

*Military secrets in
an open society*

THE YALE REPORT

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Known to the intelligence community simply as the "Yale Report" is a document of 627 pages whose proper title is *Estimates of Capabilities of the United States Combat Forces in Being [as of] 1 September 1951*. In a way, it was a special sort of National Intelligence Survey of gross order of battle of the U.S. military services in the early days of the Korean war. But to be more explicit without some necessary background is likely only to add confusion to that which these two lead sentences have initiated. Let me begin at the beginning.

There were many trials in the early days of the National Intelligence Estimate—none much stickier than a reluctance on the part of our colleagues from the service intelligence organizations to deal in what they called the "intentions of the enemy." The most senior and often most articulate of the military representatives who came to coordinate the NIE's had absorbed the old service doctrine which held that a G-2 did not handle the matter of intentions—that this was the Commander's job. I'm sure readers of this publication are familiar with the doctrine and its rationale; in any case this is no place to rehearse it. Be it said that our Director, General Walter Bedell Smith, whether or not he knew of the doctrine, did not want it applied in the NIE's and indicated to us of the Office of National Estimates that an NIE on the military stance of the USSR would not be complete until we had given the reader our best thoughts on how it was likely to use its vast military apparatus.

NIE 3, published 15 November 1950, is entitled *Soviet Capabilities and Intentions*, and the appearance of that word in the title was in itself no small tribute to General Smith's powers of persuasion. The text of the paper skirted the subject with a permissible discussion of "courses [of action] open to the Soviet government," which on balance was about as far as a prudent man would wish to probe into probable intentions.

Less than a year later (2 August 1951) the second NIE on the Soviet Union went to press under the title *Probable Soviet Courses of Action to Mid-1952*. Here again there was among our military colleagues a desire to fight the problem, and one suspects that had the estimate not been laid on by the Intelligence Advisory Committee (the precursor of the USIB), its completion might have surpassed our powers. As things stood, the compliance which was accorded IAC requests was not of the sort which made for an imaginative appraisal of possible or probable strategic thinking in the Kremlin.

Matters became really difficult when the estimating machinery was asked for an NIE on the "Likelihood of a Soviet Attack upon Japan." If one were to play this out according to the letter of old military intelligence doctrine, one would reply with a dead-pan listing of Soviet military strengths-in-being in the Far East and some paragraphs on the logistic problems of their reinforcement from garrisons in the West. That such a paper would be wholly nonrespon-

sive to the request apparently seemed to some of our colleagues a far less heinous offense than getting into the business of Soviet intentions. Furthermore, to write of these intentions as affected by Soviet knowledge of U.S. forces then deployed in the Far East was to compound the heresy. To them, the entire matter of "own forces" was not any part of the business of intelligence, and even though "own forces" stationed in occupied Japan obviously constituted a major item in any Soviet calculations of the attackability of Japan, we were supposed to shut our eyes to the fact. Any reluctance on our part so to do merely underscored the impropriety of undertaking the NIE.

As the reader will have perceived, these were the hard days in the life of the national estimators.

What's the Soviet Estimate of the United States?

There were those on our side at our coordination sessions who in oral argument would try to make points by imagining out loud how the Soviet leaders were estimating probable future developments in the policies and defense attitudes of the United States government. Their plan and hope was that in trying to depict the U.S. as they thought the Soviets would see it, they would stimulate their inhibited colleagues into thinking and talking and ultimately writing what they thought to be the likeliest lines of Soviet policy. If they could not be stimulated into positive action, at least they might be edged away from simple obstructionism.

To the end of getting a discussion started, William Langer, the first director of the Office of National Estimates, took an oblique but nevertheless praiseworthy approach. On 5 June 1951, he wrote a memorandum to CIA's Projects Review Committee (the institution which, among other things, passed on applications for funds for tasks to be done outside the Agency on a contractual basis). Mr. Langer's statement of the problem read as follows:

Many National Intelligence Estimates deal with the probable intentions of the Kremlin. It may be assumed that in deciding upon a course of action, the Kremlin is influenced by its estimate of the U.S. power available to counter that course of action and by its estimate of how U.S. policy makers are likely to use that power. An NIE on the intentions of the Kremlin cannot be written without ONE's having an estimate of the Kremlin's estimate of U.S. capabilities and intentions. To procure such an estimate is the problem.

In the next paragraph Mr. Langer indicated his requirement for an imaginary Soviet estimate of U.S. military forces in being as of 1 September 1951, and another such estimate regarding probable U.S. intentions with respect to the world situation. He stressed the desirability of having the work done outside the Agency and noted that informal enquiries had already indicated that a group at Yale and perhaps another at Columbia could do the work during the summer vacation. What they would turn up without access to classified materials would have the virtue of showing what the Soviets could learn about the U.S. with minimal intelligence effort.

The project received the committee's blessing, and with the end of the academic year a group was organized in New Haven under the supervision of a senior member of Yale's department of history, William H. Dunham. He recruited 15 people from six departments of the university in addition to history: biology, chemistry, classics, English, mathematics, and physics. All were trained

researchers who already knew how to use a great library and who were quick to adapt their general professional competence to the new and strange requirement. A few of them, notably Basil Henning and Archibald Foord, had had intelligence experience with the Navy during the war, and had a feel for the subject matter and the need for spare factual prose. They and the rest of the team got to the task in late June, and with a total outlay of 99 man-weeks of labor wound it up as of 1 September 1951.

The U.S.: an Open Book

Confining themselves to unclassified printed materials fully within the public domain, they uncovered what to us of the intelligence calling was a bewildering array of factual information about the size and composition of the U.S. military establishment, about major military units, their organization, training, state of readiness, and their weaponry and its performance characteristics. In short, what they found out and wrote down in 10 weeks' time was a good deal more than a very promising start on the military chapter of a National Intelligence Survey on the United States.

The section devoted to the army, for example, totaling some 120 pages with its appendix, begins with paragraphs on the state of mobilization, the army field forces, continental commands, overseas commands, tactical organization of the regimental combat team (the smallest unit under scrutiny), the division, corps, field army, and army group. The bulk of the material presented is devoted to the order of battle of army units of the Zone of the Interior, Far Eastern Command, ground forces in Europe, and other overseas commands. In the appendix, the structure of divisions and RCT's in combat in Korea is cited down to the level of specialized companies, along with their tables of organization and equipment. The final pages are devoted to the geographical whereabouts of a strange mix of some 251 army units ranging from the First Infantry Division in Darmstadt and the Seventh Infantry Division in Korea to the 8111 AU signal service in Okinawa and the 764 AAA gun battalion in the Canal Zone. For all of them there is an APO number.

The dozen and a half pages devoted to army weapons hit the high spots of the new automatic small arms and machineguns, mortars, recoilless rifles, artillery, tanks, liaison aircraft, and helicopters.

In the pages on the Navy (about 80), there is a listing of the civilians and admirals in charge of the Navy Department in Washington, in the Naval Districts, of the Atlantic Fleet, Naval Forces Eastern Atlantic and Mediterranean, and the Pacific Fleet; there is a summary paragraph on overall manning strength; and a section on ships in commission which includes, in addition to the larger ships, destroyers, submarines, and destroyer escorts. (There was no effort to enumerate minesweepers, patrol vessels, and so on.) After one section devoted to ship modifications (notably of carriers to handle heavier aircraft) and another to construction of new ships, there comes a long treatment of the naval air arm. Here are discussed the then nine classes of combatant air units, with notations about the types and numbers of aircraft in each, along with a good deal of information about their deployment on carriers and shore stations.

Among the units one finds a note about Heavy Attack Wing 1 which the report correctly assessed as the Navy's first component capable of delivering the atomic weapon. (This was a datum to which the Navy had assigned a

justifiable secret classification.) Then comes a round-up of Marine Corps aviation. There are appendixes devoted to the performance characteristics of the planes being operated by both Navy and Marine Corps. The paragraphs devoted to deployment of major ships, by class and name, to the Atlantic, "Mediterranean," and Pacific Fleets are followed by a discussion of principal naval bases and naval air stations and facilities, a discussion of new weapons, and development in undersea warfare. The launching of the first nuclear-powered submarine (well-publicized, to be sure) is noted.

Air Force Section Bulkiest

The section on the Air Force is the bulkiest (222 pages). As with the passages on the Army and the Navy, this one begins with the table of organization, both civilian and military, at the headquarters in Washington and at the principal air commands within the continental U.S. and overseas. Then comes a discussion of the 95-wing Air Force which, at that time, was the strength toward which the service was endeavoring to build, a discussion of numbers and types of aircraft, the brief pages on personnel, a rather full treatment of the 13 commands in the Zone of the Interior—notably the Strategic Air Command, Tactical Air Command, and the Air Defense Command—and the five overseas commands. Then comes 100 pages about the aircraft: the operational inventory, production and production schedules, and performance characteristics of bombers, fighters, transports, helicopters, trainers, liaison, and experimental models.

The report's final 150 pages come in five sections, one each devoted to weapons (26 pages), electronics (31 pages), Atomic Warfare (12 pages), Biological Warfare (39 pages), and Chemical Warfare (42 pages). Of these the one dealing with atomic weapons, in which the authors attempted to penetrate the country's first-ranking secret—the size of the nuclear stockpile—and those dealing with CW and BW seemed offhand the most dramatic.

The Atomic Warfare section takes off from the official report of Henry D. Smyth and estimates the U.S. stockpile of atomic bombs to lie between 600 and 2400, with the favored number about 1500 bombs of the Hiroshima yield (20,000 tons TNT equivalent).

In the CW pages, due consideration is given the U.S. government's activities in "producing and perfecting" the new nerve gases as well as continuing to carry in inventory mustard, lewisite, phosgene, and others of World War I fame.

The extensive section on BW lists seven laboratories (under government supervision) which were engaged in BW research and seven others (all associated with private or state universities) which were doing BW-related research under government contract. Next comes a table occupying three pages which lists the bacteria, viruses, and other pathogens in the arsenal or under consideration, along with their targets (man, domestic animals, plants) and favored methods of delivery. This is followed by long discussion of individual pathogens: botulinus, tetanus, the organisms producing pneumonic plague, glanders, tularemia, brucellosis, anthrax, and a group of specific viruses and rickettsiae. Throughout, the need to know about such things for defensive purposes is recognized, but the main thrust of the report is the U.S. concern with these biological weapons as an offensive weapon. One cannot escape a feeling that the U.S. had developed and was retaining a very considerable capability in this field.

To come back to the origin of the whole project: one would be justified in assuming that the Soviet leaders had very precise notions as to the inventory of U.S. forces in being at the end of 1951, and were in a position to make confident estimates as to the capabilities of those forces in any of several possible war situations. How the Soviet leaders estimated U.S. intentions—which was part two of the project—became a doubly stillborn exercise.

As matters turned out, it was much more difficult to obtain the services of outside Sovietologists who would play at writing the Soviet estimate of probable U.S. courses of action than of lining up a group like that at Yale. We did enter arrangements for the "Intentions" study and furnished the authors with a copy of the capabilities study just discussed, but the result was a disappointment. It may have been that we had set our sights a bit too high. In the end, it did not make all that amount of difference.

In the first place General Smith's concern to have National Intelligence Estimates wrestle with the imponderables of an adversary's probable intentions, which was forcefully communicated to his colleagues on the Intelligence Advisory Committee, began to filter down to the troops, and the resistance we had met in the early days began to melt. To our considerable surprise we were able for example to finish the estimate of the likelihood of a Soviet attack upon Japan with no more than the normal pains of doing coordinated speculative intelligence. So by the time the Yale Report was in, reproduced in suitable quantity, and ready for distribution, with the "Intentions" paper close behind it, the main reason for the exercise had largely disappeared.

But this was by no means the end of the matter, and the use to which the Yale Report was soon put was one which, to say the least, we had not anticipated.

This all began when General Smith received a very cursory and preliminary briefing. The occasion was social—our director was having a small gathering to honor some foreign colleagues. Over in a private corner of the room he asked me of the progress of the work at Yale. I told him that the report was already in, that I had rapidly gone over the conclusions with Mr. Henning on the basis of which I would hazard two guesses: (a) that there was in the public domain enough information to piece together an all-but-complete gross order of battle of U.S. forces-in-being, and (b) that the voluminous study which the Yale group had written was probably about 90 percent correct. I can only guess that it was General Smith who conveyed the gist of my remarks to President Truman, but of one thing we may be sure and that was that Mr. Truman had got the word.

President Truman Reacts

He got it just about the time he was working on a new Executive Order aimed at giving greater protection to certain categories of classified information. At the top of his list of secrets to be safeguarded were those concerning the U.S. military, but he also recognized that the State Department, the FBI, and the CIA also produced and disseminated material of similar sensitivity. On 24 September 1951 he issued an Executive Order (Number 10290) which set the new pattern for safeguarding of these materials, a class of stuff which was to

be known as "security information." Paragraph 4 of the order undertakes a short (and not wholly satisfactory) definition of the material at issue:

Classified security information. The term—as used herein—means official information, the safeguarding of which is necessary in the interest of national security and which is classified for such purpose by appropriate classifying authority.

What the order was trying to get at was a separation of all classified government utterances into two categories: those which directly affected the national security—such things as intelligence, sensitive areas of international relations, but especially military matters of an operational nature—and those which dealt with other things. It was the President's intention to give the first broad category the benefit of special protection. Needless to say the American press was fearful of the consequences of the order and let its fears be known. Mr. Truman went out to meet it in his press conference of 10 days later.*

He started by reading a statement which began: "There has been considerable misrepresentation and misunderstanding of the Executive Order issued on September 24, 1951, relating to the handling of information which has been classified in order to protect the national security." At this point he interrupted himself with an *ad lib*. He said: "And right here I want to stop and tell you that Central Intelligence had Yale University make a survey, and that survey found—and they had no connection with the Government—that 95 percent of all of our information was public property."

He then continued with a close but not verbatim rendering of the document before him until he got to its end when he added: ". . . and remember that 95 percent of our secret information has been revealed by newspapers and slick magazines, and that is what I am trying to stop." **

The newsmen had awaited the question period with breath abated. When the time came (and it came immediately after the sentence quoted above) the first request was "Can you give us some examples of what caused this order?" Mr. Truman's answer began with reference to an article in *Fortune* magazine which had published a diagrammatic map showing seventy-odd places in the U.S. where one or another phase of the atomic energy program was going forward;*** he then took up some aerial photographs of principal American cities "with arrows pointing to the key points. . . ." Naturally the newsmen were soon politely asking about the impropriety of publishing information which had been released by the Department of Defense or cleared by the Atomic Energy Commission, or, as in the case of the air map of Washington, by the "Civil Defense Administration." After an unremunerative exchange, the conference came back to the Yale Report and once again the President reiterated his sentence with the "95 percent" in it. In answer to the question "How far did this Yale Survey figure

*Mr. Truman came to the conference of 4 October 1951 with a mimeographed hand-out. In his presentation he not only made some verbal departures from its text, but also interpolated some trenchant *ad libs*. The result is that comparative rarity, two slightly different official texts. One is what Mr. Truman actually spoke, to be found in *Public Papers of the Presidents of the United States: Harry S. Truman*, vol. for 1 Jan. to 31 Dec. 1951 (GPO, Washington, D.C. 1695) pp 554-560. The other is the unmodified text of the official handout, but with Mr. Truman's *ad libs*. This is in the *New York Times*, 5 October 1951.

**This final clause may be a distorted echo of what I believe I had told General Smith about the Yale Report. On the other hand it may be something wholly Mr. Truman's own.

***"The Atom and the Business Man," *Fortune*, XXXIX, No. 1 (Jan. 1949) pp 53 and ff.

in the decision to put out this order?" the President replied, "I didn't sign the order until I got it."

The Aftermath

By all odds the most remarkable thing about this press conference was Mr. Truman's unawareness of just how open the open society of America was. Like a good number of other innocents (a lot of them in the intelligence community) who gasped at the large amount of apparently classified information in the Yale Report, he did not fully understand that practically all of it had been formally or informally declassified at one time or another by the action of the Secretary of Defense, or by one of the service secretaries, or by an official empowered to speak for one of them. As Arthur Krock wrote in a column in the *New York Times* (7 Oct. 1951) someone "in a position to know the background of the President's lecture" suggested that the "boss had just got a bum steer." It was up to the White House Press Secretary, Joseph Short, to issue with stunning promptness a statement of clarification. It ran in part:

The President has directed me to clarify his views on security information as follows:

1. Every citizen—including officials and publishers—has a duty to protect our country.
2. Citizens who receive military information for publication from responsible officials qualified to judge the relationship of such information to the national security may rightfully assume that it is safe to publish the information.
3. [Citizens who receive this sort of information from improperly qualified sources should be most guarded in passing it along.]
4. The recent executive order does not alter the right of any citizen to publish anything.

The statement did much to allay the fears of the press but not its curiosity about the Yale Report and the CIA's interest. The university answered all queries with "the project was completed for the Division of External Research of the government. All details are confidential—so we cannot say who participated [in it]";* the Agency answered with no comment whatever. In a short time overt press and public concern about the Yale Report declined to zero.

Meanwhile, back in the South Building at the 25th and E Street campus, we sat on a large quantity of the 627-page document. In a few days, however, General Smith authorized the circulation of one copy to each of the IAC principals. Some of their top staffers read the document, and one of the purposes behind the undertaking began to be realized, though perhaps not as fully as we had desired. What filtered down to the intelligence officers who represented their organizations at the meetings devoted to the coordination of the National Intelligence Estimates was that a far less expert intelligence service than the Soviet could know a very great deal about the inventory of American military strengths. This was, after all, one of our principal objectives and to this extent the enterprise had achieved a modest success.

As I have remarked earlier, the doctrinal objection to venture estimates into the realm of the other man's probable intentions had begun to soften, even before the Report and its counterpart dealing with the Soviet estimate of

**New York Times*, 5 Oct. 1951.

probable U.S. intentions were completed.* Thus we were not obliged to pursue the somewhat devious attack which had prompted the study in the first place. We had, of course, plenty of troubles trying to agree about how the Soviet leaders saw the world scene and what they probably planned to do about it, but the difficulties were the normal ones relating to substance, not those proceeding from a reluctance to violate what had once been basic doctrine. (And so it has been ever since.)

But the Yale Report did cause a considerable stir in a direction we had not anticipated. General Smith and Mr. Truman were not the only ones to take cognizance of what anyone could learn about our armed services without half trying. A lot of us whose experience in our government's service had been confined to intelligence were not aware that our field was one of the few relatively protected ones in the area of national security. I, for one, assumed that since our ill-wishers were so successful in masking the details of their armed establishments, the U.S. too made similar but less successful efforts. Indeed, as I look back on the scores of non-intelligence military briefings I received in Washington and in the field, I cannot recall a single one designated as "unclassified," though I will warrant that much of what was conveyed under high security classifications had been or soon would be public property.

This essay is not the place to undertake a full discussion of what here is an important though peripheral issue: the issue of "secrecy in government" or—and more especially—that phase of it which bears upon the security classification of information regarding our military establishment. On the other hand it is hard to avoid it altogether.

Classification and Declassification

Three aspects can be ticked off briefly: *First*, almost everything regarding the U.S. military—whether or not committed to paper—gets classified at some point in its life. Often this occurs for the best reason in the world, more often for reasons not good at all. *Second*, the recent rule which establishes a system of automatic step-by-step downgrading to one side, there is and has been a tendency for the higher classifications to absorb the lower. *Third*, except for the automatic downgrading matter noted above (which by the way came long after 1951) there has been little—if any—formal rational across-the-board effort to downgrade or declassify. This is readily explained in terms of the staggering magnitude of the task. Thus there has been in years past the inevitable tendency for *formal* classifications, once given, to stick. This was obviously the case at the time of the Yale Report.

I use the modifier "formal" advisedly, for there are those who observe the classification because that's what the book says to do, and those who don't. In fact, there are and long have been two pretty well defined separate universes within the security apparatus of our military.

There is the one universe inhabited by the normal run of people (military and civilian) who know their service's regulations with respect to the formal classification of a vast encyclopedia of information regarding military matters. For those under Army discipline in 1951, the publication *Army Regulations No.*

*This, the "Intentions" half of the exercise, came to us a month or so after the completion of what I have been calling the Yale Report. As noted earlier, it fell a good distance short of our hopes, and we decided to file it without reproducing and circulating it.

380-5 was the ruling text. In a good number of pages it endeavors to define, in the abstract, the categories of military information deemed Top Secret, Secret, and Confidential, and to give substance to the abstract definitions with a wealth of specific illustrations. For those under the Navy and Air Force there were, of course, similar publications.

By far the greater part of the people in the first universe made no effort whatever to keep book on what formally classified matters—over-classified or misclassified to begin with—had been down-graded or declassified as a result of compromises, leaks, the simple passage of time, or conscious decision at the upper echelons. As already noted, no one made nor does anyone now make a systematic effort to keep this kind of book. In consequence there is an understandable tendency among these people to go on treating documents (and their content) which were initially slugged, say Secret, as Secret irrespective of what their classification has become in real life. This is the course of conscientiousness, if not simple prudence. Those low on the totem pole who cavalierly take the law in their own hands do so at the risk of crossing their security offices and getting bad marks in their personnel jackets or worse.

When we in intelligence had good reason to seek information which lay nominally within these operational security frontiers, we more frequently made contact with these cautious and conservative interpreters of the rules than with the others. Often our questions received diffident answers; sometimes we were urged to take the matter up to higher echelons: well up, say, into that other universe.

Who May Override Classifications?

This second universe is the one of the high civilian officials in the defense establishment, and sometimes the high military themselves. We may assume that these people too know all about the formalities which are owed classified information, how it is to be issued, transmitted, and stored. With equal confidence we may assume that of the many regulations regarding this sort of material, the one they know the best is the one at the beginning of the publication which tells them that virtually none of the preceding need apply to them.* To be sure, common sense—if no higher law—indicates that things having to do with communications systems, intelligence sources and methods, movements of forces and diplomatic negotiations in train, sensitive military R and D, plans, and a

*Department of the Army, *Army Regulations No. 380-5*. Section I,3. Application.-b.

In the application of policies for the safeguarding of Classified Security Information, consideration must be given to the fact that practical limitations will often hamper the attainment and maintenance of absolute protection. Consideration also must be given to the need for the dissemination of information to Congress, the public, or other Government activities, other agencies of the Department of Defense, and Navy contractors as well as to the Army Establishment. Likewise, progress in material development, commercial experience, and industrial capacity may be of greater value to national defense than the absolute safety of a specific item of Classified Security Information.

(This text is quoted from the issue of *Regulations* of 6 June 1952. I have been unable to locate a copy of those in force for the year in which the Yale Report was written, but I am assured that the message of this paragraph appeared in earlier versions. The message, furthermore, is in force today. See, for example Department of Defense *Information Security Program Regulation*, July 1973 (DOD 5200 1-R), para. I-604.)

few other topics ought not to be made public. But to the people of this second universe goes the right to disregard classifications when they conclude that the national interest is better served by doing so. They have been known to project this right beyond their departmental jurisdictions over into other territory, including that of intelligence and diplomacy.

We must understand, however, that a Secretary of Defense (or a service secretary) will be under a number of pressures to talk freely. Some of these come from the public, the news media, or the political realities of democratic government; some, and often the most insistent, from a legitimate inner urge to tell fellow citizens and especially their representatives in Congress that he is performing the vital defense functions with which he has been entrusted. Indeed the commonest channel of declassification is probably through the Department of Defense and the military services themselves, and its principal tributary is the stream that runs between the Pentagon and the Hill. The civilian authorities testify fully and frankly on the record, reserving for themselves the right to review the transcript for security before it goes to the GPO and out to the world. Their underlying philosophy is to delete a little rather than a lot.

Should one of these officials display an understandable reluctance to give equal time to his nonsuccesses, he may be sure that congressional spokesmen in the opposing party will not. Nor will these spokesmen confine their remarks to off-the-record proceedings in committee. If they feel that they have a well-documented case, they may make it on the floor for the benefit of the readers of the *Congressional Record*. In the ensuing debate much more will be aired than the simple non-success which the initiating official wished to play down.

In addition to this volume of nominally classified information issued through one channel or another directly to the American public, there will be genuine secrets which are released with a different audience in mind. This will be the sort of information which the U.S. government may choose to convey to our allies for one set of reasons, or to our ill-wishers for another. Such, for example, would be one Cabinet officer's divulging to a meeting of allies the intelligence sources behind some critically important U.S. estimates, or another's using an open forum of foreign statesmen as the place to articulate the secret U.S. estimate of the numerical strength of the Soviet operational ICBM force. In this case his real desire was to have the message reach Moscow.

In the Name of Public Relations

But revelation of the nominal secrets of the first universe do not stop here. There is yet to be contemplated those which pour forth through the military's own public relations bureaux whose functions are among the most vital. After all, the armed services are *in loco parentis* for millions of the nation's sons and daughters; they must try to induce them to enlist and—once enlisted or drafted—they must do everything possible to lighten the burdens of service. They must reassure families and the public at large that the troops are being properly cared for, properly trained for a multitude of duties besides combat, and provided with equipment which will assure their optimum performance with a maximum chance of returning to civilian life in better shape than they left it. Rivalry between the services results *inter alia* in each one's touting in public its new weapons and new methods of bringing them to bear. The kind of reluctance one would normally associate with the publicizing of new military technology

yields to the demands of a good public image, or morale within a given service, and even to the demands of the contractors who have developed the new machines of war.

The public relations divisions of the services are very large enterprises, and their task is just what it sounds like. They are in continuous contact with the news media—their news- and feature-people—with the magazines, and technical journals; they are in close association with the host of privately-sponsored periodicals devoted to a score of military specializations—the infantry, the surface fleet, long-range aviation, and so on. These journals in turn carry the advertisements of the contractors wherein are related in as full detail as is permissible—and beyond—technological triumphs which lie behind the accuracy, reliability, simplicity, ruggedness, power, and so on of the military device at issue.

Publications like the *Army, Navy, Air Force Register*; the *Army, Navy, Air Force Almanac*; and the *Stars and Stripes* (several editions in different parts of the world) which in the course of their business print a voluminous literature of service order of battle could not be in business at all without an unofficial but nevertheless full service support.

With these volumes of material relating to the military being given to the media, the opportunities to guess at what is being withheld on security grounds are manifold and inviting. Furthermore the odds are not exactly stacked against a correct guess: if you tell a man that $2+1+X=5$, he needs something less than a graduate degree to divine that $X=2$. If he wishes to confirm his solution, access to knowledgeable sources and the wiles of the practiced newsman or secret intelligence agent can usually do the trick.

More Releases than Leaks

The bulk of the materials which the Yale group had exploited belonged to the general category of official and semiofficial releases from various components of the defense establishment; what the group drew from the "news-papers and slick magazines" was significant, but of far less importance. That the group amassed this welter of data probably caused little surprise among the relatively small number of witting officials in the Defense Department. A one-time highly placed official of one of the services said to me that the only part of the project that surprised him was that anyone should be surprised at its findings. Offhand, he thought that there was virtually nothing regarding the American military which was properly secret. He did except the areas which I have noted earlier. That was about it; he seemed wholly relaxed that all the rest was out in the open for all to see. Had he seen the Yale Report it would have been old hat to him.

Maybe that reaction would have been the correct one, for in comparison to what the Yale Report could have been, it was no great shakes. Some of its shortcomings derived from the limitations built in to its terms of reference which—it will be recalled—stipulated a tally of gross order of battle of U.S. forces-in-being as of 1 September 1951. Others derived from the scant amount of time allowed for the completion of the study, which in turn obliged the project supervisor to recruit staff where he could find it within the Yale community, and largely without reference to any specialized talent it might possess in

U.S. military matters. But suppose it had been otherwise: suppose that the terms of reference had had no well-defined outer limit, and that the group pushed on until it ran out of valid and relevant material; suppose that the ceiling on available time and funds had been very considerably raised and that the staff comprised two or three score top-drawer professional specialists. Could any one, no matter how long a resident of that second universe, be wholly unshaken as he contemplated the new study? I somehow doubt it, especially if the study had been artfully packaged in two parts.

The first of these parts would be the bulk of the report, say a few thousand pages which would deal with the unspectacular matters of the Yale Report, but do it more thoroughly and accurately. The second would be a systematic arrangement of what the project supervisor would consider as unpleasant surprises. It would show that as a result of the general relaxation of security on matters which no one in the second universe cared about, a large number of the true secrets of state which they did care about lay about in the open, all but uncloned.

Nuclear Stockpile

A case in point: Among 1951's secrets of state, few ranked in importance with the size of the U.S. stockpile of nuclear weapons. There were no more than a handful of Americans who knew how many A-bombs, as they were then called, had been assembled and were ready to go. The section of the Yale Report called "Atomic Warfare" nevertheless essayed an estimate. The man who composed it was a physicist whose principal focus of interest was not the viscera of the atom nor the nature of nuclear explosions. Needless to say, his wartime experience was remote from the Manhattan District. With these limitations he embarked upon a search of the open literature. Drawing principally upon the well-known Smyth report,* an article by Sir John Cockcroft,** and a few other articles in popular scientific journals and the *New York Times*, he made a calculation regarding the probable rate of the production of plutonium and uranium-235 between 1945 and 1951, and another as to the probable number of bombs on the shelf. Those of us who read these conclusions in 1951 were consumed with curiosity to know how well he had done. Of course, the few government officers who were in a position to say could not give us a grain of satisfaction. Now, twenty-odd years later, one such officer has received authorization to give a long-after-the-fact evaluation and to give it under the security classification of this article. Interesting indeed are his comments.

In the first place he finds that the Yale professor's estimates were wrong and wrong on the high side. He goes on to say that the error was wholly unnecessary. He points out that the Yale professor missed two bits of highly significant public information: the first had to do with the power levels at which the Hanford reactors were working. This had been picked up by a Soviet secret agent working for the KGB control in Ottawa and was published in the *Report*

*Henry D. Smyth, *Atomic Energy for Military Purposes* (Princeton 1945). This report first appeared as a U.S. Government publication.

**See *Bulletin of the Atomic Scientists* (Nov 1950) p. 329.

of the [Canadian] Royal Commission* which investigated the espionage ring. The other appeared in none other than the AEC's semi-annual reports to Congress of 1949 and 1950. With these data and a higher degree of expertise in isotope separation and bomb design, the high-ranking secret of the stockpile could have been penetrated to a nicety. The odds are heavily in favor of the Soviets having done just that.

This case is a classic in its way. Once the atomic weapon was tested, then—shortly after—used in anger, the single most important secret surrounding the whole vast nuclear weapons enterprise was gone. Now everybody knew that controlled large-scale nuclear explosions were possible. Professor Smyth was an official spokesman for the U.S. government, and his report was a piece of deliberate disclosure. If the U.S. government had tried to continue into peacetime the security wraps which it had thrown around the Manhattan District during the war, it would have found the costs prohibitive. It would have had to cope with numerous powerful and angry groups (led by the nuclear scientists and the media) who were claiming an unlawful abridgement of rights guaranteed under the First Amendment. The Smyth report is a classic example of a libertarian government retreating to a prepared position and endeavoring to hold the security line at that point. The government correctly reasoned that in the absence of such a maneuver, uncontrolled leaks would be more hurtful to national interests. From there on, a minor slip over at the AEC, a snippet of significant information picked up by a Soviet secret operative, and the Russians had the essences of the secret of the stockpile. With the publication of the snippet in the unclassified *Canadian Report* it was almost anyone's in exchange for some legwork and thought.

Biological and Chemical Warfare

How many other of the true military secrets of 1951 would have fallen in such a constellation of circumstances? It is a guess, and not too risky a one at that, that the U.S. stockpiles of biological and chemical warfare weapons could have been known, although this was far from the intent of the Defense Department. The Yale group had no trouble in finding a rich unclassified literature. Oddly, it missed one of the documents in the BW area which was a rough BW counterpart to the Smyth Report. This was the memorandum which George W. Merck, a war department special consultant for biological warfare, wrote for the Secretary of War, and which the War Department released to the press on 3 January 1946.**

The Merck report tells of the history of the BW program, which began in anticipation of a need for defense against biological weapons the enemy might employ. It tells of the establishment of the early civilian agency under Mr. Merck; of how intelligence regarding German BW capabilities which arrived in December 1943 made necessary a change in the purely defensive posture of the program, and a change in the first administrative arrangements. The program was broadened and put under the Chemical Warfare Service of the Army. The

*Ottawa [27 June] 1946.

**War Department; Bureau of Public Relations; Press Branch. "Biological Warfare"; 8 mimeographed pages.

report goes on to explain that while the main objective in the U.S. BW program was still

to develop methods for defending ourselves against possible enemy use of biological warfare agents, it was necessary to investigate offensive possibilities in order to learn what measures could be used for defense. It was equally clear that the possibility of retaliation in kind could not be disregarded in the event such agents were used against us. . . .

The report tells in general terms of the activities of the program and lists some of its "more important accomplishments." Needless to say, the most of those mentioned were the spin-offs with a definite bonus in such agreeable areas as pure science, public health, and plant pathology. Toward the end comes the pregnant paragraph whose topic sentence is:

Steps are being taken to permit the release of such technical papers and reports by those who have been engaged in this field as may be published without endangering the national security.

If one may be permitted to do a bit of reading between the lines of the Merck report, using something a good bit more substantial than pure intuition, one perceives in a flash that the document was largely designed to forestall future embarrassments. None knew better than the Army of the hundreds of civilian scientists once in the program who were returning to their peacetime pursuits and who in the uncensored atmosphere of their laboratories would be relatively free to talk of their hitherto highly classified research. Biological warfare was a nasty expression, and clearly the Army was eager first to acknowledge of its own free accord that it had indeed engaged in BW work, and second to stress that its primary concern had been "defensive" and "retaliatory," not "offensive."

How the Merck report affected the substance of articles on BW that soon began to be published one cannot say; it is difficult to believe that it did not have an effect on the quantity of books and articles devoted to the subject. By 1951 any foreign intelligence service with a respectable publications procurement enterprise could have had a highly enlightening little library on the BW capabilities of the United States. As in the case of the A-bomb, even had it so desired our government could not have stifled these voices in peacetime without risking a minor upheaval. Accordingly it did the only thing it could to mitigate the worst of the bad effects which it perceived on the horizon. In all likelihood it issued the Merck report with this aim in view. That it also gave the intelligence services of our ill-wishers a long and exhilarating free ride was merely one item in the cost-sheet of our blessings.

It is of more than passing interest that in an exercise of 1948 the combined intelligence resources of the United States and the United Kingdom produced relative to the Soviet BW and CW capabilities only the sentence that virtually nothing was known. If there had been a requirement on the subject in 1951, our intelligence community could have done only a mite better.

Conclusions

And for us who serve in the intelligence profession of our country this is the nut of the matter. I am happy to report that I know no one among us who would amend the Bill of Rights just to make things difficult for our opposite

numbers in unfriendly lands, but some way or another no one should blame us for the youthful pique we feel when we compare our lot to theirs. But pique and our lament on the injustices of life to one side, it still seems objectively improper that American intelligence endeavoring to construct, say a Soviet order of battle or the probable performance of a Soviet weapons system still under R and D should have to pick around in informational garbage pails for unmatched molecules, while our Soviet counterparts endeavoring to do the same for the U.S. parallels can get it by a letter to the GPO or a subscription to *Aviation Week and Space Technology*.

Something exactly akin to this sentiment was what moved Mr. Allen Dulles to say out loud, "Sometimes I think we go too far in what our Government gives out officially and what is published in the scientific and technical field. We tell Russia too much. Under our system it is hard to control it." * Something akin moved Mr. Truman to sign and defend Executive Order Number 10290 whose main point was to assure

that military secrets in the hands of these other [civilian] agencies should be protected just as much as when they are in the hands of the military departments. . . . It would not make any sense to have a paper containing military secrets carefully locked up in a safe in the Pentagon, with a copy of the same paper left lying around on the desk of a lawyer in the Justice Department.**

This simple and commonsense thought was unfortunately obscured at the press conference and in subsequent press coverage as a result of someone's having "given the boss a bum steer."

The order, however, was in effect and stayed in effect for two years*** and, of course, had little visible effect. It did not affect what high officers of the defense and service departments (both civilian and military) might wish to convey to the Congress, and on the record, and it seems to have done little to stem the tide of purposeful and inadvertent leaks.

The Yale Report could have just as well been written under its protective canopy in 1952 or 1953—or for that matter under subsequent executive orders in any of the 20 years which have followed. In fact if it were tried again and this time with greater expertise and a more relaxed deadline, the results would probably be far more of a shock to the intelligence calling, and of no more consequence to the course of national policy.

**US News and World Report*, 19 March 1954. p. 54.

***New York Times*, 5 October 1951, quoting President Truman.

***Superseded by Executive Order #10501 of 16 Dec. 1953.