength as an integral component of national security and increasing manifestations of a global economy, the College has focused its attention on both domestic and international economic issues.

Social considerations. Social considerations have also been evident in the development of the College. In the years following World War II, the National Security Act of 1947 gave rise to the structure of the nation's modern defense establishment to include codifying the traditional ultimate control of the country's military by its civilian leadership. Thus, it is perhaps not surprising that civilian students began attending the College's resident course in 1949, and their participation increased steadily in the years that followed. Similarly, in the aftermath of the integration of America's military forces, civil rights legislation, and Johnson's attempt to forge a Great Society, women and African-American students began attending the College in 1973 and have likewise increased substantially in their representation since.

Stakeholders. In addition to the multiple political, military, economic, and social forces which have influenced the Industrial College, various internal and external stakeholders, both as individuals and groups, have shaped the institution as well. Assistant Secretary of War Dwight Davis, for example, was a major force in establishing the College, as was industrialist Bernard Baruch and Army officers such as Colonel Harley Ferguson. The Joint Chiefs of Staff played a major role in shaping the institution following World War II, issuing at least eight formal changes to its mission through 1961. Robert McNamara's drive to instill management practices throughout the defense establishment influenced the College's curriculum and prompted the initiation of a professional journal on management. Within the institution itself, several rather forceful Commandants, like Schomberg in the 1960s, altered directions as well, curtailing and changing field studies, for instance, and initiating electives courses which would later be endorsed as part of the model for senior military education in the mid-1970s. The faculty too have been influential, as in the case of Schomberg, reversing his re-direction of the College's field studies program almost immediately after he left the institution.

Review Boards. Finally, a number of independent review boards and commissions have influenced the mission of the College over the years. The Echols Board, convened during World War II, was responsible for re-opening the College and defining its wartime mission to provide contract training for thousands of military and civilian officials. In the years following the war, the Dewitt, Hancock, and Gerow Boards crafted an architecture for senior military education at large and defined ICAF's unique mission niche within that system. The Clements Committee, in the 1970s, laid

the groundwork for the College becoming part of the new National Defense University. In more recent years, the Dougherty, Rostow-Endicott, and Skelton groups, redirected a portion of the College's mission toward joint military planning.

### An Enduring Institution

In spite of the many forces which have moved the Industrial College in a variety of directions, it has been a remarkably resilient organization. Its longevity is somewhat unique among government organizations. The College is older than the Social Security system and the United States Air Force. It has endured while many institutions such as the Atomic Energy Commission and the Department of Health, Education, and Welfare have come and gone or been absorbed into other organizations. What then, accounts for the successful endurance of this College?

In many ways, the Industrial College is a hybrid organization. Part government and part educational institution, it has features of both, including the tendencies toward longevity of the latter (Harvard, Princeton, and Yale, for example, pre-date the founding of the country; West Point and Annapolis were established early in the 19th century). In fact, the College's identity primarily as an educational institution appears to have served it well over the years. Following its controversial foray into mobilization war planning in the 1930s, subsequent post-war charters for the institution explicitly distanced it from direct participation in war planning.

Similarly, the College's educational mission appears to have partially isolated it from the government bureaucracy of which it is a part. For the first two decades of its existence, the College was part of the organization of the Assistant Secretary of War, essentially representing the civilian leadership of the defense establishment. Following the major reorganization of the national security community in 1947, the Industrial College became a subordinate organization of the Joint Chiefs of Staff, the military leadership. In more recent years, it has become a functional component of both the National Defense University and the Defense Acquisition University. While its various parent organizations have clearly influenced the institution, none appear to have wholly dominated it. In fact, from time to time, the College appears to have actively steered the government bureaucracy in directions compatible with its own perceived needs, successfully placing friends of the institution, for instance, on many of the independent review boards which were convened over the years.

The College's multiple sponsorships seem to provide yet another basis for its endurance. Over the years, the institution has served not only a variety of parent organizations, but a host of other customer constituencies as well. Beginning in the 1920s, the Industrial College provided education to not only Army officers, but Navy and Marine Corps officers as well. Through the post war years and into modern times,

it has expanded its educational services to include Air Force and Coast Guard officers, civilians from most federal agencies, and most recently, a few civilians from private industry. Moreover, while Service rivalries have been a perennial issue in the American military, even in today's joint environment, the College's educational role in a non-operational field of study poses little or no threat to parochial Service interests.

In the final analysis, the College appears to have successfully endured by balancing forces in seeming opposition to one another. It has indeed remained responsive to the needs of various customer constituencies and a profoundly changing national security environment. In that sense, it has most assuredly remained relevant to changing times and circumstance. At the same time, the institution has been guided by a rather singular and unique constancy of purpose over time. While its specific mission has been frequently amended, one common theme has persisted and been refined: education related to the resources which contribute to national security.

### A Unique Institution

It is that same singular purpose which has made the Industrial College a unique institution with a unique mission. Arguably the oldest joint senior College in the defense establishment, it has, since the 1920s, provided education in the resource component of national security to a diverse student population of future military leaders. Gradually expanding that audience to include promising civilian officials from throughout government, the College has developed into a graduate institution dedicated to the study of the political, economic, and military elements that comprise the resource component of national security. That mission certainly makes the Industrial College unique among educational institutions within the defense establishment; it may well make it unique among educational institutions anywhere.

### Potential Detractors

The success and longevity of the Industrial College notwithstanding, several factors have appeared on the historical landscape from time which have detracted from the College's long-term development and evolution.

The relatively rapid turnover in senior leadership has been one perennial problem. Given the rather substantial influence these individuals can wield in the short term, their frequent changeover has been somewhat disruptive. Several review boards and at least one NDU President have noted that each change in leadership brings new and sometimes unproductive changes in academic programs and organizational structure. In the 70 year period from 1924 to 1994, the Industrial College was headed by 32 Commandants, making their average tenure in that position only a little over two years.

Another perennial issue has involved institutional prestige. Concerns within the College about its prestige relative to the Army War College were common throughout the 1920s and 1930s. Following World War II, concerns over prestige re-surfaced relative to the National War College, and several Commandants questioned whether or not ICAF graduates were advancing to general and flag officer ranks in sufficiently competitive numbers. Given the institution's remarkably long-term success, singularly unique mission, multiple constituency support, and its distinction as the only senior military school to have a U.S. President among its alumni, the College's persistent anxieties over prestige seem at least partially misplaced and potentially dysfunctional.

Finally, the unique and defining purpose for which the Industrial College has been justifiably proud may itself be a potential detractor in the College's continuing development. In the absence of analogous educational institutions and programs elsewhere in military, government, or private circles, the College has gradually moved in several directions which are somewhat more conventional and familiar. Thus, over the past 20 years, the College has incorporated courses in political science, economics, and history, and while these disciplines are focused toward national security concerns, they would not be unrecognizable in most civilian graduate universities. Similarly, more recent moves toward joint military planning are, by design, similar to those educational programs now in place at every other senior military college in the country. Balancing the College's unique contributions with these other more common areas of interest appears to have been a challenge in the institution's more recent history.

### Further Research

In analyzing the historical evolution of the mission of the College, it becomes readily apparent that, in addition to the detractors cited above, several other related issues would lend themselves to further potentially fruitful research.

The role and mission of the Industrial College in a post-Cold war era of a significantly smaller military establishment is certainly worthy of investigation. As the defense establishment shrinks and discretionary government and military spending declines further, will the Services and Federal agencies continue to send large numbers of students to the College? If present enrollment levels continue from an increasingly smaller pool, what will this trend portend for the traditionally high quality of promising students sent to the institution? Will the 10-month educational program be viewed as an investment in future excellence or a drain on scarce manpower resources?

These same budgetary pressures are apt to raise questions about further consolidations within the defense establishment, including its educational institutions. Will Congress continue to support senior colleges within each of the Services as well as the two joint senior colleges? Will the larger infrastructure of military education -- the Naval Postgraduate School, the Air Force Institute of Technology, and others -- come under scrutiny? What are the likely ramifications for the Industrial College in such reviews and possible future consolidations?

Finally, the recent move to award Master's degrees at the Industrial College, as well as at the National War College, raises another interesting area for further research. For most of its history, the Industrial College resident course was structured as an executive program for highly successful senior leaders, not unlike those conducted for senior individuals from the private sector at Harvard and MIT. Moreover, for the past 20 years, most students entering the Industrial College already had earned at least one master's degree. Will the fairly recent move to begin awarding master's degrees, and the likely continuing desire to maintain accreditation demonstrably alter the nature and practices of the institution?

#### POSTSCRIPT

Part of the public legacy with which Dwight Eisenhower is often associated is his farewell address to the American people delivered via radio and television from the White House on January 17, 1961. In that speech, he cautioned about the "unwarranted influence, whether sought or unsought, by the military-industrial complex" (U.S. Congress, 1970, p. 148). While warning about the potential dangers of excess in this area, however, Eisenhower also noted the essential role which that complex played in our national security. In light of the hazards of an uncertain world, he observed, "we have been compelled to create a permanent armaments industry." Moreover, he called the military establishment "a vital element in keeping the peace" (p. 148).

It is thus not surprising, that four months earlier, on September 6, 1960, President Eisenhower personally presided at the dedication of the new academic building for the Industrial College -- in many ways an institutional icon for the military-industry complex and the associated admonition for which Eisenhower is often remembered. Speaking that day at the new facility which today bears his name, the President included these important observations among his remarks:

Our liberties rest with our people, upon the scope and depth of their understanding of the spiritual, political, and economic realities which underlie our national purpose and sustain our nation's security. It is the high mission of

the Industrial College of the Armed Forces to develop such an understanding among our people and their military and civilian leaders (cited in Bauer, 1983, p. IV-25).

Eisenhower's words have since been inscribed in the entrance foyer of the Industrial College. Over the course of seven decades, it has been the evolution of this high mission of which he spoke that has made this institution of adult education and learning unique in the American national security establishment and very possibly unlike any other educational establishment in the world.