A LAW IS PASSED—THE ATOMIC ENERGY ACT OF 1946

Byron S. Miller*

A UNUSUALLY clear example of the role which democratic processes can play in the framing of legislation is presented by the history of the law controlling atomic energy within the United States. Several unique factors combined to deprive the legislator of his comfortable patterns for reaching policy decisions. He was not dealing with a recast of conventional controversy, a labor versus management or debt reduction versus public spending issue, on which his attitudes had long been fixed, his speeches ready at tongue, the public reception and opposition tactics already known. He could not judge by the people lined up on one or the other side, for traditional alignments were criss-crossed. Even commercial special interest groups were largely silent. In short, for most senators and many representatives, atomic energy legislation required an almost pure exercise of judgment. The very same factors also operated to induce a surprisingly wide expression of opinion by the public.

The response of the Congress to this unparalleled necessity for original judgment was not one of imaginative suggestion. Rather, the reaction of many legislators was to escape the entire problem, one senator openly expressing a wish to dump all atomic energy knowledge into the ocean. Most, however, felt lost in a morass of technology, an attitude which appeared to survive the educational hearings. Hence the debates both in and out of Congress all too often exhibited a stubborn tendency to pose

* Midwest Director, Commission on Law and Social Action, American Jewish Congress. Formerly Associate General Counsel of the Office of War Mobilization and Reconversion, which acted for the Administration in securing domestic atomic energy legislation.


choices in terms of conventional opposites which bore little relation to the
issues being decided.

The factors responsible for this atypical legislative history can be
grouped roughly as follows:

1) The Atomic Bomb. The military and political significance of the
A-bomb and the political, social, and economic significance of its civilian
counterpart, atomic energy, were problems enough; but they were almost
eclipsed by the engulfing emotions of fear and awe which then surrounded
the subject. The compelling demand for international control was an ad-
ditional element with a very practical relation to domestic legislation.
Each of these factors constituted unique legislative considerations. And
the element of fear was not confined to problems bred by the bomb from
which it had sprung; rather it diffused through the entire legislative at-
mosphere in the illogical fashion of a primitive emotion.

2) The Newness of the Problem. Multiplying the problems raised by
the special incidents of atomic energy was the total absence of any con-
venient framework into which the legislative problem could be fitted. The
door was open for all manner of entrants into the legislative contest.
Fortunately, the universal interest in the subject opened publicity avenues
to a degree rarely available to private citizens seeking to make their
positions and reasons known.

3) The Political Activity of the Scientists. Into the idea vacuum cre-
ated by the fear, the stupendous prophecies of atomic energy uses, and the
unfamiliarity of the problems presented marched an array of political
unknowns, the scientists. These Men Who Made the Bomb personified the
factors which had unsettled the legislators. They were awesome creatures
indeed to have built the bomb, men of limitless capacity to have harnessed
such a colossal new source of energy, and men almost from a different
planet, politically speaking. Before the bomb, physical scientists had al-
most uniformly been silent on public affairs, apparently preferring the
precision and predictability of natural forces to the inexact conflicts and
compromises of the social world. Yet here they were, mostly young,
forceful, and hopeful men and women dealing with old and tired legisla-
tors of few ideals, earnest and sure of their subject in contrast to Congres-
sional fear and uncertainty. Matching their energy and capacity to the
opportunity, the scientists soon became a major factor in the formulation
of atomic energy legislation.

4) The Postwar Attitude toward the Armed Forces. In the wake of
victory our armed forces enjoyed a prestige and political strength in
Congress then unprecedented in American history. In those quarters, at
least, the capacity of the military to control atomic energy in peacetime
was demonstrated beyond doubt by their victory in the war. At the same time most veterans, particularly enlisted men, had developed an opposite attitude toward supervisors—the "brass hats"—at least so far as non-military activities were concerned. The general public exhibited attitudes in the full range between these two; but perhaps the larger portion was more readily affected by stories of specific abuses than by the generality of victory. The result may be ungrateful, even illogical; but there can be no disputing the popularity of Mauldin and similar cartoonists.

Each of these factors contributed to make the Congress and the executive branch more susceptible to the wishes of the public than is usually the case. The result was a law unprecedented in scope, in technique and in constructive potentialities. That the ultimate enactment was of such a high standard is a tribute to our means of communication and our human resources—in other words, to our democratic system. This victory was made possible by articulate public opinion; yet the same freedom of expression in the hands of less well-meaning individuals and legislators came uncomfortably close to defeating the will of the overwhelming majority, as the following history indicates.

I. EARLY DEVELOPMENTS: THE MAY-JOHNSON BILL

Until August 5, 1945, when the first atomic bomb was dropped on Hiroshima, neither Congress nor the public knew that an instrument of such vast destructive possibilities was even contemplated. Only the scientists, the military leadership of the Manhattan Project, and the very highest echelon of the Administration knew of the work and of its almost limitless consequences should a bomb be successfully produced. Thus, the secrecy surrounding the project gave these two groups, the scientists and the military, an enormous head start over the rest of the country (and the world) in anticipating the problems created by the release of atomic energy and in developing techniques for meeting these problems.

As early as 1943 the scientists began writing and circulating papers covering such topics as the destructive capacity of the bomb, possible national and international political consequences of its use, and possible peacetime uses of atomic energy. Accounts are available elsewhere of the psychological conflicts which many scientists underwent in trying to live with the knowledge that their goal was the production of a weapon endangering civilization itself. By the end of 1944, however, they had settled upon the need for quick dissemination throughout the world of the few basic facts which would permit an unprepared public to understand the new problems presented by atomic energy. In February 1945 the formation of an organization of atomic scientists was considered but
security rules of course precluded action at the time. Finally, the preliminary work of the scientists was gathered together by the Committee on Social and Political Implications, headed by Professor James Franck; this work was incorporated into a special report sent to Secretary of War Stimson on June 11, 1945.\(^3\)

Meanwhile the military leadership had also become active. Shortly after President Roosevelt's death, President Truman was first informed of the atomic project. In May 1945, with the latter's approval, Secretary Stimson set up the Interim Committee to advise the President on the use of the bomb and to recommend legislation that would insure the most advantageous use of this new discovery.\(^4\) The legislative assignment, however, was kept a tight secret.\(^5\) Both the scientists and the Interim Committee considered at length the best way to use the bomb, an effort which culminated in its actual use at Hiroshima and Nagasaki.\(^6\)

Despite contrary assurances from the War Department, no adequate informational measures had been prepared to enable the public to form an intelligent understanding of the significance of the atomic bomb. First reports about the bomb created mental chaos; the few carefully prepared articles were no match for the fanciful speculations put forth by writers, broadcasters, and speakers all over the country. The scientists attempted to fill the information void, but without preparation, without experience in the workings of our mass communications system, and without adequate resources or freedom to reach the bulk of the people before misleading, even harmful, first impressions had been formed. Indeed, it is hard to conceive how any system short of mass censorship during distribution of prepared material could possibly have transmitted the story of the atomic bomb without creating the very first impressions which have since caused so much harm—the notion of "secrets"; the confident expectation of a defense against the bomb; and the assumption that other nations will be incapable of atomic warfare for almost a generation.

**THE MAY-JOHNSON BILL**

During these months legislation was being drafted under the supervision of the Interim Committee, behind locked doors and subject to

\(^3\) For many illuminating details, see Simpson, Scientists in Washington, 39 Univ. Chi. Magazine 3 (Nov., 1946).


\(^5\) Various scientists were told no legislation was yet being contemplated.

severe security precautions, by General Royall, then Special Assistant to the Undersecretary of War, and William L. Marbury, a well-known private attorney. There is some indication that this secrecy was continued even after Hiroshima; hence the scientists were caught unawares when President Truman sent a special message to Congress on October 3, followed the same day by introduction of the Interim Committee bill in the House by Representative May and in the Senate by Senator Johnson—the May-Johnson bill. There can be no question that the bill reached Congress in unorthodox fashion, since it was not cleared through the Bureau of the Budget, or by the bureau with other departments and agencies as is customary.

The May-Johnson bill was widely denounced as a drive for military control of atomic energy in time of peace, though the bill was sponsored expressly for the purpose of substituting civilian control for War Department supervision. The accusation derives not from explicit grant of authority to the military but from a series of provisions which readily lent themselves to military domination. A brief chart illustrates the point:

**MAY-JOHNSON PROVISIONS AND OMISSIONS**

1. **Administration:** Commission serves part-time; Administrator and Deputy Administrator full-time. Administrator directly vested with powers paralleling those of Commission. Administrator and Deputy may be members of armed forces.

2. **Basic Policies:** Stated only in terms of military uses. No provision for development of peacetime uses, for encouragement of non-military research through grants and declassification, etc. Essentially, all policy decisions were merely shifted from Congress to the agency with no guides in the Act.

**MILITARY EMPHASIS**

1. **Administration:** Full-time Administrator and Deputy would easily dominate part-time Commission where Commission could not even control Administrator by refusal to delegate powers. Unique statutory provisions permitting military appointments and expressly creating a Deputy led to charges that deal was for Army Administrator and Navy Deputy, hence military control.

2. **Basic Policies:** Omission of reference to peacetime uses and of provisions designed to foster such research and development coupled with leaving basic policy to military administration supported inference of military emphasis in program.

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7 H.R. 4280, 79th Cong. 1st Sess. (1945); see testimony of Secretary of War Patterson, Hearings before Special Senate Committee on Atomic Energy, 79th Cong. 2d Sess., at 389 (1946).

8 The bill expressly provided that the Administrator was to keep the Deputy Administrator fully informed at all times. The presence of this unusual and ordinarily unnecessary provision in a carefully-drafted bill was widely explained as founded on traditional interservice suspicion and hostility; hence the inference that the Deputy was to be a Navy man while the Army kept the Administrator post. Indeed, General Groves' kittenish testimony before the Senate Committee tended to confirm this view.
3. **Powers**: Agency given sweeping powers in extremely general terms over private activities, but could also permit unlimited private activity. Power of dismissal of scientists anywhere in field from private or public jobs was absolute.

4. **Research and Secrecy**: Research permitted only under license. Broad power to keep data classified. Compartmentalization permitted. Dismissal power (mentioned above).

3. **Powers**: Because of Manhattan Project activities, creation of private rights which might hamper international control was anticipated. Dismissal power abuses were freely predicted and similar activities in past were blamed for postwar exodus of scientists from Project.

4. **Research and Secrecy**: Military control suspected of licensing only activities of direct military value. Continuation of excessive secrecy and compartmentalization charged. Dismissal power and other controls expected to scare off scientists.

The May-Johnson bill was detained at the presiding officer’s table in the Senate because of a jurisdictional dispute; in the House, however, it moved smoothly and efficiently into the guiding hands of Andrew Jackson May, chairman of the military affairs committee. While the Senate wrangled over referral to the foreign affairs, military affairs, or a proposed new atomic energy committee, Mr. May opened and closed public hearings on October 9, 1945, and rushed executive committee sessions designed to report the bill out promptly.

**OPPOSITION DEVELOPS**

From the standpoint of the May-Johnson bill’s backers such haste was well advised. No sooner was the bill introduced than there rose from atomic scientists throughout the nation an avalanche of outraged criticism that could only have been spontaneous and deeply felt. During the operations of the Manhattan Project in wartime, there had gradually developed a cleavage between most of the scientists and their military supervisors.\(^9\) Without here repeating the many incidents which explain the unenthusiastic attitude of most scientists toward military supervision, it may be sufficient to cite the conclusion of one of the key men in the Project that the military “delayed the bomb by 18 months.”\(^{10}\)

Local organizations of scientists had been formed at each of the principal sites shortly after Hiroshima. Educational efforts directed toward

\(^9\) This division occurred as well between the handful of administrator-scientists in key positions and their brethren in the various laboratories operated by the Project. The former group became increasingly divorced from the work and problems of the working scientists and more under the influence of the military leaders. At the war’s end they had long since ceased to represent the viewpoint of most scientists.

\(^{10}\) See testimony of Prof. Leo Szilard, Hearings before Special Senate Committee on Atomic Energy, 79th Cong. 1st Sess., at 294 (1945).
helping the public attain an intelligent understanding of the physical facts of atomic energy and some of their political, social and economic consequences were under way when the May-Johnson bill suddenly appeared on the scene. Immediately, a major share of the scientists' energies was thrown into a fight for more careful consideration of the bill. Led by such outstanding men as Drs. Condon, Szilard, and Urey, they descended upon Washington insisting that a single day's hearings limited to favorable witnesses was a shocking abuse of legislative discretion in dealing with such a momentous and largely uncomprehended subject. When their request for further hearing was initially refused, they met informally with a large caucus of congressmen, then used the hearings of a Senate subcommittee considering science legislation as a sounding board for airing the defects of the May-Johnson bill. Simultaneously, they were calling on prominent private citizens, editors and publishers, on leading figures in the Administration, and on influential senators and representatives. Their efforts so moved Mr. May that he reopened hearings—for a single day. A few witnesses testified against the bill, a few more for the bill, and the committee resumed executive sessions, with General Royall in daily attendance. The bill was reported out with a few amendments, only one of consequence, on November 5. Two Democrats filed dissenting views; nine Republicans voted solidly against government control.

Fortunately for the scientists not all officials in a position to affect the legislation had the stolid single-mindedness of Mr. May. In late October the President began to have misgivings about some aspects of the bill. Indeed, his approval had been given in reliance upon the endorsements of the War Department and the few scientific leaders who served on or with the Interim Committee. He had no notion that scientists would have any serious objection to the proposed law. His concern was echoed by men then occupying key posts under him, such as Budget Director Smith, Secretary Ickes, and Secretary Wallace. In the House of Representatives, Helen Douglas and others had voiced their apprehension so that Speaker Rayburn was of no mind to let the May-Johnson bill come to the floor until the air had cleared. Newspapers, magazines, and broadcasters throughout the country were charging that the bill was being railroaded through without giving the public a chance to form an opinion on the issues.

**THE SENATE SPECIAL COMMITTEE**

Meanwhile the Senate continued in its disagreement as to committee jurisdiction over atomic energy legislation. The logjam was broken in late October when, after a regular session between the President and Demo-
cratic legislative leaders, the Senate voted to establish a Special Committee on Atomic Energy. Following custom, though not without opposition, the sponsor of the resolution creating the committee became its chairman—freshman Senator Brien McMahon. As if to make sure that McMahon was kept in his place, the other ten positions on the committee were awarded to Senator Connally, chairman of the Foreign Affairs Committee, Senator Vandenberg, ranking Republican on the same committee, Senator Johnson, sponsor of the May-Johnson bill and ranking Democrat on the Military Affairs Committee, such conservative stalwarts as Senators Tydings, Byrd, Millikin, Russell, and Austin, and freshmen Senators Hickenlooper and (ex-Admiral) Hart.

The legislative strategy soon emerged. The House bill was to be kept off the floor until the new Senate committee had had an opportunity to study the entire field of atomic energy and to prepare alternative legislation. The heat was off; there was time for the scientists, the public, and the government to settle down to the more difficult task of developing constructive suggestions for the content of atomic energy legislation.

The President's concern over the reception accorded the May-Johnson bill has already been mentioned. Even as he was conferring with legislative leaders, his principal assistant, John W. Snyder, then Director of the Office of War Mobilization and Reconversion (OWMR), came to him with an analysis of the defects of the May-Johnson bill and a preliminary outline of the requirements of a good bill. These suggestions were developed after extensive discussion with the high-ranking scientists who were leading the opposition to the May-Johnson bill and were prepared by James R. Newman, head of OWMR's science division, with the author's assistance. The President was so impressed with these suggestions that he forthwith designated OWMR to act for the Administration in connection with atomic energy legislation. Mr. Newman was shortly appointed special counsel to the Senate Special Committee on Atomic Energy, and Dr. Condon, by then the new Director of the National Bureau of Standards, was named Scientific Advisor to the committee.

Through November and most of December the Senate committee busied itself with the task of learning about the physics, production and potential uses of atomic energy and the military significance of the atomic bomb. Since an examination of the criticisms of the May-Johnson bill had


\[12\] The scientists reached general agreement on objections to the May-Johnson bill and ingredients of an alternative bill at a conference sponsored by the University of Chicago and held at Rye, N.Y., in late October. See Simpson, Scientists in Washington, 39 Univ. Chi. Magazine 3, 4 (Nov., 1946).
shown that modification by amendment was not feasible because of the many basic changes needed, the drafting of an alternative bill was begun by Mr. Newman and the author\textsuperscript{13} under the joint guidance of Senator McMahon and the Administration, and in consultation with the scientists and other agencies of the government. The draft was completed as the general hearings of the Senate committee were nearing conclusion and was introduced by Senator McMahon just before the Christmas recess. The Committee agreed to consider specific legislation when it resumed hearings in January, using the McMahon bill, the May-Johnson bill, and a bill submitted by Senator Ball as the bases of discussion.

II. A BILL EMERGES FROM THE SENATE COMMITTEE

Even as the press was daily reporting the testimony of expert witnesses filling in the general facts about atomic energy and as the McMahon bill was quietly being drafted, the protagonists in the May-Johnson bill controversy were preparing to do battle in the new arena—the Senate Special Committee on Atomic Energy.

The isolated site organizations of scientists were consolidated into a single Federation of Atomic Scientists. A simple word change substituting "American" for "Atomic" sufficed to cover the inclusion of other scientific groups not strictly in the atomic energy field. A small office with a lone secretary was opened in Washington, accessible only by ascent of some four flights of steps. Many of the nation-wide civic, labor, and religious groups banded together to form the National Committee on Atomic Information, devoted solely to the educational task of disseminating the basic physical and political facts about atomic energy,\textsuperscript{14} the Committee sharing the Federation's lofty perch. The scientists themselves, unable to afford paid representatives in the nation's capital, inaugurated a relay system whereby a member from each site took a two-week leave of absence, spent it in Washington, and returned only to be replaced by an associate for a similar two-week period. In Washington they worked till all hours of the night, meeting with members of all three branches of the government and influential organizations and individuals, writing speeches and articles, and learning as best they could the political ins and outs in the seat of government.\textsuperscript{15} For the most part they avoided political bias. Perhaps their rare combination of a non-partisan attitude and an unflagging devotion to

\textsuperscript{13} Valuable contributions to the drafting were made by Prof. Thomas I. Emerson of Yale Law School, then the author's supervisor, and Prof. Edward H. Levi of the University of Chicago Law School.

\textsuperscript{14} See, for example, their widely distributed bulletin, "Atomic Information."

a goal of no conceivable personal benefit explains some of the readiness of political leaders to listen to them. The organizations which had joined in creating the Atomic Information Service merged their legislative activities into the Emergency Conference for the Civilian Control of Atomic Energy sparked by the tireless Rachel Bell. And, to complete the girding for battle, groups of prominent individuals nationally and locally were formed into Emergency Committees for the Civilian Control of Atomic Energy. The national committee roster included, among others, Bishop Oxnam, Beardsley Ruml, William Donovan, Palmer Hoyt, Arthur Whiteside, Percival Brundage, Donald Nelson, Cass Canfield, Harry Emerson Fosdick, Sumner Welles, and John Hay Whitney.

Across the ideological gulf the proponents of military control were not napping. Working quietly, mostly through service officers, they brought their wartime prestige and their hard-earned knowledge of the workings of Congress to bear on the more responsive members of both houses. Even a character assassination here and there was not beneath then. Theirs was a double strategy; preferred was the passage of a bill firmly establishing military control in peacetime, but the alternative of no legislation was almost equivalent since the military would have remained in control.

Thus the lines were forming for the more difficult open contest in the Senate with each development exposed to the eyes of the public, unlike the quick trick tried in the House.

THE McMAHON BILL

The McMahon bill’s provisions focused the issues awaiting decision. Its key sections are summarized in the following chart:

1) **Administration:**
   a. 5-man full time commission.
   b. 4 Division Directors appointed by the President.
   c. No exemption permitting military officers to serve while on active duty.

2) **Basic Policies:**
   a. “Improving the public welfare, increasing the standard of living, strengthening free competition among private enterprises so far as practicable, and cementing world peace.”
   b. Specific provisions for encouraging research, insuring public availability of peacetime uses, and leaving basic decisions to Congress when practical applications are ready.

3) **Powers:**
   a. Government monopoly of production of fissionable material (the explosive in the bomb) and of the material itself.
   b. Control through licensing of source materials, of production and utilization equipment, and of research with dangerous quantities.
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4. Control of the issuance of production patents and of the availability of utilization patents.

d. Powers explicit and tailored to specific objectives.

4) Research and Secrecy:

a. Freedom for research with non-dangerous quantities; assurance of fair distribution of essential research materials; minimum controls over non-dangerous by-product materials.

b. Basic scientific information unrestricted. Related technical information subject to classification, but clear policy of dissemination to aid research unless foreign policy considerations overbalance. Enforcement through Espionage Act.

c. Express protection of scientific employees against unfair administrative dismissal.

The Senate committee spent four weeks hearing witnesses testifying exclusively with respect to legislation for the domestic control of atomic energy. In the course of these hearings the President sent a special letter to Senator McMahon outlining the Administration’s views on the principal ingredients of desirable atomic energy legislation. With a minor exception, his recommendations paralleled the McMahon bill, thus bringing into the open his change of heart on the May-Johnson bill.

The hearings concluded, the Committee embarked upon a schedule of executive sessions almost unprecedented in legislative annals. For six weeks practically the full membership of the Committee met in almost daily session, combing over the legislative proposals before them. The Committee’s first response to the weight of favorable testimony on the McMahon bill came when, after a preliminary skirmish, it voted to use the bill as a working guide. Section by section, the Committee went through the bill three separate times, emerging with a true group product, a bill which, while still bearing a resemblance to the original McMahon bill, nevertheless contained changes in almost every line. Several sections were completely re-written, others substantially overhauled, a few settled by more or less artful compromise. The result was a superior piece of legislation, a testimonial to the latent capacities of free discussion. True, a few provisions are subject to pointed criticism, but rarely has a legislative body making its own decisions emerged with a bill reflecting as high a caliber of statesmanship as did the Senate Special Committee in reporting out its modified form of S. 1717.

THE COMMITTEE PRODUCT

A full analysis of the Committee’s changes would not here be appropriate. Some of its evident improvements were: 1) the creation of the post of General Manager, to be appointed by the President and to service the Commission in supervising the four Divisions and other organizational units; 2) the revision of the patents section to provide explicitly that cer-
tain inventions were not patentable and to make the availability of utilization patents discretionary rather than automatic; and 3) the addition of a section expressly providing that international agreements were to supersede any inconsistent provision of the domestic control law.

Two other provisions, however, received the bulk of the Committee's attention and supplied the fuel for the major controversies within and without the Senate unit. These were the sections dealing first, with the relation between the military departments and civilian Atomic Energy Commission and second, with the determination of appropriate secrecy measures. Though the questions were logically distinct, they were the beaches upon which the civilian and military control proponents engaged; and while the black sand of one issue was distinguishable from the white sand of the other, the heat of the conflict fused them into a single mass of deep disagreement on the special capacity of the military to preserve the national security.

From the time of the President's first offhand statements about preserving our monopoly of the "secrets" of the atomic bomb, the majority of the public, as shown by public opinion polls, accepted the simple notion of "secrets," perhaps subconsciously hoping that preserving these "secrets" would protect us against all danger of atomic warfare. Though later polls showed that most people accepted the intellectual proposition that we could not retain our monopoly, nevertheless their emotional dependence on the concept of "secrets" was probably not seriously affected by the logical inconsistency of such a position.

In this respect members of Congress followed the public pattern. From the early questioning of witnesses on the general subject of atomic energy, there was no question but that the law would contain some provision to preserve the "secrets." Indeed, an early propaganda coup was scored when the words "security" and "secrecy" became interchangeable in this field. Hence, from the outset, few scientists publicly advocated a policy of complete declassification, although many were apprehensive of the evils that had been and could continue to be committed in the name of secrecy.

Assuming, then, that secrecy was not only desirable but vitally linked up with our national security, it was not surprising that one of the principal foci in the civilian versus military control dispute became: "Who could better keep the secrets?" Disclosure of the Canadian espionage story in December and ensuing months, succeeded by dark hints from J. Parnell Thomas of the Un-American Activities Committee that secrets were leaking to other nations from Oak Ridge, were not calculated to let the public forget the issue. Curiously, these stories were urged as proving military
control alone could preserve the secrets even though Oak Ridge was still under military control.

Meeting the issue on the same level, the scientists responded with two arguments: first, that only a scientist could know a "secret" from a paragraph of jargon; and second, in many instances War Department secrecy rules had hampered the development of the bomb. Indeed on one occasion it appeared that a whole laboratory might have exploded if one group had not illicitly transmitted information unknown to the group in the endangered lab.

Though the public debate proceeded largely on this level, a few members of the Senate committee had realized that secrecy did not depend on the color of the Commission's coats. More serious to them was Secretary Patterson's objection to the original McMahon bill, that it contained inadequate provision for participation in atomic energy control and development by the regular military departments. Their first plan was to give to the Army Chief of Staff a veto power over acts of the civilian Commission. This "compromise" was discarded when the then Chief of Staff, General Eisenhower, showed no great enthusiasm for the power. Next, they developed the so-called "Vandenberg amendment." This proposed to create a Military Liaison Committee consisting of representatives of the War and Navy Departments with power to advise and consult with the Commission on all matters it deemed to affect security, to know of all matters within the Commission and, where it felt any action or proposed action was "inimical to the common defense and security," to appeal the question to the President whose decision would be final. Senator McMahon opposed the amendment, urging instead a compromise as to membership on the Commission. Put to a vote, he was defeated 6 to 1, four committee members being absent. His request for postponement of consideration until the full committee was present was granted, the vote then becoming 10 to 1.

Disclosure of the amendment was the signal for a direct offensive by the scientists, the conference of organizations, the emergency committee of prominent individuals, and the many friends of civilian control in the communications fields and elsewhere. This time the public relations advantage rested with their side. The substance of the amendment was proposed by several other senators; Vandenberg's principal contribution was his suggestion of the final wording. Because it was dubbed the "Vandenberg amendment," however, instead of some other shorthand reference, the amendment's fate almost as a matter of senatorial courtesy came to rest with Vandenberg. This was most desirable because he was more re-
responsive to public opinion than some of the other sponsors and it was an election year for him—he could not then know that the November 1946 election was to be a Republican landslide. While the clamor against the amendment steadily mounted (including some influential protests from Vandenberg’s home town), the Administration also became concerned. For one thing the proposed amendment by-passed the Secretaries of War and Navy, a result not exactly palatable to them. Shortly, Vandenberg himself indicated a willingness to accept modification. The solution lay in the familiar lawyer’s legerdemain of accomplishing fundamental changes in meaning while altering as few words as possible. By limiting the scope of the Liaison Committee’s functions to military applications and by restoring regular channels within the military departments, the amended amendment ceased to create an autonomous and powerful military committee and replaced it with an orderly liaison within traditional military department jurisdiction and channels. Vandenberg’s acceptance of the changes was readily approved by the Senate committee.

Just as the military control debate merged into the secrecy question, so the fight over the Vandenberg amendment affected the committee’s attitude when it reached the section dealing with control of information. There, for the first time, Vandenberg, Hickenlooper, and others sought advice from leading scientists in close touch with the scientists’ organizations and made a determined effort to produce a section which would preserve the maximum secrecy consistent with dissemination of enough data not to hamper research.

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16 The original and final drafts, with the deleted original in parentheses and the final additions in italics, follow:

(b) “There shall be a Military Liaison Committee consisting of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the (President) Secretaries of War and Navy in such number as (he) they may determine. The Commission shall advise and consult with the Committee on all atomic energy matters which the Committee deems to relate to (the common defense and security) military applications, including the development, manufacture, use and storage of bombs from fissionable material, the allocation of fissionable material for military research, and the control of information relating to the manufacture or utilization of atomic weapons. (The Committee shall have full opportunity to acquaint itself with all matters before the Commission.) The Commission shall keep the Committee fully informed of all such matters before it, and the Committee shall keep the Commission fully informed of all atomic energy activities of the War and Navy Departments. The Committee shall have authority to make written recommendations to the Commission on matters relating to military applications from time to time as it may deem appropriate. If the Committee at any time concludes that any action, proposed action, or failure to act of the Commission on such matters is (inimical to the common defense and security) adverse to the responsibilities of the Departments of War or Navy derived from the Constitution, laws and treaties, the Committee may refer such action, proposed action or failure to act to the Secretaries of War or Navy. If either Secretary concurs he may refer the matter to the President whose decision shall be final.”

17 Exception may be taken to including data relating to the production of power as of primary military significance, but on this Sen. Vandenberg was adamant.
the scientists flowed from the Espionage Act which the committee not unexpectedly was unwilling to touch. The final section, while indulging Senator Austin's penchant for inserting the phrase "to assure the common defense and security," provided explicitly that the Commission should weigh against the policy of security through secrecy first, the importance of freedom of communication in assuring the progress of research and second, the desirability of eliminating restrictions when adequate international controls were established.

With these and lesser modifications, the Senate committee unanimously approved their bill on April 19, 1946. Unanimity in a committee of such conservative composition on a bill authorizing unprecedented government controls was no minor or accidental achievement, as the ensuing history indicates. After an agonizing delay, the reasons for which have never become clear, Senator McMahon seized the opportunity on a peaceful Saturday afternoon to bring the committee bill up for consideration on the Senate floor. The Senate approved the bill unanimously on that day, June 1, 1946.

III. FINAL PASSAGE

The jubilance of the proponents of civilian control over Senate approval soon faded as they analyzed the membership of the House Military Affairs Committee, to which the bill was then referred. Of this 27-member committee, 9 of the Republicans had already gone on record as opposed to government control in voting against the May-Johnson bill. Chairman May, whose "own" bill had been stopped by advocates of the measure now resting on his desk, was hardly likely to press for prompt action in perhaps the last month of the legislative session. A half-dozen of the Democrats had consistently sided with May on pro-military measures. Then, with ironic timeliness, invitations to witness the gigantic atomic demonstrations at Bikini drew off a number of committee members, one of these being Representative Holifield who almost alone had fought the May-Johnson bill in committee.

After a week's delay Chairman May announced public hearings would be held. Two witnesses were invited—Secretary of War Patterson and Assistant Navy Secretary Kenney. Examination of these witnesses by committee members demonstrated beyond doubt the committee's preoccupation with the military use of atomic energy and their unquestioning assumption that only the military departments were qualified to act in the interests of national security. This testimony concluded, the House unit

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18 Sen. Austin insisted that amendments to the Espionage Act, 40 Stat. 217 (1917), 50 U.S.C.A. § 31 (1940), were an extremely complex problem that previous committees had unsuccessfully attempted.
embarked upon section-by-section consideration of S. 1717 in executive session.

The amendment pattern was soon apparent. Chairman May supported three militarizing amendments, one to permit military men to serve in any position, another requiring at least one member of the Commission to be from the armed forces, and a third requiring the Director of Military Applications to be a military officer. These revisions approved, he then fought off a host of disabling amendments proposed by the dissident Republican members, allowing only an occasional one to slip into the bill.

By the end of June, though the amendment process was substantially finished, the bill encountered such parliamentary obstacles that its chances of stillbirth rose alarmingly. House rules designate a majority of the committee's roster as a quorum and require a quorum for formal action if the point is raised. Several members of the committee were off to Bikini, others were ill or out of town, leaving it within the power of eight or nine members acting in concert to prevent a quorum. The same Republican group then followed the practice of coming to meetings, counting noses, and, if a quorum were present, taking turns leaving the committee room. This process continued for several days despite powerful objections from the public,19 from the Administration, and from the Speaker of the House. Whether these pressures were enough to have ultimately been successful is purely speculative, because at this point fortune intervened from another quarter. The Senate committee investigating the national defense program chose this moment to release its first tentative stories on the May-Garsson munitions undertakings. Though Chairman May did not then appear to be much involved, he must have had some foreboding of what was to follow, because almost immediately thereafter he forced the bill out of committee with that uncanny strength which committee chairmen so often display.

This was July 10. The scene shifted to the Rules Committee, where J. Parnell Thomas20 sought openly to kill the bill on the ground that continued control by the War Department was essential to the nation's safety, urging the conclusion of his Un-American Activities Committee that secrets were leaking to other nations from Oak Ridge. His contention was

19 The Emergency Committee for the Civilian Control of Atomic Energy published two full-page ads in the Washington Post in this period. Their emphasis, as was that of the bill's proponents in the House, was upon the eminence of the men supporting the Senate bill—the Senate Committee, Eisenhower, Baruch et al. Judging from the attention given these advertisements in later floor debate, they evoked a response which more than justified their expense.

20 Rep. Thomas was a member of both the Military Affairs and the Un-American Activities Committees.
being supported by some War Department quarters even then, as appears from two concurrent incidents. The Oak Ridge security officer stated over the telephone that the Thomas Committee was inaccurate in quoting him as saying "the peace and security of the United States is definitely in danger." Yet he was somehow unable to obtain clearance to reduce his denial to writing for submission to Congress. Furthermore, as has only recently been revealed, a "high officer in the Manhattan Project" sent a special message to Thomas about this time urging him to order the FBI file on the Senate committee's scientific adviser (Dr. Condon) because some indications of disloyalty might be obtained from it. Thomas' effort failed and by July 16, under Chairman Sabath's guidance, the Rules Committee had approved by a narrow margin a rule permitting prompt consideration of the bill on the floor of the House.

The Administration in working for the passage of the Senate bill was now faced with a difficult tactical situation. In floor debate a bill is always managed by the chairman of the committee from which it emanates—here Mr. May. Opposition time is controlled by the ranking minority member—in this case Dewey Short, who was completely against the bill. Confronted with these obstacles, the Administration depended on Ewing Thomason, next ranking Democrat on the committee, who was personally convinced of the wisdom of the Senate bill. From the outset Thomason set his sights on one goal—House passage of some bill under the number S. 1717, regardless of content or amendments, just so that a bill would go into a conference committee of both houses. Valiantly, he fought against efforts to cripple the legislation: amendments establishing the death penalty for violation of secrecy restrictions; requiring FBI approval of the "character and associations" of all employees and contractors; and replacing patent controls with provisions permitting private patent rights regardless of secrecy requirements. Each of these he lost, but in the final test, a motion to recommit the bill to committee, he won by a scant 50 out of 342 votes, and the bill moved into conference.

The House conferees were Democrats May, Thomason, and Durham and Republicans Clason and Thomas. Senate conferees were Democrats McMahon, Johnson, and Russell and Republicans Vandenberg and Millikin. In conference the members of each house vote as a unit; hence the vote of the Senate members cannot overrule the House members or vice versa. The problems in the conference committee were twofold: 1) To what extent would the Senate members now "give in" to House amendments which more closely fitted their normal conservatism? 2) Could a civilian control bill secure the approval of the House delegation if May voted with the Republicans?
In conference committee the Senate delegation soon displayed an impressive unanimity in both substance and tactic. In general, all minor House amendments not inconsistent with the structure of the bill were accepted with few modifications. Two basic issues remained—the role of the military and the patents section. Here, the strength of inner conviction flowing from full consideration and careful decision demonstrated itself. The Senate delegation sustained their own decisions on these points by sheer force of superior knowledge and genuine belief.

Of the two, the patents questions afforded the greater likelihood of departure from the Senate bill. The American Bar Association, the National Association of Manufacturers, a number of Hearst papers, and a National Patent Council had unloosed a violent attack on the Senate patents action after the bill had passed the Senate. The chairman of the House Patents Committee had taken the floor to denounce the Senate proposal as the end of the American patent system. A former Assistant Commissioner of Patents, whose current employment by RCA was not revealed by the record, had testified that the Senate provision was modeled after the Russian system. Against a background of Congressional unwillingness to modify the patent system over many years, the intensity of the attack was indeed likely to occasion some or many concessions from the Senate delegation.

To the particular credit of Senator Millikin, a self-designated conservative, the Senate version emerged untouched. After a careful study of the objections raised in the House, he concluded that the Senate section alone could both preserve the secrecy sought by other sections of the bill and serve the public interest in a field developed entirely at taxpayers' expense. After hearing his one-and-a-half-hour speech on the subject in the conference committee, the Senate delegation voted unanimously to re-substitute the Senate patents section and May voted with the Democrats to give the House conferees' concurrence by a 3 to 2 vote.

The military amendments presented a different problem because here May's sympathies were clearly with the House Republicans. In this area, Senator Vandenberg bore the brunt of persuasion. Upholding his revised military liaison committee amendment as a fair adjustment of the civilian versus military control issue, he dominated the conference committee discussions. He conceded the requirement that the Director of the Military Applications Division be an active officer, and strove to eliminate both

\[\text{Despite a succession of similar recommendations from presidential commissions and legislative committees, the Senate provision contained almost the first limitations in the last hundred years on patentable inventions and on the freedom of patentees in granting or denying licenses.}\]
the requirement that at least one member of the commission also be an officer and the clause exempting all commission posts from the 1870 prohibition against military officers in civilian positions. At this point, May was suddenly afflicted with a severe heart attack. His condition not only prevented his testifying before the Senate committee investigating his transactions with the Garssons; it kept him as well from the crucial sessions of the conference committee. In a story-book scene and with a voice implying he was on his death-bed, May finally whispered his acceptance of Vandenberg's proposal. The conference bill was complete, though J. Parnell Thomas in an unusual move refused to sign the report.

Back again on the floor of the House in the closing days of the session, the conference bill drew the same violent opposition which had met the House committee report. Thomas spoke angrily; Patents Chairman Latham denounced the conference bill; others sprang up to attack the bill as dangerous and socialistic. In last-minute desperation the opposition even spread the rumor on the floor of the House that steel was now fissionable; hence the steel industry would be nationalized under the bill. The break came when Clason, the other dissenting House conferee, announced his decision to vote for the bill. In a few moments the conference report was approved by voice vote in the House. Approved by the Senate the same afternoon, it was sent to the President for signature. On August 1, the Atomic Energy Act of 1946 became law.\(^\text{22}\)

CONCLUSION

This review of the history of one of the more significant laws of our time permits a few deductions not peculiar to this legislation. Like all laws receiving wide public consideration, the Atomic Energy Act in its history illustrates 1) the tendency toward oversimplification of the issues with resultant confusion and concealment of the value judgments actually involved; 2) the effect which the nature of the issue and organized efforts can have upon alignments for and against; and 3) the essentially inconclusive nature of all legislation.

THE ISSUES

In the public eye the principal decision lay in choosing between military and civilian control. To many, this was a simple choice between war and peace. To others, advocacy of civilian control was a means of preventing "brass hat" abuse of our precious asset, atomic energy. To many scientists, the issue was posed in related terms: military control meant a continuance of arbitrary decisions, uncomprehending bureaucracy, and

an intellectual gap which the military officers showed little interest in bridging. To a few historically-minded souls, the issue was one of democratic tradition—the armed forces with their essentially authoritarian training and discipline would not be adequately responsive to the public will.

Across the fence, advocates of War Department control were equally reliant upon generalization. To them, military control meant military preparedness against the specter of Russian conquest. For those less war-minded, it meant the only effective means of keeping military secrets. A surprising number reasoned that the military had won the war, theirs alone was the job of preserving national security—hence, they should be given this vital part of our security program. Still others were merely unwilling to try anything new because the whole subject frightened them, so they supported continuance of the current method of military administration.

Underlying each of these attitudes was a basic value judgment as to the personnel best fitted to run the atomic energy program. Yet the legislative issues were not determined by personnel. The May-Johnson exemption from the 1870 prohibition of military appointments was merely permissive; even without this clause, retired or resigned military officers were eligible if the President appointed them.2

Not until the Vandenberg amendment and the House committee revisions were proposed was there a direct question as to the role of military personnel.

Rather, the real “control” question involved decisions as to both the amount and direction of the discretion to be given to those in control and the genuineness of the administrative structure, regardless of who might ultimately be appointed. Was it wiser to give sweeping power with almost absolute discretion to the administering body or to determine initial policy as to research, production, peacetime uses, secrecy, etc., and refine the grants of power to match these decisions? What types of exclusive public ownership, what safeguards for private research, what emphasis upon peacetime uses should the law specifically establish? Would responsibility be effectively lodged in a large part-time commission with outside interests working through a full-time administrator with independent powers? Or would responsibility better match authority in a small full-time commission working through an administrator whose role was primarily executory? These were the “control” issues. Yet no special political astuteness is needed to realize how drab and colorless these questions would have appeared in public debate. No wonder both sides sought sup-

2 This is not to say that the debate in these terms would not have had some effect on the President’s exercise of his appointive power.
port within the framework of the simpler symbols of military versus civilian control.24

The patents issue presented a slightly different case history. Here, opponents of the Senate's patent clause posed the question in traditional private enterprise versus socialism terms. They lost, not because their antagonists advocated socialism, but because they had studied the real issues and made a judgment on the substance of the problem. Perhaps this directness was possible only because of the smallness of the audience (the conference committee) and because it came in the midst of a drive for completion of the legislation before the session ended. In any event, the patents question never attained wide public discussion; hence, no simple symbols were needed.

THE ALIGNMENTS

Political parties have long ceased to be the sole mechanism for organized expression on public issues between elections, if indeed they ever were. Private organizations in bewildering variety supply forums for debate on public questions, take positions, and seek simultaneously to influence and represent the thinking of their members. Business, trade, and farm groups; labor, religious, and civic groups; social, book, and family clubs—all are more or less responsive on matters of public policy.

Over a period of years the more politically active organizations have developed fairly clear policy stands; on a host of conventional controversies their positions can readily be anticipated. Sometimes these positions are described as "liberal" or "conservative"; and repeated organizational alignments have tended to give the groupings themselves liberal or conservative labels.

Mere novelty of an issue is not alone sufficient to break down these habits of alignment, as responses to many of the New Deal innovations demonstrated. The atomic energy controversy, however, supplied proof that established groupings may be redistributed. The issue itself was of course a major factor; but the issue alone would not have broken the momentum if many individuals, scientists and others, had not actively worked toward this objective. The results were roughly as follows:

1) Organizations such as the Veterans of Foreign Wars, the Farm Bureau, and the General Federation of Women's Clubs joined the League

24 In a very real sense the debate in oversimplified terms contributed to the content of the final bill. Most of the bill's policy conclusions on freedom of research, emphasis on development of peacetime uses, use of traditional methods to preserve secrecy, protection of the public interest in non-military benefits, and leeway for international control followed from subordinate arguments invoked in favor of civilian control. The simplicity of the issue made public discussion possible; the discussion itself shaped the actual legislative decisions.
of Women Voters and the Congress of Industrial Organization in supporting civilian control;

2) The National Association of Manufacturers, the American Bar Association, and similar property-emphasis groups were largely silent until after the Senate had approved its committee's bill; and

3) A few large corporations worked actively but quietly with the unauthorized military spokesmen who lobbied for military control.

THE EFFECT OF LEGISLATION

A law at best establishes general propositions which influence but do not determine the effect it will have. Congress sets the boundaries and the direction; the executive and judicial branches supply the specific content. Where the law has received extensive consideration and has involved many drafting changes, the legislative history imposes more specific limitations on executive or judicial action. Conversely, where issues have been disposed of by compromise, the usual inherent ambiguity increases the discretion of the other branches.25 Finally, whatever the wording and history of the law, its current administration inevitably reflects both the current attitude and the closeness of scrutiny by the Congress—there are always appropriations, term expirations and reappointments, and even the possibility of direct amendment, although such action is rarely necessary.

To date, the Atomic Energy Act has lived a typical life. The public support for civilian control resulted in the appointment of higher-caliber civilians than almost any other selection made by the President. But when "civilian control" meant Lilienthal, many new Congressional supporters were won over to military control.

These new converts together with the original diehards have conducted a never-ending campaign for restoration of military control. Their campaign has been nourished by the apparent failure of negotiations for international control and by the increased emphasis upon preparation for war. It matters little to them that under the present Act the civilian commission has been uniformly credited with doing a more efficient secrecy job than the Manhattan Project had done, or that the Act contains adequate provisions for control of atomic weapons by the President and the armed forces.

The work of the commission, while difficult to evaluate because of restrictions on available information, seems generally to reflect the conflict 25 See Levi, The Law-Making Process (unpublished memorandum, University of Chicago Law School, 1946) for an interesting paper on the nature of legislation, with particular reference to the atomic energy situation as it appeared in May 1946.
between the military emphasis of the present Congress and the longer-
range emphasis of the Congress which enacted the law. The result has
been a kind of schizophrenic performance, with a definite swing to mil-
tary emphasis despite the victory for "civilian control." From the outset
the Military Liaison Committee seems to have played an important role
in the work of the commission. Thus, the compromise provision has per-
mitted the pendulum to swing way over toward military control in a
period of war hysteria. The compromise secrecy section has not only re-
sulted in great timidity in declassification to the detriment of research, but
it has enabled the Commission to follow undemocratic practices in so-
called "loyalty procedures," thus driving away many young and able sci-
entists. Despite the Act's emphasis on spreading business participation in
the field, the bulk of atomic energy research, production activities, and in-
formation rest in the hands of a few corporations. Finally, the split per-
sonality has had its effect on the Commission itself. Research plans seem
to progress slowly, in large measure from unwillingness to revise inherited
plans to meet scientific possibilities. Close questions tend to be avoided or
evaded, and decisions are often hard to pry out of the group.

On the other hand the caliber and civilian nature of the appointments
have had some clear dividends. The Commission is actively distributing
harmless isotopes not only here but abroad, thereby vastly contributing
to fundamental medical and industrial research throughout the world.
Commission members are carrying on an extensive educational job to
familiarize the public with the facts of atomic energy so you and I may
form our own conclusions instead of relying blindly on "experts." Given a
change in the international situation and a revision of Congressional atti-
tude, the same Commission would undoubtedly produce the kind of a
program sought by the advocates of civilian control.

These comments are not intended as either an appraisal or a criticism
of the Commission but rather as an illustration of the incomplete nature
of the statute standing alone. While negotiations for international control
have reached a standstill, it has not been because of belligerently keeping
atomic energy under military control. If some scientists are dissatisfied
with present administration of the law, it has not been because of ironclad
restrictions written into the statute. If advocates of military preparedness
want the full military value of atomic weapons, the law permits and
indeed is presently being applied to assure that result. In short, the virtues
of the law lie in the boundaries and directions it establishes; it seems to
meet a military emergency even as the bill's advocates hoped it would
meet the challenge of development of peacetime uses.