

NAVAL WAR COLLEGE REVIEW

Vol. VI No. 3

November, 1953

CONTENTS

"THE NAVAL COMMANDER AND PUBLIC RELATIONS"	1
<i>RADM John L. McCrea, USN</i>	
"CONCEPTS AND NATURE OF AIR WARFARE"	25
<i>COL Grover C. Brown, USAF</i>	
RECOMMENDED READING	47



RESTRICTED

**NAVAL WAR COLLEGE
REVIEW**

**Issued Monthly
U. S. Naval War College
Newport, R. I.**

RESTRICTED

RESTRICTED
SECURITY INFORMATION

THE NAVAL COMMANDER AND PUBLIC RELATIONS

A lecture delivered
at the Naval War College
on 23 April 1953

by
Rear Admiral John Livingstone McCrea,
U. S. Navy

Admiral Conolly and Brother Officers of all Services:

Gentlemen, the subject: "The Naval Commander and Public Relations" covers a great deal of territory. Public relations, like so many command functions, is difficult of definition and susceptible to no firm tests of "do's" and "dont's" — the sort of list on which so many of us from time to time would like to rest our cases. No matter how complex the subject may be, it is most important that a naval commander realize that public relations is one of his important duties; in fact, it is one of his more important command functions. In using the term, "naval commander," I wish to make it clear that the term applies to all in command, whether the naval unit be large or small, afloat or ashore.

Public relations, of course, is a big and baffling subject and reams have been written about it. There is, I think, a considerable artistry to it because, try as they may, some commanders just don't seem to be able to make their public relations click. Then, too, I think that in the not too recent past, at any rate, the navy did not accord to public relations the degree of importance which the subject warranted. The reasons for this were many. First off, did not the navy belong to the profession of arms? Were we not professional men? Did not the professions have codes of ethics about their relations with the public, and would not a spreading of "how-good-we-are" on the record, be a breach of these ethics?

RESTRICTED
SECURITY INFORMATION

To be sure, this is a very narrow view since publicity is merely one phase of public relations. The Public Relations Program in the navy continues in the growing stage. The service-wide attitude towards this important problem has changed greatly in the last few years. Much to our credit, studied indifference (and I think that I am correct in using that term) has been replaced by responsible cooperation.

Now, if you please — and in violation of all rules of public speaking — please permit me some pertinent and authoritative quotes. First, the late Admiral Forrest P. Sherman had this to say:

“Matters affecting the relations of the navy and the public are of great importance and constitute one of the functions of command. The personal responsibility of a commanding officer in the conduct of public relations within his command is identical with his responsibility in other affairs. In this connection, attention is invited to the fact that public information officers, when ordered to duty within a command, form a part of the staff’s assistance provided the commanding officer. And the presence of such officers in no way relieves the commanding officer of his responsibility in the field of public relations.”

Another quote, which appeals to me, was made by the late Secretary Forrestal when he said:

“The armed forces of a democratic nation have a positive responsibility to achieve the widest possible public understanding of their missions and operations.”

RESTRICTED
SECURITY INFORMATION

Mr. Kimball, our recent Secretary, made this contribution:

“Increase public understanding by making available to the public at large the philosophy of sea power and the need for control of the seas and the indisputable place that the navy occupies on the tripartite defense team.”

I would like to repeat part of that quote again — that is, “Increase public understanding by making available to the public at large the philosophy of sea power and the need for control of the seas” Nothing could be more important. The philosophy of sea power is not a service tradition or a habit of the past — though, no doubt, there are some who might dispute this. The philosophy of sea power is one of the facts of life itself.

As I go up and down the country, I am somewhat amazed to find so many otherwise well educated and intelligent people almost completely ignorant of the philosophy of sea power. Sea power and its effectiveness — or non-effectiveness — affects all the armed services. Effective sea power is vital to the existence of this country, because without control of the seas the power of this country cannot be projected overseas. Without control of the seas, we may well be deprived — partially or altogether — from obtaining much needed materials: materials needed to maintain our economy, materials needed to supply us with the necessities of war and the necessities of peace. This is the story that must be told and retold — told in such a fashion and in such terms that in the end our public will be made to realize of what vital concern sea power is to each individual; drive home to the public how deeply it is concerned with this problem; impress on the public how greatly our national economy and how greatly our daily living is dependent, either exclusively or greatly, on large imports of

RESTRICTED SECURITY INFORMATION

such fundamental materials as tin, chrome, manganese, vegetable oils, tungsten, bauxite, cobalt, vanadium, and antimony; impress on them that the United States' appetite for these materials is, in fact, Gargantuan; impress on them that unless we have the muscle to insure uninterrupted use of the seas that we could find ourselves in one hell of a fix; tell them about the other side of the coin, as well — that even in the atomic age, a good old-fashioned blockade is still a mighty potent weapon, as potent a weapon as it has been throughout the years of recorded naval history. If anybody wants any first-class information on that, call in our late enemy — the Japs.

Of course there are other important aspects about sea power; but they need hardly be recounted here because I think, suffice it to say, that if we have the muscle requisite for the task of using the seas as we wish the other aspects of sea power pretty readily take care of themselves.

Public relations, as I said before, is a function of command. Public relations belongs at the conference tables. Public relations belongs at the policy board. Industry has found this to be so — and the navy, too, must recognize it. Dupont, for one, has a fixed rule that in any action taken by its directors which involves the public, its public relations people must be brought into consultation and the same can be said for most other large companies.

Since its start, the navy stockholders have invested in their navy some 241 billions of dollars. The navy's current plant equipment, as of today, has a net worth of about 171 billions. In over the one hundred and fifty years of its existence, our navy has paid many and worthwhile dividends to its stockholders. Yes, the navy today can produce facts and figures which are irrefutable.

**RESTRICTED
SECURITY INFORMATION**

It is in the dispensing of these facts and figures that the problem faces the naval commander. Our intelligence people want to hide most of the facts, whereas the public information chaps want to shout them to the world. The naval commander must strike some sort of a balance between the conflicting interests and, of course, hope in the end that he is right.

The personnel of the navy are greatly important in so far as day-to-day public relations go. The best public relations is done not by the photographs which we so carefully crank out and distribute to the press in such profusion, nor is it done by the news releases carefully gone over and evaluated by these experts in the field of public relations. Good public relations are helped tremendously by those in the navy. A man or woman wearing the uniform of the service is a marked and conspicuous individual. His or her every action in public is noticed and evaluated by the owners. Their conduct and uniform should be above reproach. They should wear the colors of their service simply, easily, proudly and, above all, inconspicuously. If they do this, they reflect credit on the navy and the navy profits thereby.

Witness the fine public relations value of the outstanding performance of air force personnel stationed in England during the recent storms and the fine job of rescue which the air force personnel did recently in the case of a severe train wreck which took place near one of their bases in England. Think, too, of the discredit that can be brought to the service by an individual in uniform, say, operating a motor vehicle in such a manner as to be dangerous not only to himself but to others; even operating it in a discourteous way contributes to ill will which can accrue to the service of the uniform worn by the driver. Every one in uniform at home or abroad, is an ambassador for good or ill will—

RESTRICTED
SECURITY INFORMATION

depending upon the manner in which the wearer conducts himself or herself.

Since World War II, the uncertain question of speed and destination of navy public relations has prompted several surveys, voluminous memoranda and numerous conjectures. Regardless of these probings and proddings, they have largely defaulted because of the simple lack of understanding on the part of the navy that the public has a right to know. The public has this right — and we have got to remember that it has this right. Our story must be so well told and so convincingly told that public reaction will be that we know what we are talking about and that our position is correct. In that way, we will achieve public confidence — and public confidence is essential because in the last analysis the people determine what sort of a navy they want. If we tell our story well, we will tell it in terms of the public welfare — not necessarily the navy's welfare. Above all, our story must be so convincing that the public will believe, as do we, in the functional necessity of a navy.

There are, I think, areas of misunderstanding about the navy that we should do our utmost to clear up. This country is confronted with a heavy tax burden and the press daily demands that defense appropriations be curtailed. The press often forcefully suggests that we are completely without cost-consciousness. I think we should do our utmost to impress on the public our cost-consciousness. I think we should do our utmost to impress on the public that we are, in fact, economy-minded — because, indeed, we are. Furthermore, we must do our utmost to get a dollar's worth of defense for every dollar spent. Good public relations will, I think, do more than tell them — it will do its best to *show* them.

Some weeks ago, the Boston Naval Shipyard was visited

RESTRICTED
SECURITY INFORMATION

by a group of men — all members of the Boston Chamber of Commerce. This group of men were shown the many shops and the activities of the shipyard were explained to them. The thought was driven home to this group that every activity of the yard existed for the sole purpose of supporting the fleet. The day following the visit to the shipyard, a gentleman of my acquaintance, a member of the group and the president of one of the large bonding companies of this country, called me on the telephone to this effect. He said: "John, I pass that shipyard twice daily. For a long time now I have been wondering how my tax dollar is being spent behind that wall. After what I saw yesterday, I am satisfied that all is well." This is an example of the benefit of showing them. What that man saw for himself was greatly more effective than all the articles that he could have read in newspapers, magazines, or books.

The Harvard School of Business Administration has a course which the young men of that school refer to lightly as "the course for the PBE's"; translated: "for the pot-bellied executives." These men come from all parts of the country, frequently making their first trip to the seacoast. They visit the Boston Naval Shipyard as part of their instruction. The fine letters that they send me from time to time about the yard are a pleasure to receive.

Similarly, the cruises which the Secretary of the Navy has authorized for prominent civilians are greatly effective. Without exception, my experience has been that these guests come back impressed immeasurably with what they have seen. They are impressed particularly with the manner in which we operate our machinery. They are impressed greatly with the high state of efficiency with which our shipboard and aircraft operations are carried out. They are impressed with our marines; they are im-

RESTRICTED SECURITY INFORMATION

pressed with our bluejackets. They are impressed with the fine spirit of camaraderie existing between the commissioned and enlisted personnel. They are impressed with the high state of organization that permits large numbers of officers and men to live relatively comfortably in such cramped spaces.

An operation such as fueling at sea is regarded as just a little short of magic. Yes, these cruises pay off greatly. But there is an aspect to them which may, I fear, cause trouble in the future. The naval command must exercise great care in selecting persons for these cruises. The naval command must recognize that petty jealousies exist even in large metropolitan areas and that there will be — if you will pardon the expression — “men of distinction” who will feel that if John Doe, taxpayer, is invited to go that he, Richard Roe, taxpayer, being “just-as-good-as” John Doe, should be invited also. Well, there just aren’t spaces enough for those who would like to go.

Not too long ago, one of the biggest mid-Western papers — as a matter of fact, I think it probably is the biggest mid-western paper — in an editorial column wanted to know just how one citizen was chosen over another for the high honor of making a navy cruise at the taxpayer’s expense. Don’t forget the emphasis — “at the taxpayer’s expense.” That is the reason that I am fearful that we may run into a little trouble with these cruises.

I stated earlier that every one in the navy uniform was a walking exhibit for good or bad public relations for the navy. The slogan: “Every navy man be a navy booster” is important. It is trite, I know, to remark that how we treat our people in this vast organization is greatly important. The naval commander must so conduct himself that he deserves the respect of his subordinates. Another trite remark you will say — and I will agree —

RESTRICTED
SECURITY INFORMATION

but, nevertheless, it is important: I don't recall that anyone shipped over on the CAINE; there should be no Queegs. But in all fairness to Herman Wouk, I must say that I sailed once with a chap who could have taught Mr. Queeg a trick or two. It is the duty of the naval commander to keep his eyes peeled for that sort of thing and to stamp it out with all the vigor that he can muster. And he can do it without being sort of a "popularity Jack."

Not long ago, I read in a Boston paper a particularly well-written letter by an enlisted man. It was written as the result of a letter that had appeared in that same paper which greatly criticized the navy. This long, finely written letter was positively lyrical about the navy and what it had done for the writer — the great satisfaction that had come to him in serving his country in such a fine outfit; the respect which he felt towards his shipmates, officers, and men alike, and the respect with which they in turn held him. There was a navy booster! And he was a booster probably because the naval commanders with whom he had sailed were leaders of high order who had much public relations sense. We cannot overlook the value of such public relations.

On the other hand, we overlook our campaign of "Every navy man a navy booster" if we overlook our navy dependents. So let's make that sentence read: "Every navy family a navy booster." Now, the navy wife encounters the American public much more intimately than her husband. Her attitude towards the navy is going to be a reflection on the navy's attitude towards her. Kick her around, ignore her, and neglect her problems — and she will be just as vehement a navy opponent as some of our more hostile columnists, and perhaps a more effective one. We are all familiar with these advertisements in the NEW YORKER that tell us never to under-estimate the power of a woman — just as though

RESTRICTED SECURITY INFORMATION

any man who has had experience with them ever could bring himself to the point of underestimating the power of a woman!

Again, we must turn to the commander's functions. If, in so far as he can, he sees that dependents have roofs over their heads, facilities that ease the cost of living, and a reasonable opportunity to see their bread winners, he will accomplish two purposes: win a navy advocate and boost the moral of his blue-jackets. Mom and Dad can be brought in to the cheering section, too, by convincing them that son is getting a fair shake whether he stays in the navy or not and that he will be a better man for having served therein.

I have stressed the position of the commander as a policy-maker in conducting his public relations. He has to be that — and more. He must be more than a "thinker" — he has got to be a "doer." He must be willing to work at his job. He can't always send representations. The navy commander, in conducting his public relations, is going to have to spend a lot of time (and, generally, at inconvenient times) doing things for which many of us have little taste. Americans, as a class, are great joiners. I have no idea of the number of veterans' groups and auxiliary groups that are in the First Naval District. Every so often, I almost think there are too many. Each of these groups is organized to keep alive the spirit of a particular organization or a particular event. These groups are important, and the shore-based commander must pay much attention to them. The average naval commander doesn't like making speeches — but in my book the shore-based commander, and the sea-going commander as well, if he is really working at his public relations aspects of his job will, when practical to do so, make himself available to these organizations in a helpful way. That helpful way to them generally means making a speech.

RESTRICTED
SECURITY INFORMATION

I know full well from experience that it is hard work, and I further know full well that the wife doesn't like to sit at home night after night alone—that is the way they are. I know full well that (as I suspect you do) the explanation of you having a public relations job to do is of little avail. I hope that I'm not giving too intimate a picture of my family life but, nevertheless, that is the way it goes. Secondly, these veterans' groups and historical organizations think themselves important—and they are important, I can assure you! And it behooves the naval commander to do well by them in pursuance of his public relations program. The same can be said with equal emphasis as to cooperating with other civic organizations.

Dealing with this broad subject, the naval commander must recognize the difference in "public relations" and "public information." "Public relations" identifies the policies and procedures of an individual or organization with the public interest. It calls for executing programs of action to earn public understanding and support. "Public information" is one of the tools of public relations. It may be described as: "the employment of established means of communications, newspapers, radio, etc., for the practical day-to-day business of apprising the public of the doings of its navy."

Since I am in command of the naval district to which I am assigned, I am the public relations officer. Somewhat lightly, I refer to my position and to that of my assistant for public information as the "bishop and parish priest relationship." As the bishop, I set the public relations program; as the parish priest, he is charged with looking out for public information having to do with our programs—that is said respectfully, too, very respectfully.

RESTRICTED SECURITY INFORMATION

I would suppose that one of the most important ways by which our public finds out about us is through the press. That reminds me. My first midshipman cruise, forty-one years ago this summer, was made in the U. S. S. MASSACHUSETTS. In the ship was a first-class boatswain's mate of Norwegian extraction and accent. He was about in middle life, a fine petty officer, the ship's best seaman. He sported the sharpest red Van Dyke beard that you have ever seen. No professional man could have looked more the part. Smith presided over his part of the ship from his chest, which was so placed that he could see most of the superstructure. That chest was an important fixture in the part of the ship because near it was conducted all the division's business. And on it Smith would lay out his patterns and cut a suit of blues on a rope yarn Sunday for anyone in the division from some yardage of cap cloth just as neatly as you please. Smith was kind to midshipmen in a respectfully suspicious sort of way. He would help them with their problems, but beyond that he had little further truck with them. All I know about knotting and splicing I learned from Smith. I was pretty slow at it and, accordingly, I spent considerable time in the vicinity of that holy of holies — old man Smith's chest. In due course, I was invited to sit on the chest — an honor, I assure you, not accorded to many.

In addition to his being a fine seaman, Smith was quite a naval philosopher. One day he was telling me of the old navy — how wonderful it was. Well, of course, it is always thus. He was telling me of his mild impatience with the young enlisted men of his division. When pressed for his reason, old man Smith, in a rich Norwegian accent, remarked: "Well, Mr. McCrea," he said, "today, too damn many of them can read and write."

General reading, as time goes, is a relatively modern accomplishment. Not so many decades ago, there were few books and

RESTRICTED
SECURITY INFORMATION

fewer newspapers. The family was fortunate to possess a copy of the *Bible* or a copy of *Pilgrim's Progress*, and maybe a *Home Remedy* book. The reading that was done was an event — and it was probably done by an older member of the family, with the others sitting around listening. Nowadays, everybody reads — and what they read! Books on every conceivable subject — fiction, fact, history — come tumbling off the presses with a speed that is frightening as well as challenging. As for newspapers, the speed with which editions follow one another leaves a reader bewildered. At any rate, the printed word is greatly impressive; it carries with it much authority and people are greatly liable to believe what they read in the papers. It would be some sort of a minor sacrilege, I suppose, to hope that the day will come when people won't go hook, line and sinker for all that they read in the papers. If that millenium is ever reached, journalism in this reading world of ours may have to re-appraise its responsibility to the public. I am fully aware that that sentence could probably precipitate some sort of a row.

It is the duty of the naval commander to see to it that the press gets the truth about this navy of ours, and that is as it should be because the public — our public, our owners if you please — are entitled to the news, the good and the bad about this navy of theirs. They are the stockholders and they are entitled to a stockholder's report. As stockholders, however, they are entitled to a *statement of facts*. They should be able to distinguish between facts and editorial columnists' and commentators' opinions. Note that I say they *should* be able to make this distinction, but it just isn't that easy. Since they "read-it-in-the-paper," they are liable to believe it. And in this manner opinions become facts for many, and sad to relate for most. Good news is rarely exciting; good news will, therefore, rarely get the play that bad news gets. Good news

RESTRICTED

SECURITY INFORMATION

will be usually found buried some place inside the paper, but the bad news makes the attention-arresting headline. And the one that is about the navy — how it hurts!

I hate to say this, but in my heart I feel that many editorialists twist and distort facts to the point that the public is often presented with an editorial which is greatly biased. Now, why do they do this? The reasons, I suppose, are many and varied. The owner or the publisher may have an angle to play. Many of them like to think of themselves as crusaders or guardians of the public and protectors of the public from the shortcomings — real or fancied — of those so-and-so's who administer the armed forces. They, or some of their friends, may feel that they have suffered injustice at the hands of the services. At this point, I wrote in here this morning coming down, a query: Is it that we might be smug to a point that annoys them? Then, again, the editorial writer may just want to be different.

A case in point: Accompanying Operation MAINBRACE, there were some thlrty-eight American newspapermen. They did a good job of covering the operation and, far and by, thought well of it. One prominent Eastern paper (which had no newsman of its own at the operation) printed a series of three editorials which proceeded to tear Operation MAINBRACE to pieces. In an unguarded moment, the youthful editorial writer stated that he based his editorial on a news dispatch that he had read in a foreign newspaper. On the basis of that, he was moved to write three attention-arresting editorials that appeared on three successive days in his paper. That series of editorials was widely read. Many a prominent citizen asked me: "Are the facts, as presented, true? Is the criticism justified? Is that the sort of performance for which taxpayers have to pay their money?"

RESTRICTED
SECURITY INFORMATION

Well, what was the answer? My answer was this: "The paper evidently has available to it information which was not available to the navy." Then, fortunately, I was able to cite other newspapers' comments and articles which were highly laudatory of MAINBRACE.

That which may be said of the irresponsible editorial writer may be said of the irresponsible columnist. We must remember that to many we are "brass hats" and nothing more—we are just really and truly "brass hats." The term, so far as I'm able to understand it, carries with it no idea of endearment or, for that matter, even mild respect.

On the other hand, we must not forget that there are papers which are careful to maintain a scrupulously fair editorial policy. The "twisters," of course, will insist that they are fair, as well. I know of no way of dealing with the "twisters," especially the columnists. In appraising their activities, I suppose that they have a tough time of it. Every so often, they must view something with alarm and the services are always a sure-fire target. However, in the field of journalism I think, upon reflection, that there can be greater offenses than dangling participles and split infinitives.

Again, I say that I have no remedy for dealing with these features of our problem. The best that we can do, I think, is to cultivate good, personal relations with the owners, with the publishers, with the editors and with the newsmen—and impress on them that the navy commander's door is always open to them and that we will help them in every legitimate way to get a story. We must impress on them, however, that we, too, work for a boss and that classified material is not in the public domain.

Furthermore, I think we naval officers should remember

RESTRICTED SECURITY INFORMATION

that we, like the navy itself, are in the public domain. We belong to the owners — they pay the freight. Accordingly, the free press of the country, in its position of guardian of the public interests, feels quite at liberty to kick the navy and ourselves about from time to time. We must admit that we are thin-skinned about this and, furthermore, that we are resentful of anything derogatory about our navy or ourselves as a class. Why are we thin-skinned about this? Because of our deep and abiding affection for the navy and all its works. We believe in the navy and we believe in the people who populate it. We believe that officers and men — marines and Waves, all — set a high standard for private and public institutions.

Dealing with the press is not a new problem. After a good deal of experience with a hostile and quite often scurrilous press, Thomas Jefferson was moved to remark: "Where the press is free and every man is able to read, all is safe." And so it is with the navy. The observation of boatswain's mate, Smith, must perforce give way to those of Thomas Jefferson because the privilege of reading the free press — even if we think it be distorted — is one of our greatest heritages.

I suppose the personalities of naval commanders and the public information officers have considerable to do with the effects of public relations. Opinions vary. Most public information officers need and want and assume they will obtain guidance. The commander should, I feel, give policy guidance, exercise partial control, but stand clear of the working level. The public information officer should be allowed a measure of autonomy beyond the commander and Washington.

Just what comprises public information? Well, it is obvious that the commander cannot take the full advice of the intelligence

RESTRICTED
SECURITY INFORMATION

people — conceal everything, both good and bad — nor can he attempt to appease the public information fellows by publishing everything. As I said before, there is a happy medium — and we must find it!

I suppose I should illustrate what I mean. Last summer, we had an unfortunate case of sabotage in the Boston Naval Shipyard. Some bolts and nuts were tossed into the gear boxes of a destroyer and, needless to say, caused considerable damage. An investigation was ordered. I was advised by the intelligence people not to release anything to the press until the investigation was well underway. Realizing that this was "Real News," I talked to my public information fellow and said: "How about going out in town, seeing the newspapers and asking them to keep it out of the papers until our investigation is completed?"

He advised against it, saying: "These fellows live by stories — this is a story, it will get into the papers no matter what they promise." He suggested giving them some of the story. The district Intelligence Officer said: "No!" Well, there I was. I took the advice of the D.I.O.

In about ten days, much to my chagrin, headlines appeared in an afternoon paper: "Sabotage in Navy Yard: Reporters from this paper have uncovered what the navy has been hiding for weeks," etc. So that's the way they go. What to do? There is not a clear-cut answer. The only thing I can suggest is the personal touch.

I think that the day has long since gone when I, as a senior commander, may state: "Don't do as I do, but do as I say." I think that I must, in advance, lay down lines of guidance as to what I want done and what I want left undone. I think the naval com-

RESTRICTED
SECURITY INFORMATION

mander must set the example by being a good public relations man, calling in his public information people to sit down and talk at the conference table where policy is formed; to have his public information people examine the policies which he is setting forth and give him the benefit of their experience.

By the same token, as I would be most loath to examine all the details set forth by the logistics people on my staff — for it is intricate and detailed; I would never have time for it, so I take their word for it — the time has come, I believe, to set forth distinctive policies in public relations, to ask and obtain guidance from those persons who are on my staff for such purposes, and to abide by their decisions in so far as they make sense. The basic purpose of public relations is a function of command and carries with it the premise that the public relations program must be logical. Of course, what is “logical” may mean many things to many people. In my judgement, the public relations program, above all else, must be a program of common sense.

Another factor that enters into the field of public information is “timing.” I know that there are many stories about the navy which are considered good and which, for some reason or other, just didn’t get published. Leaving out the fact that our public information people are on a good working basis with the press, there always exists the element of chance.

A short time ago, we were going to commission a ship — the NORTHAMPTON. Certain details of construction of this new class of ship had leaked to the press unbeknown to my PIO people, much to the distress of CHINFO in Washington. However, that in itself wasn’t too bad. But I had the (then) new Secretary of the Navy coming to this area on one of his first trips, outside of official Washington, to make one of his first major addresses.

RESTRICTED
SECURITY INFORMATION

That in itself was noteworthy and surely it was newsworthy. However, at the time of the occasion Joe Stalin elected to pass to the Great Beyond, and Joe stole effectively the headlines right out from under any news which we might have been able to have created by the special event. My own PIO tells me that this is only one of the many situations which can exist. There are many editions of metropolitan newspapers where the stories that appear in one edition may be omitted from later editions. I know this to be true because often I have asked him for things that I have thought he should clip which he hadn't clipped and, upon investigation, we would find that news stories were eliminated from one edition to the other in great rapidity.

At this point we should direct our attention, I think, to the navy information's mission and see if what we have said here is in consonance with that mission. The mission reads:

"To keep the public informed of the activities of the navy as an instrument of national security and to disseminate to the naval personnel appropriate information on policies and progress of the Navy Department."

Notice that the sinew of that mission is to inform the American people of the navy. Keeping that foremost in our minds, and donning our economy-minded spectacles, we might now ask ourselves three questions. The first question is: Are we presenting the proper material to obtain goodwill? Now, only a public opinion poll could accurately determine the answer to this question — the proper material to put before the public — because, unlike the automobile manufacturer, we cannot measure our results in terms of sales. However, the kind of thinking that should accompany the solution to this question can very well be illustrated. For example:

RESTRICTED SECURITY INFORMATION

A naval aviator, recently returned from Korea, reported that remarks of reporting mammoth bomb drop tonnages may have rated a good public relations in World War II but that today, in his judgement, a much better job was done in describing the good results obtained with a minimum of bombs. In view of General Van Fleet's recent remarks, that probably makes good sense. In other words, pointing up to the navy's bomb accuracy as a measure of materiel economy.

The second question: Are we using the proper means of presenting the material? This question, like the first, can only be answered by a public opinion poll. However, there are some guide lines. One of them is American leadership habits. Surveys are available showing how much time people spend with newspapers, magazines, radio, television, movies, etc. These can be carefully and thoughtfully scrutinized. Beyond leadership hides an intangible: The impacts of various *media* on the individual. Newspapers have been singularly ineffective in influencing national elections. That prompts a question: Do they pack much more of a punch on other matters? Just what are the issues and what type of presentation?

Books — particularly novels — profoundly affect thinking. *Uncle Tom's Cabin* inflamed the North; *Caine Mutiny* inflamed the navy; Nicholas Monsarrat's *Cruel Sea* found a wide recognition among naval personnel, but sold thousands fewer copies than did the *Caine Mutiny*. However, a book can be a powerful, promotional device.

At this point, a parenthetical word about the sea. The sea has been the subject of countless stories, books, and plays. Why? Well, I suppose that great romance is the answer. The average

RESTRICTED
SECURITY INFORMATION

chap, I suppose, likes to escape from the humdrum of his daily life and there is nothing to accomplish that like going to sea — even if it is only in a book. In addition to those books listed above, a long list could be added: *Captain Hornblower*, *The Sea Around Us*, *Under the Sea Wind*, *The Old Man and the Sea* — just to mention a few. Until something better makes its appearance, *Moby Dick* will probably hold first place as the great American novel. *South Pacific* and *Mr. Roberts* will do, for the moment, as examples of plays.

The navy has a truly wonderful backdrop against which this action takes place because throughout recorded history the sea and the men who sail it have had attached to them an aura of romance. The navy should make full use of this romantic setting, in so far as common sense dictates, in promoting its public relations programs. Other media include television, radio, movies, plays, commercial advertising — which frequently hang on to military subjects, especially naval and sea subjects.

To be realistic, the seldom-used avenue of public relations is military philosophy. Americans, as a people, are peace-loving but a look at their war-studded history proves that they are not peaceable people. Historians too frequently devote volumes to economics and sociology with almost complete disregard for war. Of course, our citizens detest war — and rightly so — and many, therefore, just like to dismiss it from mind just like a foolish person might disregard, say, cancer just because he loathes it. Unless we are to win a lasting peace and security, the public must comprehend the causes of war and the degree of security that will prevent it or win it with the least cost to be considered.

Our third question: Have we placed our personnel to the best advantage? Theoretically, a public relations man should be

RESTRICTED
SECURITY INFORMATION

— and I quote from Mr. T. R. Sillis' *Public Relations* (and as a quote, I think it is a dandy!) He says:

“A public relations fellow should be well educated with more than a foundation in psychology, sociology, politics, labor relations, history, finance, mechanics, engineering, all sciences, law, physiology, a few common foreign languages, literature and grammar.

If he could also be versed in art, music, domestic science and etiquette — it would help. He would be an articulate and sincere speaker in conversation as well as on the platform, a good mixer, able to please all types of personalities, a writer equal to Steinbeck, a super-salesman of interesting editors and stories as well as perspective appliances in any service; a sports enthusiast, a mental catalogue of publicity outlook with personal acquaintance among the executives of every big newspaper, wire service, magazine, radio station, syndicate, trade journal, newsreel and movie production right and legislative committees.”

Powerful man, this fellow! Well, of course no individual comprises more than three or four of the combine set above. Just as in the navy a task force comprises ships of many types with a single over-all objective, in civilian life the public relations firm ties together five or six people who in the aggregate furnish most of these required characteristics.

Frequently, in navy information, older officers — I am aware — hold billets (and rather grimly at that) which are unsuited to them and to which, may I say, they are almost totally unsuited — particularly with regard to their public information talents. We

RESTRICTED
SECURITY INFORMATION

must take care in placing our public information people and we must be ruthless in removing them if they are not suited to the billets to which they are assigned.

Again, I must repeat that public information is a function of command. Despite everything that I have said here this morning, I profess to know little about public relations. I have professional support in that observation, because on two important occasions I was told by professionals that I didn't know much about public relations. Any observation that I make in this field should, therefore, be taken with a grain of salt and taken merely as a seaman's idea, if you please, of a great and important subject. As an aside, and in my own defense, I might add that on the occasions referred to above it turned out that I was right. As in other matters, differences of opinion are important in public relations.

I think that all will agree what we want and what we strive for is goodwill for the navy. Goodwill must be *deserved*—goodwill must then be *sought*. Goodwill must be *gained*—and goodwill must be *held*. Faith in the navy and belief in its functional necessity should comprise the propellant of our public relations program. But faith in the navy and belief in its functional necessity cannot, in my judgement, justify a running fight with a sister service. Put the navy forward in the finest possible light. Be alert to do this and grasp every opportunity to do so; but whatever you do, do it in good taste and make certain that the story is the story of the navy, and not the story of the naval commander.

Thank you!

BIOGRAPHICAL SKETCH OF LECTURER

Rear Admiral John Livingstone McCrea was born in Marlette, Michigan. He entered the U. S. Naval Academy in 1911 and was graduated in 1915, receiving a commission as an Ensign. He advanced to the rank of Vice Admiral on September 16, 1946. Upon assuming duties as Commandant, First Naval District, in February 1952 he reverted, as is customarily the practice, to the rank of Rear Admiral.

During the first World War he served in the USS NEW YORK, the flagship of Battleship Division 9, which operated with the British Grand Fleet throughout the war.

Between wars he served in many types ships and had assignments throughout the naval establishment. On January 3, 1942 he was appointed Naval Aide to President Roosevelt. In February 1943, on return from Casablanca where he accompanied President Roosevelt, he assumed command of the USS IOWA. While in command of the IOWA, he transported the President and the Joint Chiefs of Staff to Oran for the Cairo and Teheran Conferences. He commanded IOWA when it participated in the major assaults and engagements of the Pacific, including Kwajelein, Truk, Saipan, Hollandia, Palau and other assaults up through the Battle of the Philippine Sea. In 1944, as a Rear Admiral, he assumed command of a task force which operated against Japanese strongholds in the Kurile Islands in the North Pacific.

Admiral McCrea has been decorated not only by the United States, but also by many foreign governments.

While on duty in the Office of the Judge Advocate General he attended George Washington Law School, receiving the degree of Bachelor of Laws in 1929. On a later tour of duty in Washington he pursued further the study of law, receiving his Master of Law degree in 1934. He is a member of the Bar in the District of Columbia and has been admitted to practice before the Supreme Court of the United States.

RESTRICTED
SECURITY INFORMATION

CONCEPTS AND NATURE OF AIR WARFARE

A Lecture Presented
at the Naval War College
on 25 March 1953

by
G. C. Brown, Colonel, USAF

Gentlemen:

We of the Air War College team appreciate the opportunity to participate in your study of military theory and global strategy. For the next two days we will be considering together the concepts and nature of air warfare, for in a sense, all of our discussions will be dealing with different aspects and different views of this same subject. So much has to be left unsaid on so broad a topic that our problem for the next two days is really one of selection — the selection of the key ideas, facts, and relationships for study.

Since we will not have time to examine all the ramifications of selected subjects, it is all the more important that we have a common appreciation from the outset of the fundamental concepts, facts, and evaluations that we will be dealing with. We know that these profoundly affect our individual appreciation of specific aspects of this complex business of warfare.

Let us consider this first talk, then, as an opportunity for us to establish a common point of view or a frame of reference for our discussions. The object of an enterprise is certainly a good place to start, and since air warfare is only a part of the whole, we can relate the part to the whole by examining the object of the entire enterprise of war. In talking about achieving objectives in war, we should examine the dominant features of the means

RESTRICTED
SECURITY INFORMATION

to be used in achieving them. We should also try to visualize the vulnerabilities these means can exploit, and the effects of the application of the means.

Air warfare is a term which usually denotes a state of being or a condition. But when we use the term while thinking of warfare as a whole, we note immediately that we are talking about a means as well as a state of being or condition. A given means, when applied, creates characteristic effects. It is not always easy to see how these effects of the application of air force can serve our war objectives or, when the same means is in enemy hands, to see how it influences *our* proposed actions.

It seems that we could talk profitably about the concepts and nature of air warfare in terms of objectives, means, and effects. The means we are principally considering is air force. Let's try to undertake this examination by starting at the national level. Then we can move on to talk about objectives, means, and effects from strategic considerations to tactical ones. Let us begin by examining the basic concepts of the use of air force in war.

The idea of using air forces as the primary offensive power of a nation's combined arms probably took firm root in World War I. General Pershing had planned an extensive supporting air offensive and the Allies were preparing to build forces to undertake it when the war ended. The records indicate a remarkably open-minded attitude toward this unprecedented military plan. Perhaps the heat of battle and the unity of purpose explains this open-mindedness. But, we know that in the years subsequent to World War I a bitter conceptual struggle developed between U. S. airmen and their fellow Army officers. During this early period the Navy was only remotely involved with the *central* point of difference.

**RESTRICTED
SECURITY INFORMATION**

What was this conceptual struggle about? It was about the object of war and the application of military means to attain this object. Airmen argued that the *object* of war was to overcome the will of the enemy people or government and to impose one's own will upon them. They said the nation itself was the war-making entity. Its need for security, its aggressive ambitions and its purposes in any war were simply the expression of the needs and desires of the people and their government. Airmen reasoned that armies were merely instruments interposing barriers between the nations themselves. The airplane could avoid these barriers by flying over them to attack the people, their social and economic structure, and their war industries. The nation, in all probability, could be induced to yield to this direct attack; and in any event the attack would, in the long run, render its field armies ineffective.

Ground force officers contended that the enemy's will was dependent upon the relative success of the armies engaged, for it was only through capture and control in detail, or the inevitable threat thereof, that the enemy's will could be bent to yours. Firepower alone, without surface movement of troops into the enemy country would never suffice in conquering the country. The soldiers agreed that it was only when all hope was lost that the enemy would yield, but as long as his army remained intact the enemy could hope that the balance might be upset. Therefore, they said, the real object of military forces in war was to destroy the opposing army — and they cited those great military authorities, history and von Clausewitz, to support their argument.

In rebuttal we might put the air view another way. To argue that destruction of the army and capture is the objective is to confuse means with ends. In other words, to capture may not be synonymous with control — and other means can be and have been used to achieve control. Control does not automatically come with

RESTRICTED
SECURITY INFORMATION

the destruction of the army and capture. Witness the trouble of the Germans in Russia in World War II. The control gained by armies after the destruction of opposing armies results only from threat of further destruction of property and hardship on the people. If the people do not yield to the terms of the victor, the terms themselves must be changed or control must be gained through imposing greater degrees of hardship.

This difference between airman and soldier was, and still is, a basic difference in evaluation of vulnerabilities and weapons system capabilities. It is a difference as to which are means and which are ends in war. The confusion of means with ends could be a deadly military sin. Such confusion is a great impediment to exploiting new weapons and different strategies for accomplishing the same objective.

In looking for evidence as to whether capture or threat of capture is the object or simply a means, let's look briefly at Clausewitz, Mañan, and two historical experiences. In reading Clausewitz to see whether he agreed that the object of war is to destroy the military forces, we find this. He compared two countries to two wrestlers. He said: "Each tries by physical force to compel the other to do his will; his immediate object is to overthrow his adversary and thereby make him incapable of any further resistance. War is thus an act of force to compel our adversary to do our will. Force is thus the means; to impose our will upon the enemy is the object. To achieve this object with certainty we must disarm the enemy, and this disarming is by definition the proper aim of military action."

At the beginning of the second chapter of Book I entitled "End and Means in War," Clausewitz says, "A plan for war, that is a plan for disarming the enemy, must distinguish between three

RESTRICTED
SECURITY INFORMATION

things, which as three general categories include everything else. They are the military forces, the country, and the will of the enemy."

"The military forces must be destroyed, that is to say, *put into such a condition that they can no longer continue to fight.* We take this opportunity to explain," he says, "that in what follows, the expression 'destruction of the enemy's military forces' is to be understood *only in the sense.* Besides destroying the enemy's military force, the country must be conquered, for from the country fresh military forces could be raised. But even if these things have been done, the war, that is to say, the hostile tension and the activity of hostile agencies, cannot be regarded as ended so long as the will of the enemy is not subdued also, that is, until his government and his allies have been induced to sign a peace or his people to submit."

It seems, from these passages, indeed from the essence of everything else he says, that Clausewitz denies that the object of military forces in war must be the destruction of the armed forces. He visualizes them as means with which to impose one's will. That he could not foresee the development of another military "means" is not to his discredit.

Mahan very ably sets forth the critical importance of the homeland in war. Time after time he points out that the fruits of control of the sea is national power in a strategic sense. He, too, shows that the essence of strategy is to bring pressure on the center of power — the homeland. When the situation was right, blockade and economic strangulation could and did serve as the sole means of controlling the homeland and will to wage war.

The writings of Clausewitz and Mahan indicate that they

RESTRICTED
SECURITY INFORMATION

might well agree that in the final analysis, the object of war is control — control of the military forces, the country, and will of the people — and that varying degrees of control can be obtained by the application of varying degrees of force. The estimate of how much and where control must be obtained is a function of the political design and military strategy. To be controlled the enemy must be disarmed, but disarming need only be accomplished in those areas where the opponents have chosen or have been driven to fight for decision.

Final resolution of terms acceptable to both sides is a political problem and is assessed by the victor in relation to the cost of the effort required to secure better terms. If the price of yielding is totally unacceptable to the loser, the amount of force required will assuredly be greater. And we must never forget that as long as the enemy can hope to redress the imbalance of power and win through to a greater measure of success, just so long will he continue the struggle.

In amplification of this concept of control as the objective, that is, control of the military forces, the homeland, and the will, let's examine briefly two historical cases.

During the 30's the British replaced army contingents with air squadrons for controlling their vast empire. They then set about controlling the colonial people with air forces. It was accomplished by actual or threatened air attacks against towns and villages of these people. The story of this development that became Empire military policy is a fascinating one, though too long to recount here. We are interested only in the central idea and the basic principle involved in this successful policy. The idea was that in controlling behavior of the people involved, military force should be applied for limited political objectives. The idea of capture and

**RESTRICTED
SECURITY INFORMATION**

occupation was abandoned, and punitive reprisals for their aggressions were replaced with the requirement that the people conform to a code of reasonable behavior. The behavior desired was made very clear from the outset and continuously repeated throughout the air operations.

The central principle upon which the success of the operation really depended probably was not understood clearly in the beginning. This principle is directly concerned with will of a people — It is this. Where people can take no effective action to defend themselves and the means they possess for retaliation or defense cannot even be employed, the costs become unbearable and they reach a state of utter frustration. They are then subject to control without capture. The British found the use of ground forces to oppose these people gave them an incentive and an object to fight. They could hope to make the British reprisals too difficult to carry through. The very fact that they had a capability to fight demanded that they do so, and once engaged they fought on until they were defeated.

This was an experience in control of backward peoples — but they were an organized people and they had a society and a government and needs and desires like all other people.

How would this concept of control without capture look in a major war? Our second historical example is World War II against Japan. In the Pacific we fought a great war of combined arms. We won control of the air and the seas. We pressed on to position ourselves for air attacks on the Japanese homeland in preparation for the defeat of the home army and capture of the nation. This strategy was fought to the political objective of unconditional surrender.

RESTRICTED SECURITY INFORMATION

During the course of this war, however, we had considerable success in the naval and air interdiction of Japan's strategic lines of communication. The mining campaign, both on overseas and coastal traffic, further augmented this strategic interdiction. The B-29 campaign against the homeland was ushered in and the fire bomb attacks began to disrupt the social and economic integration of the nation.

What was the Japanese reaction? The wiser heads recognized more than a year in advance of the termination of the war that Japan had lost control in two interrelated and decisive areas of conflict — air and sea. The Emperor stated then, over a year before the end of the war, that all hope of victory was lost. All the Japanese could hope for was more acceptable terms. The strategic threats to the homeland of air and sea interdiction were not sufficiently developed at that time to cause capitulation in terms of unconditional surrender. The true strategic significance of Japan's plight was recognized by many with the progressive destruction of the nation's heart by B-29's and continued strangulation by sea. In spite of the fact that the army was still intact, from a national point of view the military forces had totally lost the ability to defend their homeland. (If we had put our army ashore, what then?) As a result of this defenselessness the controlling factions of the government lost any hope whatsoever of raising fresh military forces for the war, in the modern meaning of the word. The record is plain — they yielded to unconditional surrender without capture. They did so because they had lost all hope of either victory or better terms.

Up to this point we have been discussing concepts of warfare in terms of objectives. We have said that control is the object of war. The degree of control required is responsive to the

RESTRICTED
SECURITY INFORMATION

political design and the power of the enemy to resist. The *nation* is the entity and its *power* is represented by its armed forces, the homeland capacity to support and generate forces and its will to prosecute the war. Will is dependent upon hope — the hope for greater relative success in war, and, when losing, the hope for new strategy or new means for regaining the initiative or the *hope* for acceptable terms.

Let's talk now about strategic considerations resulting from the use of air force as a means in war. If a strong homeland, guarded by a strong army, gives an enemy hope for victory, how does air force fit the objective of control? A central part of the concept for the use of air force in war is built around one of the big problems of war strategy — that of preventing the enemy from developing greater relative power after war has started. The development of this power can be called a strategic threat. In the past, greater power could come by greater mobilization, seizure and occupation of resource areas, realignment of coalitions, development of new weapons, etc. Today, most of these strategic threats can be controlled by air force. That is, relative strategic power positions can be reversed at the very outset of a war by direct air attack against the homeland. The ability of air force to upset a carefully constructed power position lies in its ability to penetrate to the center of gravity. Resources cannot be processed if the industry is not available; military forces cannot be sustained and equipped if the weapons are destroyed; hope cannot be maintained if the very life processes of the nation are under severe attack. In other words, the homeland that Clausewitz nominated as a consideration in war must now be thought of as the prime strategic objective for the application of military forces at the beginning of a war, not as a consideration to be entertained after his forces are defeated. These concepts, and air force, have ushered in a pro-

RESTRICTED
SECURITY INFORMATION

found change in the nature of war. Part of this change is found in the simple fact that air force works *both ways*. Survival demands that the capacity of the enemy to concentrate firepower against the homeland be countered. This consideration of the security of the homeland drives us to fight for an intermediate military objective—command of the air. In this capacity of air force to penetrate to the heart of a nation and the resultant requirement to *fight for command of the air* we see the real nature of air warfare and the *dominating fact of warfare as a whole*. All other objectives for air and surface forces must be responsive and subordinate to this fact.

Let's talk about force capabilities for a little just to get a feel of the revolution that has occurred. This will give us a few facts against which to measure the ideas we have just been dealing with and a background as we move on to discuss objectives, concepts, means, and effects in military strategy. Since our next session will deal with capabilities at greater length, we will examine only the dominant features here.

Today, the atomic bomb gives us a new order of magnitude of firepower at an amazing reduction in force requirements. Let us make a comparison that is a stiff reminder of this fact. The comparison is based on rough calculations from World War II statistics and the explosive power of the 20 KT atomic bomb. We are only trying to see order of magnitude. It has been said that a 20 KT bomb is worth about 2 KT, or 2,000 tons of conventional bombs, when employed against large military or industrial installations and built-up industrial areas. This reduction in efficiency is primarily due to the concentration of the blast in one relatively small area in which more blast is obtained than is needed. Consequently, it cannot be applied over larger areas. There were roughly

RESTRICTED
SECURITY INFORMATION

450,000 bomb-carrying sorties required to deliver 1,350 KT of fire-power against *Germany* itself in World War II. And this was over a period of $4\frac{1}{3}$ years. (Sorties figure on the basis of 3 tons per bomber.) This would now require 675 bomb-carrying sorties, as opposed to 450,000 in World War II, with 20 KT bombs reduced, for comparison, to 2 KT. We now refer to 20 KT bombs as the hand grenades of the A-bomb family.

From this sort of comparison it should be obvious that in any effort to destroy a nation's war-making capacity through air attack, or to destroy military installations or concentrations of military forces, the A-bomb represents the most revolutionary advance in offensive capabilities of all times. It has certainly had a revolutionary impact on air strategy, concepts of target selection, phasing of effort, tactics, and force composition. When we look at this advance in aircraft firepower, along with advances in navigational and bombing equipment, and couple with them the considerable advances in speed and range, we must conclude that every aspect of previous air warfare experience has to be examined in the light of these specifics. Seizing upon World War II successes and failures as representative lessons to be learned is not only inadequate but dangerous.

Let's do some reasoning about the capability of air force to strike directly at the heart of a nation. Let's see how this *means* and its *effects* must be taken into account in national military policy and strategy. But above all, if we are to see how this capability affects the nature of warfare and national military strategy we must take a two-way look. We must consider it in relation to the actual and potential capacity of an enemy on the one hand, and our own capacity on the other.

The power of air forces to penetrate air defenses was dem-

RESTRICTED
SECURITY INFORMATION

onstrated in World War II when tens of thousands of sorties were flown against Germany before the German air defense system was crippled by direct attack. Of course, this was under the specific conditions of the time. An assessment of the technological facts and trends indicate that the offense can always keep pace with the defense. Conditions of penetration today may differ markedly from World War II. Nevertheless, the same technical advances which may be applied to a system of defense can also be applied with greater effect to the offense. The real question is *not* whether an offensive air weapon can be shot down — of course it *can*. The question is whether the firepower that can be delivered is sufficient to accomplish the objectives.

Examination of the offensive capabilities of today's air forces inevitably leads to the conclusion that the air weapon has the capability to destroy the economic and social fabric of a nation. In a very short time a nation can be reduced industrially and economically to the status of a third-rate power. Vital political, social, and economic processes can be destroyed. Political control can be seriously, perhaps fatally, disrupted and capitulation brought about without capture.

Professional competence and national determination can maintain and develop this kind of force at relatively reasonable and sustainable cost. The questions then are: For what purpose should it be maintained? Why must we talk about air capabilities in terms of widespread destruction of a nation?

Suppose, for a moment, that an enemy nation had a capacity to devastate our homeland and we had a very limited force for offensive action. If we examine that situation, we can see that the devastation of our homeland would leave us with little strategic potential for sustaining our forces or for further mobilization. Air

RESTRICTED
SECURITY INFORMATION

defenses alone are not adequate to stop the attacks. If we could not strike back and saw no hope of stopping the attacks, we would certainly not be able to stand the continuing punishment. That nation would need only to attack on a modest scale and threaten on a large one.

Whether we like it or not, modern technology has created this nation-killing potential. Apparently, to an even larger degree other major powers are building toward such a capability. We will have to live with this threat knowing that relative security and relative success can only come from doing a more efficient job against both an enemy nation and her threatening forces. This is not a happy thought, for relative success in the near future has all the appearance of being worse than what we have known in the past as defeat. That is why we must think of war strategy first in terms of survival and freedom. As time wears on, the destruction of the physical monuments of our culture may be the minimum price of war.

We might review for a moment the capability we have just been examining, and its strategic effects. Perhaps this will help us to see better how it must relate to total strategy. Suppose we, as a nation, attempted to defeat the enemy's deployed air forces. The probability of completing the task of defeating the enemy air force through these means alone is not very great. Hence, we are ultimately forced to attack the homeland to complete the defeat of the air force. But, we must not forget that the attrition of our forces in the first campaigns might be so great that we could not complete the job. Then what would be our strategic position if the enemy chose to use the balance of his undamaged air force to destroy our national power structure? What would happen to mobilization? What would happen to continued support of the

RESTRICTED SECURITY INFORMATION

forces in the field? Would the ultimate outcome be in doubt? The point is, you can't choose. This is a strategic advantage which you can't yield to an enemy. You must build and maintain the force capable of doing a more efficient job than he does.

This is little different from Mahan's theory that opposing fleets must keep their quality weapons, their ships of the line, so disposed that the enemy cannot meet and defeat them in detail. He further contended that a navy must have sufficient "forces in being" to meet and defeat the most powerful force the enemy or coalition of enemies can muster. This did not necessarily mean the most, but the sum total of numbers, quality, and command had to be greater than that of the enemy. The very existence of the "fleet in being" influenced the entire disposition of enemy forces. This fact made it possible that one combatant might find the benefits of this threat of greater advantage than meeting the opposition, with the attendant chances of destruction. In this event, an aggressive navy seeking the engagement might find it difficult to bring the enemy to bay. Or, they both might choose to maintain the threats, not daring a decision, while letting the situation develop in other areas of conflict.

When we compare this with air against a nation, the same theory applies at the national level. The major difference is that the aggressor can bring the other to bay if he desires. In this case, if neither dares, there may be no total war.

A number of people have put it this way. We have entered a new era of warfare. No longer can we talk about security as we have known it in the past. Time is now the most important factor in strategy — time for preparation, time for decision, and time in action. No longer can the political leader seek the military leader on the brink of war, asking that he then provide security. Perhaps

**RESTRICTED
SECURITY INFORMATION**

the only way to use this power to gain our political ends is never to unleash it. Certainly our vital national interests may be better served by *successful* limited economic, psychological, military, and political warfare. But as Clausewitz says, "This is a slippery path on which the God of war may surprise us. We had best keep our eyes on the enemy lest we be forced to defend ourselves with a dress rapier while he uses a sharp sword."

In carrying this examination of the nature of air warfare beyond the considerations we have been discussing up until now, let us remember that we are only trying to draw out the dominant features against which all other considerations have to be weighed. We have talked about the objective and the concept of the use of air force as a means for attaining it. We have discussed capabilities and vulnerabilities and the strategic implications of possible effects to be attained through air warfare. We have examined the impact of air force on total strategy. Let's move into some specific strategic considerations now. This will help to develop the picture of the nature of air warfare in greater detail.

Great military theorists of the past and our top men of today seem to agree completely that the essence of strategy is concentration in time and space. The dominant characteristic of air forces is their ability to concentrate firepower in time and space; speed, range, bombing accuracy, and individual aircraft firepower in a three dimensional medium are the means to this end. This flexibility presents a wide range of target objectives. It is apparent that determination of what is to be hit, with what force, and in what sequence, or what is to be defended in response to what threats, is of vital importance in air strategy.

Fusion and fission weapons have established a new order of magnitude of capabilities for concentrating firepower in time and

RESTRICTED

SECURITY INFORMATION

space. These weapons in quantity, coupled with far-ranging aircraft, are completely changing the problems of national strategy and security. Formerly, farsighted diplomacy in combination with adequate force could determine where the war was to be fought. Alliances properly conceived to balance land and sea power could force an aggressive enemy to fight for a decision at predetermined places and on given lines. Even then, sea power had to operate under a fluid concept of control of all vital sea areas. On land, however, concentration of firepower could only be gained by a painful and time-consuming massing of huge quantities of men and materiel. Only those forces in close proximity to the front lines were in the battle zone.

The German General von Bechtolsheim, in discussing battle lines, made the observation that a battle line was not a line of soldiers but a line of fire. If this is true, then a fact is already with us and the trend is clearly visible—in the future the determination of surface battle lines are lesser included problems of grand strategy. Today, and in the future, firepower may be delivered simultaneously from front to rear. In the air-atomic age concentration is a function of the weapon and not the massing of great forces. There are no strategic reserves that can be held out of the line of fire in complete security. The problem of depth in strategy is not essentially geographic anymore but a problem of time—time in decision, time in readiness, and time in action. The surface battle line becomes just one of a series of strong points on a global scale, with the nations themselves and the concentrations of striking forces constituting these points.

The strategist with weapons in hand individually capable of destroying the strongest man-made structures finds the strategic defensive posture unacceptable. He must seek to destroy the

**RESTRICTED
SECURITY INFORMATION**

most remunerative targets in a strategic offensive-defense against deployed forces. This brings home the fact that in air warfare both sides can wage a strategic offensive at the same time—though strategists contend this is impossible with surface forces.

The strategic offensive is an integral part of the fight to gain command of the air. Not only will attacks against the government and military control centers help in winning control, but production of weapons of mass destruction will have to be stopped as soon as possible. Just as in control of the seas, control of the air does not mean that all forces can be destroyed or neutralized. With the atomic weapon, however, it becomes imperative to destroy production of the weapon that makes the remaining forces effective.

Let us think for a moment of two opposing air forces operating in a vital theater of operations in conjunction with ground forces. In the light of our discussion of the significance of firepower and the ability to penetrate defenses with air forces, what does the future hold in store for such an operation? What about the World War II concept of getting close to your work in order to mass and sustain high sortie rates? What about the concept of local air superiority? What about the concept of a strategic defensive posture on the part of air forces in a theater of operation?

The firepower available in nuclear weapons puts a premium on offensive action and proper selection of targets. It inevitably forces strategy of air war away from any major reliance upon air-to-air attrition for success. The vulnerable surface installations, planes on the ground, and logistics are the most remunerative objects of attack. The air war will be won or lost through attacks on forces on the ground. The massing of installations and logistics within range of enemy short-legged aircraft close behind some predetermined surface battle line or behind some surface barrier

RESTRICTED SECURITY INFORMATION

seems to be the surest road to defeat. As long as nuclear weapons are available to either side considerations of vulnerability must be the over-riding ones. Forces and installations must be dispersed and hidden under the best possible system of passive defense. Greater aircraft range in operation now becomes a priceless asset that can hardly be over-emphasized. It is a quality factor that permits you to move your installations out of reach of an otherwise superior force. It permits you to devote your efforts to war-winning offensive action rather than to excessive commitments to air defense. The future seems to hold success for the side which follows the concept of out-ranging the enemy rather than getting close to his work.

The concept of local air superiority seems to be invalid for the future during the decisive stages of the air war. In any area where the outcome is of *critical* importance, opposing forces can and will be committed in the amount that the total air situation permits. Great firepower, as we have noted, makes it possible to concentrate powerful new forces overnight from widely separated places. In a critical area local air superiority can only come as a result of general command of the air. Conversely, general command of the air can only come from the proper employment of all air force in an integrated effort to win it. The first consideration in this over-all effort is and will be that of security, not freedom of action as it was in World War II (see JCS definition of air superiority). We must not visualize one air force on defense and another on the offense fighting for freedom of action in a given area. The facts have changed. There can be no such thing as a defensive air posture in a vital theater where the fight has been joined both on the surface and in the air. Attrition of an attacking force in the air through air defense cannot succeed. Forces now have the capacity to gain a critical level of destruction against surface structures

RESTRICTED
SECURITY INFORMATION

in depth. One penetrating a/c with enough firepower to destroy an entire air base, depot or port gains more than the defense does in shooting down numbers of a/c. With this in mind, we can say there are no fronts to be stabilized. The air war in a vital area cannot be broken off; it must be fought offensively; and the force must be committed to win. And for the reasons we have discussed, if the war is global it must be fought and won globally. The air must be controlled for survival.

The subject we have been examining is concepts and nature of air warfare. We set out to examine this subject in terms of objectives, means, and effects. We said to achieve objectives we must have means, and means produce effects. Our evaluation of means and how they must be used to produce effects constitutes our view of the nature of air warfare. But don't you think we can agree that the nature of the condition we have been examining is warfare, not air warfare? Haven't we actually been talking about air force as a *means* in warfare, and how it has affected the nature of warfare in its entirety? Perhaps we shouldn't even use a term like air warfare. Perhaps we only wage air campaigns, army campaigns, naval campaigns, and psychological campaigns.

Air force must be taken into account in war both as a means and as a threat. Its existence opens up new ways of achieving objectives, new opportunities to exploit, and new vulnerabilities to defend. It demands an over-all strategy for its use that maximizes opportunities and minimizes vulnerabilities. The effects of its use must be taken into account in any examination of the nature of warfare.

In conclusion, at the national level we have examined the objectives of war and have found it to be a problem of control. We have said that different combinations of means can be used in war to put the enemy in a condition where he can no longer continue to fight or hope to redress the balance of arms in his favor.

RESTRICTED
SECURITY INFORMATION

We have examined air force as a means and as a threat. We have discussed its impact upon strategy and the consequences of its use against the homeland.

We have talked about command of the air and why it must be won by a combined strategic offensive against the homeland and an offensive defense against enemy air.

We have discussed the implications of firepower and vulnerability from the national level to tactical level.

The one big fact that seems to emerge is this. The ultimate victor in a total war will be the nation that has decided upon its strategy in advance. Its forces must be prepared to *win* in offensive action, command of the air, and control of the enemy homeland in the first phase of the war. In the progress of the air war, no nation can afford to have its top airmen report that his forces have been reduced to ineffectiveness and his firepower expended before his job has been done. If the enemy can continue the air attack, all hope of victory will be lost, and with the loss of hope the loss of national will.

The old shibboleth that democracies must of necessity always be unprepared at the outset of a war must be banished from our thoughts for it is a counsel of destruction.

BIOGRAPHICAL SKETCH OF LECTURER

Colonel Brown was born in Fayette, Mississippi, on 28 December 1912. He received his B.A. degree from the University of Texas in 1935. He was a Flying Cadet in 1939, and was commissioned a 2nd Lt. in 1940.

From 1940 to 1942 he was in the Training Command as flying instructor, Training Squadron CO, and Assistant School Operations Officer at Barksdale Field, Louisiana. He was in the ETO from September 1942 to May 1945 with the 9th Bomb Division as Staff Officer, Chief of Staff, 98th Bomb Wing (M), Commanding Officer, 322nd, and Commanding Officer, 287th Bomb Groups.

He served in Headquarters, USAF, Deputy Chief of Staff, Operations Directorate of Intelligence, 1945-48, and then attended the Air War College, Class of 1949. He has been a member of the faculty of the Air War College since then, and is presently assigned as Deputy Academic Director.

RESTRICTED
SECURITY INFORMATION

RECOMMENDED READING

The evaluation of books listed below include those recommended to resident students of the Naval War College. Officers in the fleet and elsewhere may find these of interest.

Many of these publications may be found in ship and station libraries. Some of the publications not available from these sources may be obtained from the Bureau of Naval Personnel Auxiliary Library Service, where a collection of books are available for loan to individual officers. Requests for the loan of these books should be made by the individual to the nearest branch or the Chief of Naval Personnel. (See Article C-9604, Bureau of Naval Personnel Manual, 1948).

- Title:** The Rommel Papers (edited by B. H. Liddell Hart), 545p.
- Author:** Rommel, Erwin. N. Y., Harcourt, Brace & Co., 1953.
- Evaluation:** This is a remarkable story of World War II, as seen by "one of the Great Captains." In it are contained, in forceful and cogent form, some of the most important lessons in command, strategy, logistics, tactics, sea power and mobile warfare yet published.

This book is packed with illustrations of both the understanding use and the flagrant violation of sound principles for the conduct of war. To the strategist, there is the challenge of analyzing the choice of objectives and the use of sea power. To the logistician, there is the challenge of how best to provide a system and administration of logistic planning and support worthy of the genius of a great fighter. To the tactician, there is the challenge of meeting the need for flexibility and imagination in the employment of old and new weapons. The Rommel Papers is one of the great commentaries of military literature.

RESTRICTED
SECURITY INFORMATION

Title: New Guinea and the Marianas, March, 1944 — August, 1944. (Volume VIII of *History of United States Naval Operations in World War II*). 402 p.

Author: Morison, Samuel E. Boston, Little, Brown & Co., 1953.

Evaluation: A history of the war in the Pacific during the five most eventful months of the war, this book not only covers all actions that took place in the Pacific during this time, but it gives excellent coverage to the planning that went into the major campaigns. The Battle of the Philippine Sea has been given considerably more complete coverage than the other actions of the period in recognition of the importance of that engagement. This history also gives much consideration to the logistics of the above battle. The author has made a definite effort to prevent producing a dull history book; to either a civilian or a naval officer, he has been completely successful.

Title: Imperial Communism. 256 p.

Author: Bouscaren, Anthony T. Washington, D. C., Public Affairs Press, 1953.

Evaluation: The tactics employed by Soviet communism in the effort to achieve domination throughout the world are outlined in detail in this work. Each vital area of the world is examined with regard to the progress made by Soviet communism in establishing its political and military control. Particularly emphasized is the failure of the United States and the United Nations to recognize and understand the problem in the areas concerned and the lack of strong policies to effectively block the Soviet efforts. The book is an excellent study of the progress of world communism to date and should provide enlightenment to those interested in the subject.

Title: Beans, Bullets and Black Oil. 482 p.

Author: Carter, Worrall R. Washington, D. C., U. S. Government Printing Office, 1953.

Evaluation: Beans, Bullets and Black Oil is a story about the logistic services supplied to U. S. naval forces — by means of floating facilities — in the operating areas in the Pacific, 1941-45. It is a well-written history of naval logistics afloat in the Pacific during World War II.

RESTRICTED
SECURITY INFORMATION

Title: Russia: What Next? 230 p.
Author: Deutscher, Isaac. N. Y., Oxford University Press, 1953.

Evaluation: This book outlines in an objective way the accomplishments — good and bad — of the Soviet regime under Stalin's leadership, and states which of these accomplishments will die and which will be permanent. In part II, the dilemma which faces the Malenkov regime is dealt with, showing what courses of action are open to Malenkov in both the domestic and international fields. This is a valuable addition to the literature on the subject of Russian outlook and probable policies.

Title: Middle East Dilemmas. 273 p.
Author: Hurewitz, J. C. N. Y., Harper & Bros., 1953.

Evaluation: Sponsored by, and published for, the Council on Foreign Relations, this book is a factual treatment of the background of United States policy in the Middle East. The major divisions are full chapters, by countries: Iran, Egypt, the Arab-Israel area, and Turkey — each rather complete in itself. This treatment allows a clear picture of events in any one country, but tends to confuse the picture of the whole area at any given time. The author shows that "The United States assumed greater responsibility in the Middle East in five years of the containment policy — at least, in terms of ultimate implications — than the United Kingdom had amassed slowly and successively in a century and a half." And yet, except in Turkey, the United States is faced with the delicate (and largely insoluble) problem of finding an acceptable middle position in the conflict between the established body of Great Britain and local aspirations to a greater measure of national sovereignty.

Title: Bulwark of the West. 101 p.
Author: Turner, Arthur C. Toronto, Ryerson, 1953.

Evaluation: Dr. Turner traces the growth of NATO from an address at Lake Success on September 18, 1947 to a plenary session of the United Nations General Assembly (by Mr. Louis St. Laurent, then Secretary of State for External Affairs of Canada) to its present status of an international alli-

RESTRICTED
SECURITY INFORMATION

ance of fourteen states. This brief, concise book presents a Canadian scholar's view of the causes and effects underlying the conception of NATO; it discusses the problems of NATO, the relations of NATO and European integration, the relations of NATO and the British Commonwealth, the relations of NATO and the United States, NATO as a regional group, and NATO as a long-term alliance. The analysis and interpretations provide a basis and starting point for the study of NATO — membership in which so greatly affects the national policies of the United States. It is a clear, factual, and pertinent discussion of the vital factors relating to the United States' alliance with Western Europe.

- Title:** The Ultimate Weapon. 163 p.
- Author:** Anisimov, Oleg. Chicago, Henry Regnery Co., 1953.
- Evaluation:** The author presents an evaluation of the political climate of Europe and the factors which motivate the people of Europe to seek security outside of their own national governmental structures. He states that European nationalism has become a negative rather than a positive force, and that the common man has faith only in a supranational organization as a means of giving him security. Mr. Anisimov believes that political warfare alone has the means to achieve the aims of the Western world and outlines reasons for the success of Soviet political warfare against our own failure to exploit its possibilities. He approaches the problem of political warfare squarely and his entire discussion warrants close study by all who are looking for positive means of combating communism.
- Title:** Atomic Weapons in Land Combat. 182 p.
- Author:** Reinhardt, G. C., Col., U.S.A. and Kintner, W. R., Lt. Col., U.S.A. Harrisburg, Military Service Publishing Co., 1953.
- Evaluation:** The authors discuss the effect of atomic weapons on strategy and tactics, with emphasis on their impact on the tactics of land warfare. While, as indicated, the book deals mainly with land combat, Chapter 5 discusses the impact on airborne, amphibious, special operations and logistics and is of particular interest. The book is written in easily

RESTRICTED
SECURITY INFORMATION

understandable language and is considered to be an excellent first book on the subject. Much food for thought is contained within its covers—particularly, with reference to logistics and command problems.

PERIODICALS

Title: Alaska — Barrier or Gateway?
Author: Beyer, George W., Major, U.S.A.
Evaluation: MILITARY REVIEW, September, 1953, p. 35-44.
Annotation: A general interest article on Alaska from the view of a military man assessing this area as an asset or liability to military operations.

Title: Russia and the West.
Author: Kennan, George F.
Publication: THE NEW LEADER, August 24, 1953, p. 2-6.
Annotation: An abridgement of a paper delivered at a conference on The Problem of Soviet Imperialism, sponsored by the School of Advanced International Studies of Johns Hopkins University.

Title: Geophysical Research.
Author: Landsberg, Dr. Helmut E.
Publication: AIR UNIVERSITY QUARTERLY REVIEW, Spring, 1953, p. 63-73.
Annotation: A discussion of geophysics as it effects modern global-scale warfare, with particular emphasis on air operations.

Title: The Threat of the Pressure Mine.
Author: Robinson, Donald.
Publication: READER'S DIGEST, September, 1953, p. 129-131.
Annotation: Reports that the pressure mine used in World War II by Germany has been further developed by Russia and that the U. S. Navy is searching for a method of sweeping the new pressure mine.

RESTRICTED
SECURITY INFORMATION

- Title:** The MSTs and the Merchant Marine.
Author: DENEHRINK, Francis C., Vice Admiral, U. S. N., and BAILEY, Franzer A.
Publication: NATIONAL DEFENSE TRANSPORTATION JOURNAL, July-August, 1953, p. 28-34.
Annotation: Highlights testimony of Mr. Bailey, favoring proposed legislation that would transfer all water-borne transportation under government control to privately owned or operated vessels. Admiral Denehrink's testimony opposes this idea.
- Title:** The Kremlin Triumvirs: One Down, Two to Go.
Author: Deutscher, Isaac.
Publication: THE REPORTER, September 1, 1953, p. 15-19.
Annotation: Deals with the conflict of principles and policies hidden beneath the clash of personalities within the Kremlin from the time of Stalin's death to the downfall of Beria.
- Title:** Defense and Strategy.
Publication: FORTUNE, September, 1953, p. 75-76, 80-82, 85.
Annotation: Includes: (1) A brief report on the task of the new Joint Chiefs of Staff in providing security for the U. S. on a reduced budget; (2) A short article on Eisenhower's Navy, dealing with the effect of the reduced appropriations on the Navy shipbuilding and modernization program.
- Title:** Soviet Spy Rings Inside U. S. Government.
Publication: U. S. NEWS & WORLD REPORT, August 28, 1953, p. 16-19, 88-107.
Annotation: Full text of unanimous report of the Internal Security Subcommittee of the Senate Judiciary Committee, released August 24, 1953.
- Title:** Atomic Weapons and American Policy.
Author: Oppenheimer, J. Robert.
Publication: FOREIGN AFFAIRS, July, 1953, p. 525-535.
Annotation: Deals with the arms race in which the United States, Britain and Russia are the principal contestants, discussing

RESTRICTED
SECURITY INFORMATION

three changes that the author feels should be made in our present policy regarding atomic energy. (Reprinted in U. S. News & World Report, July 10, p. 48-51 and in Bulletin of the Atomic Scientists, July, p. 202-205).

Title: Must We Live in Fear?
Author: Miller, George H., Captain, U. S. N.
Publication: UNITED STATES NAVAL INSTITUTE PROCEEDINGS, July, 1953, p. 759-766.

Annotation: An analysis of the geopolitical philosophy of the landman (e. g., Mackinder) and that of the seaman concludes that a review of their geopolitical outlook by U. S. citizens would give them an appreciation of the strength that is inherent in our maritime position.

Title: Guerrilla Warfare As It Really Is.
Author: Roselli, Auro.
Publication: HARPER'S MAGAZINE, August, 1953, p. 77-82.

Annotation: An explanation of the nature of guerrilla warfare, which the author discusses under the three stages that make up the cycle of partisan warfare.

Title: Don't Get Hysterical About Guided Missiles.
Author: Gallery, D. V., Rear Admiral, U.S.N.
Publication: THE SATURDAY EVENING POST, June 13, 1953, p. 31, 151-154.

Annotation: The former Assistant Chief of Naval Operations for Guided Missiles discusses weapons of the future; argues against those who claim that these weapons make our present armed forces obsolete and points out that our global strategy plans for the defense of the Free World depend on control of the sea.

Title: Logistics — What Is It?
Author: Eccles, Henry E., Rear Admiral, U. S. N. (Ret.)
Publication: UNITED STATES NAVAL INSTITUTE PROCEEDINGS, June, 1953, p. 645-653.

Annotation: A discussion of the meaning of "Logistics" and its place in the Naval establishment for the purpose of providing

RESTRICTED
SECURITY INFORMATION

a background that will be helpful to those who are trying to solve existing logistical problems.

- Title:** The Mediterranean: Pivot of Peace and War.
Author: East, W. Gordon.
Publication: FOREIGN AFFAIRS, July, 1953, p. 619-633.
Annotation: Deals with the political interests of Britain, America and Russia which focus on the Mediterranean; reviews past experiences and discusses the strategic problem of Western defense in the area.
- Title:** Now Russia Threatens Our Sea Power.
Author: Eliot, George Fielding.
Publication: COLLIER'S, September 4, 1953, p. 32-36.
Annotation: Reports that experience with Russian mine warfare in Korea has resulted in significant progress in defensive preparations by the U. S. Navy to meet the greatest mine threat it has ever faced.
- Title:** The Soviet Union.
Publication: CURRENT HISTORY, August, 1953.
Annotation: This entire issue, devoted to the Soviet in an attempt to explore its totalitarian nature, is of special interest. Articles deal with The Background of Revolution, Soviet Philosophy, The Geographic Setting, The Soviet Peoples, Soviet Economic Policies, The Leaders of Soviet Russia, and The United States and Russia. A chronology of important events inside Russia from 1917 to date is also of interest.
- Title:** The Principles of Sea Power.
Author: Carney, Robert B., Admiral, U. S. N.
Publication: UNITED STATES NAVAL INSTITUTE PROCEEDINGS, August, 1953, p. 817-827.
Annotation: Discusses sea power under two general categories: one that is primarily national in character, the other international in character developed to furnish security for

RESTRICTED
SECURITY INFORMATION

a group of nations and warns that "freedom" will perish if freedom loses its mastery of the seas."

Title: Air Strategy.
Author: Ernle-Erle-Drax, Reginald A. R. P., Admiral, R.N.
Publication: JOURNAL OF THE ROYAL UNITED SERVICE INSTITUTION, May, 1953, p. 237-247.
Annotation: Stresses the need for agreement among the three services and presents a hypothetical conference in which the airman, the soldier and the sailor state their cases with an arbiter summing up principles on which all might agree.

THE NAVAL OFFICER IN INTERNATIONAL RELATIONS

Extracts from remarks on
The Term Paper Orientation

Delivered on
Friday 28 August 1953 by

Rear Admiral Thomas H. Robbins, Jr., U.S.N.

Traditionally, naval officers have always been well versed in international relations. The very nature of their profession has demanded it. They have had to know thoroughly the current international situation, American foreign policy and international law. Their activities in peace as well as in war — as instruments of diplomacy, or as agents of a belligerent or neutral nation concerned with control of the seas — have kept naval officers intimately involved in international affairs and have required them to exercise that quality of judgment which should stem only from a thorough understanding of those affairs and an appreciation of the role of naval activity therein.

While it may be true — in this day of rapid communications — that independence in international negotiations such as was once enjoyed by Commodore Perry no longer obtains, it is equally true that the necessity for a naval officer to be thoroughly grounded in international affairs is just as great today as it ever has been.

You may be interested to learn that a recent examination of the duty assignments of all naval line Flag Officers showed that:

(a) 36% of them are required to deal with international affairs on a day-to-day basis as a major part of their duties.

(b) an additional 9% are similarly engaged in a substantial portion of their duties on a day-to-day basis, and

(c) another 8% must deal with international problems as a major or substantial part of their duties from time to time.

Thus 108 flag officers, or 53% of naval line Flag Officers carry with them responsibilities in international relations in one place or another throughout the world. And of course many of the officers in the other 47% of the billets will at some time or other be rotated into those billets which carry with them responsibilities in international relations.

Warfare is a complex art containing many elements — political, economic, and sociological, as well as military — all closely inter-related and interacting. A real understanding of any of these elements can be had only in its relation to all the others and to the complex whole which they constitute. As officers of the armed forces, we are, of course, charged specifically with the responsibility for only the military element of any warfare in which our nation may become engaged. Nevertheless, we can gain an understanding of the significance of the purely shooting element of such warfare only if we have the necessary understanding of the other elements as well. We must have a basic knowledge of international relations as they could be. We must devise a strategy to maintain or bring about the conditions which we desire. Finally we must understand the ultimate purpose of what we are trying to do.