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**The Uses of Intelligence**
**David C. Richardson**

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# THE USES OF INTELLIGENCE

**David C. Richardson**

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**Admiral Richardson spent his career in the Navy in a variety of command and staff positions, including command of the U.S. Sixth Fleet in the Mediterranean and deputy command of the Pacific Fleet. Since his retirement he has been acting as a consultant in electronic technology applications, serving on the Defense Intelligence Review Panel, several panels of the Defense Science Board, the Navy Space panel of the National Academy of Sciences, and the C³I panel of the Naval Research Advisory Committee. So his viewpoint combines the field commander's perspective of tactical warfare with the outlook of someone engaged in prodding Washington people into doing the right thing.**

**Richardson.** Since you heard Mr. Snodgrass last week — and I am acquainted with him although he is not acquainted with me — I might say that I have watched actions that took place in Congress with some concern. Let me just observe that it's easy to seek solace in reflecting on the unresponsiveness of various organizations within the Defense Department and within Congress itself, not to mention the Office of Management and Budget. But when you really come down to it, if the professional military did a good job in conceptualizing their new needs and explaining the relationship of proposed new programs in the context of what we already have that we need to update or improve, I think we'd get a much better response. So while I can find some blame in the review structure, I find a lot more on the part of our own professional Navy people. And I attribute that to shortcomings in our ability to use intelligence.

That's really what I want to talk about today. I think a lot of attention needs to be given to the subject of packaging intelligence — marketing it, if you please — in ways that make it much more useful to operational communities, to the command and control authorities. I rather think that one problem is that there is a structural gap, which I would close not by more structure, but by the education process, between the operational user and the producer of intelligence. This is an area which seems to be deficient — an area roughly described as net assessment. I would like to suggest some things today that might lead toward additional focus in that area.

When your professor invited me to come up here I wondered what he had in mind. Then, harking back to our experiences together as members of the Naval Research Advisory Committee's $C^3I$ panel, I remembered making remarks to the effect that to make change, to bring change into the existing order of things, it's necessary to defeat the system. The system itself unfortunately does not engender change. There are all sorts of reasons for that — good solid understandable reasons. But it simply means that we cannot rely on an organization to automatically update itself. All the tendencies are in the other direction — the sacred cows, the rice bowls, all those phrases that we use to express the power of an organizational structure with vested interests to prolong a particular project or weapons system long after it has ceased to be pertinent to the problem. The problems change; they change a great deal, and that change is reflected in intelligence. But our systems don't change nearly rapidly enough. Intelligence is, I think, perhaps the most important factor in forcing change.

Now, there has been considerable emphasis recently on improving the processes of development. We have, in my view, long suffered from the McNamara management approach, and that has been quite harmful. It has produced mindsets within the military that are far more comfortable in program managing and are not really oriented toward combat managing. In World War II it took us a year, the whole first year of that war, to find out who our good combat commanders were — we won't have a year in the next war to thrash our way around the system that peacetime has produced, nor to find the leaders who can fight forces. After the war we tried to institutionalize the selection processes, so that we could keep the kinds of people in the forefront we thought were good combat commanders. But a great many years have passed since the end of World War II, and we've gravitated away from that. Even some of the basic concepts that were so fundamental to achieving victory in war have since disappeared.

Some of our developments in communication, paradoxically, have aggravated that decline. For example, the old idea was that the combat troops — the commanders in the field, the men at the point of the spear — were the ones who were to be supported by the command structure. But I went to a war in Vietnam where just the opposite was taking place. Over half of my staff effort as Commander of Task Force 77 — the permanent carrier task force commander in the Gulf of Tonkin — during 1966-67 went into feeding information to computers back in Washington, for systems analyses that were supposed to help us, but didn't. Often we found that the data that went back were dumped back on us with the requirement to explain their meaning. We have changed the focus from serving the troops to serving Washington. In recent times this has led toward design-to-price

approaches — "Here's so much money, you build the best airplane or ship or whatever you might be working at, to fit within that price range. And don't worry too much about whether it's adequate or pertinent to solving the military problem or not."

**Oettinger.** But surely you're not advocating no control of the military budget.

**Richardson.** Oh, no.

**Oettinger.** I trust you will return to that point.

**Richardson.** This is a good time to return to it. I understand exactly why some of these constraints were put on us, and I support wholeheartedly the need for constraints. But at the same time these complex weapons system development processes, which result in weapons taking ten to twenty to twenty-five years to field that could and should be fielded within five to eight years at most, simply end up providing us, as brand-new weapons, weapons that are in fact obsolescent if not obsolete. Now there must be some middle ground between unrestrained statements of requirements — the gold-plating sort of thing — on the one hand and paralysis through analysis on the other.

When Mr. Reagan commenced campaigning for the presidency I was quite interested in getting an effort started to look into the procurement processes in the Pentagon, and I thought the time to start examining some case histories, even to tentatively pick the kind of people you wanted to look at the functioning of the Department of Defense, was right then, long before the election. That wasn't done. I have since pressed this viewpoint in Administration circles, and I'm told that Mr. Weinberger, to use the Navy example (I'm talking mostly about the Navy, though it happens to be quite typical of other Services as well — I think I can speak with authority about the Navy, whereas I really can't about the other Services) — Mr. Weinberger has stated that the Secretary of the Navy will no longer continue to be an Assistant Secretary of Defense for Maritime Affairs. Decentralization of much of the procurement process would take place, and there will be an opportunity at least to cut the enormously complex review processes, cut the time, and save one awful lot of money in that process, because time is money.

**Oettinger.** What does it mean that he's no longer Assistant Secretary of Defense for Maritime Affairs? Does he become the sole authority for naval procurement rather than dealing within the Office of the Secretary of Defense, or what?

**Richardson.** Well, I don't know precisely, and I won't try to interpret it too closely. My interpretation is that those things which are common and of general interest to all the Services functioning in the unified command structure will be handled subject to the approval of the Secretary of Defense. But a great many things that need not have unlimited scrutiny in OSD, systems and weapons that are peculiar to a Service, or predominantly so, will be determined by the Secretary of the Navy. He will have a great deal more authority over his budget than he has had. That's my interpretation. But of course it's much too early to see just where Weinberger intends to draw this line, and I'm sure he doesn't see that yet either.

**Oettinger.** In that process, while perhaps gaining some efficiency by shortening procurement time, wouldn't you run the risk of recreating the things which the centralized structure was created to cope with in the first place — incompatibility of the weapons, intelligence or command systems that cut across services for use by unified and specified commanders?

**Richardson.** Your question implies that there's only one way that that can be done: the way it has been done.

**Oettinger.** Well, what are your thoughts for an alternative?

**Richardson.** I must simply observe that the system we have now is so complex that many people who have neither understanding nor responsibility other than to chop on a program have in fact the authority to delay it, or send it back for further analysis of the need. It is just about impossible to get any project through the system at this point. I'm reminded of the old gunnery instructions, back before World War II. A problem would occur, and new safety rules be written. There would be a terrible explosion and then a whole new bunch of safety rules, then something else would happen, and more safety rules, all justifiable. But a point is reached where the constraints are so great that you just ought to zip it up and forget about it. I think it's possible to aggregate a whole bunch of regulations, procedures and so forth, each of which is understandable in the context of a particular problem that arises, and end up with an aggregate that is counterproductive. Each is good, within its limited sphere for its limited purpose, but you add them all together and you end up with something that's just far too complex to manage. There is the point of diminishing returns.

All my experience, in just about everything I've done, leads me to support the idea of decentralization — centralization of authority, yes, for certain limited purposes, but decentralization of execution, and the farther down the better. I saw this as a squadron commander in World War II. I've seen it time and time again under circumstances that were quite similar. An example. I commanded a fighter training squadron while recovering from wounds. Our technical resources were being drained away, and we found ourselves closing in upon ourselves. Our few remaining competent engineers were concentrated "in the barn" to work together. When some fine gentleman demonstrated the foresight to decentralize, to focus his few remaining top-quality people on training others, overseeing their work, then our availability began to pick up again. Decentralization is very important; and I think it can be applied without necessarily undermining the clear requirement to come up with compatible systems across the total military establishment.

One of the things I've been maintaining here today is that, if we make good and proper use of intelligence, a great deal of the development and procurement process problems will be alleviated or disappear. I think, though, that in this entire process it is absolutely essential that we conceptualize our weapons — formulate their characteristics — much better than we have in the past, and I view intelligence as being a principal factor in that

effort. I participated last summer in a Defense Science Board study group. One of the groups worked on the responsiveness of industry to the Defense Department. And it listed all sorts of things that could be done to facilitate industry's responses, to cut the time and so forth. The other end of that problem is conceptualizing the weapons, and it is the most important part. That is not a Defense Department organizational problem — at least not stemming from the Office of the Secretary of Defense — and it is not an industry problem. It's a problem of the professional military people themselves. And so I end up blaming ourselves most of all for whatever deficiencies we have, despite all the other problems we encounter.

**Oettinger.** What do you mean by conceptualization? In the prior discussion, DeLauer's presentation and others have posed the question of what a specification is, and whether you go into all the details of prescribed methods or just specify a function and then let industry worry about the details of how to perform the function. How do you relate your notion of where the military failed to conceptualize to that spectrum — what a good specification or a good conceptualization would be, and who has responsibility for what part of it?

**Richardson.** I'm going to answer your question by referring to how the Soviets do it. My answer, how we do it, is guided partly by that and partly by ourselves. The Soviet navy had the job of becoming a first-rate navy, able to contend not only with the US Navy but with the British, French and Italian navies as well. And how did they do it? Well, they studied our Navy. They studied the US, British and French navies very carefully. They found the weaknesses in our naval weapons systems as they viewed them. They looked at the promise of technology and in particular electronic technology. And they came to the view that we were overly dependent upon radars, which are electronically very noisy, and on lots of communications activity. So they designed standoff weapons that could exploit, through their sensor systems and their terminal guidance systems, our great dependence on electronics. They developed some fairly simple, basic concepts. One such: sink the carriers.

Take a look at our two basic Navy missions: project power, exert control of the seas. I don't know how anyone can design to such broadly stated missions. I have no quarrel with such a statement of mission provided there is a very definitive strategy that supports it, so that one can make a net assessment and see whether the system is adequate. I can envision the US Navy today, within a set of strategy parameters, doing a very creditable job with very low loss rates. But I can envision that same Navy required to work in a much broader geographical area suffering unacceptable losses. As we go through the development processes, then one or two decades later, if our basic concepts for employing forces were sound, and if we progressively eliminated the weaknesses in the earlier systems through systems improvement, we'd end up with a very effective force as compared to what we would have following a policy which simply uses new technology to do old things a little better. It's my claim that we have for much too long simply updated old ways of doing things — we've not really taken a hard look at the nature of our present problems

stemming from Soviet systems development and the nature of the problems we can project. We haven't conceptualized in that direction, and we have forgotten some things, some of the lessons we once learned.

**Student.** It sounds to me, though, as if your proposed decentralization is contradictory to rethinking the concepts. I would say that, before you have operational decentralization, you really do need, as you say, an overall policy that puts each operating part in its place. I really don't see how you could ask the separate services to rethink their concepts without that. To me the problem is that we're lacking that overall concept of what we should be doing, and the reason we continue doing what we did in the past is precisely that it is decentralized, and the Services have no instructions to do anything else.

**Richardson.** Well, it depends on what the central authority does, and how it functions. I have sat in a good many joint positions. I was a member of the Joint Staff in 1949-52 during the formulating days of NATO, and worked with that. I was the Navy's planner on the Joint Staff. The Joint Chiefs of Staff papers that go through are handled first by action officers, then by joint Service involvement at the planners level — the Air Force, Army, Navy and Marine Corps planners sit down and work the paper over. Then, when it's acceptable from their viewpoint, it goes to the Joint Chiefs, who either red-stripe it or not. I've sat in that position as the Navy's planner for several years. It's been my experience that the Services are the wellspring of ideas and of general competence. Time and time again I've seen individuals in the joint structure go to the Services to find the meaning of things, to get things interpreted, or to get understanding of events or matters which the joint structure just doesn't handle very well. I don't disagree at all with the point you're making; I may disagree with how you get there. I see no reason why we need to be incompatible in our Services' force structures if the upper echelon structure is constrained to doing the things it needs to do: providing guidance, adapting and adjusting strategy development to the realities. But the realities must be presented by the Services — the upper echelon itself can't do the whole thing. And there is a balance that must be struck between authorities down the line, with all their human and equipment realities, and those at the top.

**Oettinger.** You've said a couple of things I'm finding hard to reconcile. On the one hand you express a desire for more effective decentralization, the notion that ideas well up in the services, etc. On the other hand is the notion that people have a tendency to do the things they've always done. Now, are the people who do things the way they've always done them the same ones who are also innovative, or is that a difference in levels? That's question number one. Number two: you say that general objectives like projecting power are too vague, which seems to imply a need for sharper guidance. The objective is to sink carriers (which is the example you gave from the Soviet navy) and yet, moving to that level of specificity from the center would seem to go against the grain of the decentralization. Could you try to sharpen where you see the balance a bit more concretely and explicitly?

**Richardson.** The planning structure within the Navy, the Air Force and the Army these days is pretty much a mirror image of the structure within the Office of the Secretary of Defense itself. An enormous amount of time and energy is spent by the higher-ranking military people working with their OSD counterparts. The nature of the current development process is so time-absorbing for our top people that they have very little time to think within the context of their services. They seem to be caught up in a mechanism that just eats up their time, their energies, their human resources, and that is part of the problem.

**Oettinger.** You're saying that there's no conceptualization because nobody has time to think beyond shallow generalities like projecting power?

**Richardson.** That's right. And they end up justifying the same thing year after year. They're doing it over and over. They're working three budgets simultaneously, and the time to actually work out these problems is simply denied them. Another feature: in my own experience I have not seen very many good new things come out of Washington. The practical ideas largely come out of the fleet — I think my Air Force and Army colleagues would make similar remarks. Organizational structural changes are needed to reflect this. There is some evidence of such change in the Navy right now. We have two new directorates, Naval Warfare and Command/Control — Op 094 and 095. By virtue of their assignments these two organizations are more in line with fleet interests, and are better positioned to reach an understanding with our forces in the field.

The fleet has a structure that's supportive of training and keeping up individual systems. What we call "type commanders" are responsible for all the ships or aircraft types. The Commander of Surface Forces, Pacific Fleet, is responsible for keeping the surface types of ships in good shape. The Carrier Air Force, Pacific Fleet is responsible for the aircraft carriers, the aircraft, training, maintenance, people, everything that goes into that. The numbered fleet commander is responsible for blending aircraft carriers, cruisers and submarines and working them together as a coherent group. The commander in chief of the fleet is the boss of both kinds of people — the type commanders and the fleet commanders. That works out quite well in getting the most out of what we've got in the operating forces. I think that same sort of arrangement needs to be set up in Washington. I think the fleet voice in Washington has to be much stronger. In World War II we had the COMINCH, the Commander in Chief, in Washington, who was also Chief of Naval Operations. He spoke for both. I don't support the present National Security Act — that is, I don't think it's wise. I think a very significant part of our problems has come from the structure that we have, and I think it should be modified.

**Student.** I wonder if our national strategic doctrine has caused any of the problems you've identified. The sink-the-carrier sort of philosophy sounds a lot more like John Foster Dulles and brinkmanship. Now we're talking about multiple options, keeping our options open — the surgical strike, which tends to put the emphasis at the presidential level — making important decisions. Is that part of the problem?

**Richardson.** No. Strategic warfare is quite a different problem. Most of my remarks have to do with tactical warfare; I'm not addressing strategic warfare at all. A whole set of influences that bear on strategic warfare are vitally important and require quite a different approach, and I don't quarrel with that approach.

**Student.** You mentioned that your time was diverted in Vietnam from supporting the troops to supporting Washington. Was there a corresponding dilution of your authority? Was there interference with how you ran your end of the business?

**Richardson.** There was very strong interference. That was a programmed war, it was not a war run by commanders. If you were able to review the Joint Chiefs' decisions, their recommendations to the Secretary of Defense, you'd find that of any ten recommendations one or two might be adopted. I've not seen a correlation of JCS recommendations on that war with directives that were issued, but in 1968 I saw a tally of the recommendations compared with those that were adopted. And very few of the Joint Chiefs' recommendations in that time period were ever adopted.

**Student.** Well, doesn't that reflect a strategic, political type of thinking — decisions being made that are not basically considered tactical?

**Richardson.** In that case it certainly reflected some strategic considerations, and they are arguable, and could be identified, could be approached in terms of risk versus reward. But mostly, in my view, it reflected a programming approach to war. We'll spend a billion dollars and we'll get so much result. If we spend two billion we'll increase that result by so much, and if that's not enough we'll spend three billion and that will give us so much more. What that approach ignores is that the other fellow is doing things too. And you find that, with time, the things he's doing may be more useful to him than the things you are doing are to you. Your cost of doing business is going up and up and up, and the opportunities that you once had, had you taken them, are no longer available to you. I'll address that more specifically as I go on.

**McLaughlin.** I want to return to one point. It seems to me we're talking about two different things here. One is organizational — the technical value of field weapons, considerations of timeliness, economy. I thought I heard you saying something much more important, however, in terms of trying to define mission statements. You seemed to be talking about a value doctrine. Recognizing the constraints or burdens on the Joint Chiefs, still it would seem that each of the services has its center, in one form or another. I still find it hard to separate tactical from strategic. If the problem of defining the mission of the fleet, in terms of projecting force or whatever, has got to come back to the White House, well, what do we have a fleet for? Am I properly attributing this? Are you saying that besides all the technical problems of fielding the system, we have a doctrinal problem of figuring out what the military, what the Navy should be doing?

**Richardson.** I guess that brings me back to the role I think intelligence should play — a role that I have seen it playing within the last couple of years that it simply did not play at

an earlier time. That makes me very hopeful about what I think are improvements in the situation.

But let me address your question. I mentioned earlier that we need a new kind of intelligence that links the operator and the intelligence community, and I liken that to a net assessment process. The problem I'm talking about is our Naval conventional forces in the context of Soviet capabilities. A way to make that net assessment is to study the systems the Soviets have fielded, and seek out their weaknesses.

Next, we need to examine all the options a task force commander at sea has or could have to defeat their total surveillance system plus the inherent surveillance capability that's required to put individual weapons on target, the total command and control system and the weapon itself. In other words, I envision exploiting our knowledge of a hostile weapon system in the context of its total functioning, from surveillance right on through to the processes in command and control, target selection, identification, allocation to strike forces, the weapons themselves, and finally the terminal guidance system of their missiles. What options are available to us initially? As their strike systems go through time — as updates occur and new systems replace old systems over 10, 15, and 20 years' time — they develop increasing capability to implement their strategies. As we look at these various updates and their systems, and consider the operational initiatives that remain to us, what do we see? Are we getting relatively better? Or are our alternatives shrinking? Are new equipments enabling us to contend better, or are we losing ground?

That net assessment tells me I've got some things to do. It tells me, first of all, that if my developments and my new weapons are not keeping me at least abreast, or hopefully ahead, I'd better be looking at my strategy. When I start looking at my strategy, and start sizing forces calculated to achieve certain strategies, I find myself thrown back again into an assessment process. I may be led to the view that I can successfully do a smaller job. Or else I need new forces, or new approaches. Out of that kind of process I can see how to make judgments about what I can do now — what I need to do to improve my position, and what sort of constraints weigh on me until I'm able to get there. I don't see any other good way to get there, I haven't been able to think of any other good way to do it. We simply cannot continue to blithely accept worldwide ocean commitments — and we certainly have one in the Northern Indian Ocean that's in that category — without regard to our capabilities to sustain ourselves there in combat action.

**Oettinger.** You have mentioned a number of caveats about what you're describing as conventional and surface warfare, and earlier you talked about the National Security Act. What I hear you say was that there's a problem with it. My inference was that the problem you see is one of excessive centralization, a reduction in the autonomy of the services. Now other people who have talked to us, perhaps because they've come to it more with a strategic or maybe even theater warfare viewpoint in mind, have tended to argue the opposite — that the problem with the National Security Act of 1947 is that it hasn't gone far enough in reducing the influence of the services over doctrine and training and so forth, so that it may be difficult to field joint operations, whether they're unified or international commands. So are you saying that the role of the surface Navy is essentially a tactical one, an Indian Ocean one, say, and that therefore the submarine problem might

be a strategic one? That, from that point of view, the arguments that the National Security Act doesn't provide for enough centralization might be valid, but that the range of tasks in the surface Navy is essentially tactical and one ought to deal with that in a somewhat different way, including more decentralization, less work in the Office of the Secretary of Defense and more work delegated back to the services as it was before the National Security Act? Or am I misreading you?

**Richardson.** I think you have to make a distinction between whether you're talking about strategic warfare, characterized by nuclear weapons expenditure, or tactical warfare, which may have nuclear weapons but most likely does not. I'm talking about triservice tactical warfare, and the contribution that each of the services makes in that context.

I'm rather sorry that I've gotten diverted away from intelligence, and into struggling with the organizational structure of the Defense Department. My point at the outset was that, because this is a complex and difficult subject, there's no simple answer. The complexities of centralized command and control have created an organizational structure that has moved away from the wellspring of understanding, comprehension, ability to really work an Air Force, Army or Navy problem — or, for that matter, contribute to working joint problems. The wellspring of professional competence is there, in each service — not in the echelons that have been created up the line. Consider the Defense Intelligence Agency, for example. The tendency has been for the services to do more and more of the analyses of things pertinent to them, then contribute them to the DIA, rather than for the DIA to do those analyses itself. Those things the Defense Intelligence Agency does itself, according to many of my associates, are not as well done as they ought to be. This is arguable, or course. My point in bringing it up is that, if we considerably increase the emphasis on the role of intelligence even in these currently prescribed development processes, they become less inhibiting than they have been. That's the point I think is important. And I think things that we can and should do in making the intelligence more marketable, more comprehensible, can contribute to alleviating the problem regardless what structure we end up with.

I am a fairly recent convert to intelligence. I had been a rear admiral for two years when I was ordered to the Gulf of Tonkin, and really gained my first understanding of intelligence then. Today, fortunately, conditions are not as bad as they were then. But they are nowhere near as good as they should be, for all kinds of reasons. And so an area that needs a great deal of emphasis, in my view, is training people in the use of intelligence from an early stage. I thought intelligence meant pictures of airplanes and ships and descriptions — sheets pasted on the bulkheads of ships — that you looked at as you went by them, and maybe it also meant recognition. But I did not understand how much is involved in command and control, in surveillance, in the total functioning of weapons systems, until I was down there in the war and was cleared into some intelligence knowledge that had previously been denied to me.

I might tell a short story in that regard, about a young maiden who was happy as a lark until, one day, she came home and her chin was in her lap, and her dad said, "My gosh, what's wrong with you?" She said, "Well, Dad I have a boyfriend, and we're Catholic,

and he's not, and we can't get married. Dad said, "Oh no, you talk to him about it, perhaps he'll join the Church." She thought that was a good idea, so she did, and she was again happy as could be — went around for about a month all smiles, and then finally one day her chin was down in her lap again. "Oh gosh, what now?" She replied, "Dad, I oversold him. He's going to became a priest." I guess what I'm saying is that I may be oversold too — I've become a high priest of intelligence; it isn't necessarily a good thing, but it certainly absorbs my time.

I'm going to walk you through some of the experiences I have had during my conversion, because I think that, beyond the personal insight they provided, some of them have had broader significance. I hope to leave four or five ideas with you on how intelligence can be a much more useful tool than it has been in alleviating even the current procurement processes.

My first real exposure to intelligence, as I said, was in the Gulf of Tonkin, and it was courtesy of my Operations Officer, Captain Robert Hunt. Bob Hunt was a very smart fellow and he said something that's been fundamental to my thinking since: if you want to screw up the other fellow, find out how he functions and focus on his weaknesses. Our job was interdiction in North Vietnam. I made Bob targeting officer, reasoning that if we could select our targets more wisely we could double or triple our effectiveness. Bob pored over photography, studied it full time. I turned his Ops Officer job over to the Assistant Ops Officer and Bob did the targeting. Pretty soon he developed a general concept for targeting which focused our resources against targets where we really accomplished something more significant than by previous less systematic approaches.

To give you just one example: it seemed apparent that when striking a rail line if, instead of hitting the big bridge in the middle of a town where they could cross with boats and do other things, you hit four or five smaller rail structures between towns, they would be forced to send work crews out and fix the outer ones before they could get to the inner ones, so that it took them much longer to get back in commission. There was little or no antiaircraft power out there, so your costs were lighter, the threat was lower. That made a lot more sense than hitting a big bridge in town. We were working against three modes of transportation: rail, highways, and barges on waterways. We produced the system, and the Joint Chiefs sent out a study group that looked at the targeting we were doing, and they were very complimentary about it. I converted what had been a photo distribution group in Subic Bay into an analysis group, and had two individuals, an intelligence officer and an operator, working together in constant interaction, so that all the operators and all the intelligence officers could come in and work with them, and afterward go back and each contribute in greater understanding. My point is that in this instance we developed an office that bridged the gap between intelligence and operations. And it seemed to facilitate communications. It made this particular system a good system, the best we could conceive of.

Another very large factor down there wasn't intelligence at all, it was the weather. Very few people who haven't been there can understand the incredible difficulty of running any air operation in that area. I did charts of the days of the week and months, and we recorded days when the ceiling was 10,000 feet or better and visibility was five miles,

which is the minimum for any attack, as being good days. From about mid-November to mid-May you got three to five days a month at most that had as much as one period of four hours with those visibility conditions — if you were lucky perhaps you'd have all day. In the summer months you might get up to eighteen to twenty days when you could fly four, six or eight hours, and that's all. So the weather would often close in. Any interdiction system is defeated if you can't sustain it. That feature too must be borne in mind by the strategists back in the Pentagon, who have to be aware of such things in order to make the kind of decisions they do.

Well anyway, when I came back to Washington in 1967, I went to Admiral Moorer, who was chief of Naval Operations at the time, and I said, "I know how to figure out whether we're winning or losing in Vietnam interdiction as far as the Navy carrier task force is concerned." And he said, "Fine, go to it." So I got together with a few people who had been on my staff, we gathered the photography, and we looked at the targeting opportunities that had existed a year earlier, six months earlier, and we saw the things the North Vietnamese were doing to reduce their vulnerabilities. They were making bypasses beneath the waterways. When a bridge was out they simply built themselves a little concrete or stone structure just beneath the surface of the water and crossed that way. Bypasses, boats upstream — thousands of ways of defeating the effects of our attacks. Each target complex was being made less vulnerable to inderdiction attack. We portrayed this. And we looked at the increasing capability we were getting with our newer aircraft, aircraft updates, and a more adequate supply of bombs — we were once in very short supply — and we weren't winning. That's what this picture showed. It showed that the cost of doing business was going up, the risk was going up, and the returns were going down. Therefore we'd better make changes in our way of targeting and in our entire approach to that job.

I turned that over to Admiral Moorer, and they did set up a group in the Joint Staff to do targeting — but I don't think they ever had a feel for it. I think you can establish an organizational structure, but unless the people actually have a feel for it somehow it doesn't come alive or produce anything. Anyway, so far as I know, it added up to nothing. Nevertheless there was at least a method, an assessment of sorts that anybody can take exception to. They can bring in new evidence to say "Ah, yes, but you ignored such-and-such." The method provided a basis for discussing the strategies we were employing. That was premised on one of Bob Hunt's ideas on using intelligence — find out how the enemy functions and focus on his weaknesses.

I was sent to Sixth Fleet in August 1968, and I was there for two years. In fact, the first great worldwide Soviet exercise, OKEAN 70, occurred in the summer of my second year there, a couple of months before I was detached. The object in sending me there was to incorporate lessons learned in Southeast Asia into Sixth Fleet operations. And we did several new things. We integrated surveillance by integrating the several informational sources we had on our flagships. The sensors differed — radars, radio stations, other classified means of surveillance. We had a VQ squadron in the Mediterranean, for example — engaged in peripheral reconnaissance, electronic intelligence. We integrated these kinds of things into a single information collection system, and all the information

was integrated on the flagship. When the Director of Naval Intelligence saw what we had done he said, "Would you let us put that ashore in Rota?" For five years there had been philosophical treatment in Washington of an Ocean Surveillance Information System, but no one had been able to translate the ideas into operational reality. I agreed provided I could keep tasking control of the new facility, and that's what was done. That later evolved into the Ocean Surveillance Information System.

For another first we broke the bonds that prevented us from getting good quality photography for satellites. Again, the reasoning was that if you give me three to five days I can solve my own problem, but if you expect me to be effective from the outset against any contingency in the Mediterranean basin, I've got to have quality photography in order to have my plans developed in advance. Enroute planning was something our pilots were very up-to-date on; we understood it and could do it. So we broke the logjam, and for the first time got quality photography of areas that might later prove of interest.

Last year Admiral Inman spoke to this class about human intelligence within the Navy; I found that Humint contributed very significantly to Sixth Fleet operations. I disagreed with him when he later decided to disestablish that unit; although I understood why he did it, I think it was a bad decision. I never have agreed with it, because we were getting a great deal of very good information through sources like that at a fraction of what it would have cost us otherwise. Admiral Inman's stated view was that the information that was being produced was of a relatively low order of importance. Well, that depends on how you look at it. I found some of it exceedingly important, and some of it had very direct and immediate effect on our approach to some of our operational problems. I guess I shouldn't go beyond that for security reasons, but if you want to let your imagination wander across several fairly obvious areas, you probably will think of some of them. We were able to get very significant information from those sources that we could not readily get from any other.

**Oettinger.** May I play back to you what you've said so far, and see if you put in my head what you hoped to put in my head? First, you consider it important to collect intelligence by a variety of means, not just in a technical sense; integrating it is something you stressed. The bits and pieces that don't come together don't make the parts add up to a useful whole — that's still within intelligence collection and exploitation. Then you've got to know what you're collecting it for, and that seemed to be the point of your story about your assistant; the notion of looking for weaknesses and ways of exploiting them is, then, the point of intelligence collection. Finally you end up in some way guiding the intelligence process itself. But then in discussing its use you went fairly quickly past what strikes me as another important point: your feat of putting the operations and the intelligence functions together, so that interpretation and use and so on would be guided not just by the training or outlook of an intelligence officer, but also by what the operating commander or his delegate thought would be useful, and that was a key element. Is that a fair summary of what you wanted to put across?

**Richardson.** Yes it is, indeed. I talked about the necessary intimacy of operations and intelligence, and then the particular way I brought it about in Vietnam, by marrying the intelligence and operations people and facilitating the flow of information between them, imparting to the intelligence community a feel for what we operationally needed and wanted, thereby guiding their efforts to be responsive. And the other aspect was integrating all sources of information to a common purpose, to the extent that we could, for all the reasons we know are important. And that, of course, is what is fundamental to the concept of ocean surveillance information, and one part of that is that human intelligence has so much to offer. Still another initative in improving intelligence utilization was starting a set of fleet exercises called National Weeks to test and perfect our ability to conduct surveillance. We constructed our own opposition, gave them airplanes and had those airplanes simulate missiles, and we either got wiped out by the incoming missiles or aircraft, or else our surveillance served our needs and we were able to do things in time to defeat them. We really gave ourselves a total test.

**Oettinger.** Let me then test a couple more points. Something that has been reiterated, particularly by General Cushman but also by our other speakers, is that the capabilities really don't make much sense if you don't exercise them. Now you too have stressed the importance of exercise. Others have argued for evolutionary systems, where you don't try to plan on everything in a total top-down fashion, but instead speed things up by having bits and pieces and then integrating them by finding out where the problems are and then doing something ad hoc to pull them together. It seems to me you touched on that. There's one further point you haven't gotten to, which I thought I heard you promise earlier: the notion that, if you do things right and exploit intelligence properly, the organizational matters that I misled you into earlier don't matter so much. I'm not sure I understand yet why that's so.

**Richardson.** Well, the intelligence we're now talking about is the operationally significant, time-sensitive type of intelligence. It differs from the type of intelligence that is so useful in Washington in conceptualizing weapons, i.e., scientific and technological intelligence. As I indicated earlier, both types come together in the evolution of a particular threat system across a span of ten or 20 years. The scientific and technological intelligence help us understand the operational procedures, the doctrines that they practice. It contributes to our understanding of the total functioning of their systems — that's important. That sort of thing starts out, though, with operational intelligence portrayals of what takes place in Soviet exercises at sea, followed by technical characteristics, derived from many sources, of the capabilities that are typical of a particular set of weapons. One must then add science and technology assessments, thus projecting ahead. It's the combination of operational and technical that is needed in Washington: their operational policies, concepts, doctrines, procedures, and then the technical means that go with them. But those are two different types of intelligence. And I'm talking now predominantly about the operationally significant intelligence.

**Oettinger.** That's clear. I'm still missing the point, though, why adequate intelligence gives you an organizational structure in which those problems are if not resolved, at least alleviated.

**Richardson.** We have systems in development that started out with threat assessments. We have program managers in charge of bringing those systems along. In this management climate the predominant features that bear on the program manager's effectiveness, that describe whether or not he's promoted are, first, "Is it on schedule?" And second, "Is it within cost?" This makes him — no matter how good a guy he is, how knowledgeable he is — hostile to any new intelligence or any further resolution of heretofore tentative intelligence. The last thing that program manager wants to hear is that his system is not completely responsive. So he's not receptive to new enemy information, and that is an institutional ailment which I think has to be corrected. You can find all the right words in the SECDEF procurement directives that contradict what I have said, but the fact is he knows he might lose his weapon system; and second, something is better than nothing — they know that it's better to get something and then maybe fix it later than to jeopardize a whole system because of some substantial weakness that can be fixed at some later date. That's one of the program manager's very powerful and understandable reasons, but it's more costly. My point is that there needs to be a better way of getting into people's minds the changing nature of intelligence and an understanding of intelligence — so that hostility, be it in the Office of Management and Budget or in Congress, in the Office of the Secretary of Defense or in the service itself, can be converted into understanding and support. Where things need updating, they should be updated. The sooner, the less expensive — the better from just about any point of view. Now that doesn't exist today.

**Student.** Do you feel there's a big separation between operations intelligence and the intelligence element that feeds the line out into the community? In some systems I've seen there isn't a good separation, and the intelligence people are serving the community and not serving the operations side. That's more of an organizational problem, isn't it?

**Richardson.** I see a particular time-sensitive, operationally significant intelligence need that drives operational decision-making. Incidentally, I just don't subscribe to the "inundation" theory. They say, well, we'll just pour the whole intelligence thing on you. But I think a commander in the field can lay out the kind of constraints that are understandable, and can enable sensor system managers to be much more responsive to his needs. The division really, basically, is it time-sensitive and operationally significant?

For instance, I talked earlier about sorting the Soviet navy out into specific weapons platform combinations that are characteristically used together. If you look at electronics, at signals intelligence, which after all is most of the early evidence of activity relating to a weapons system, you find there's a very limited number of emitters that you have any interest in. I can conceptually build myself a 24-bank of lights around the ceiling of this room, and I'll put 15 lightbulbs in each bank. Each bulb represents a specific hostile electronic signal. One of those will be the TOPSAIL radar, and that light, say, is in five of my 24 banks. I want to end up with each lightbulb representing a specific emitter in each bank. When something begins to happen, I see certain banks begin to light up. If it's an IFF set, maybe one light in every bank will light up. But pretty soon there'll be more lights in one bank than another, and I've got what I'm looking for — that identifies the specific threat system that's coming in, that's the one I've got to focus on initially. I can identify

his requisite emission activity in a time sequence and say, "He's so far away from me at this point, I've got 45 minutes, or an hour and 45 minutes in which to do this or that." My banks of light bulbs are my way of describing a way of organizing time-sensitive operational data so as to facilitate making operational decisions that initiate counteractions.

Most of the decision-making a force commander does in the Navy is simpler, I think, than the Army problem, and probably simpler than the Air Force problem. It is more readily constrained, because there isn't the diversity of attack in a Navy system or in groups of systems that there could be in the Air Force or Army (though they might argue with me). The type of intelligence information I've been talking about leads to decisions by the commander, but much of the rest of intelligence, while it is very interesting, doesn't necessarily lead to decisions now. The processes of assimilating it can be much slower. But I've got to have the decision-making data in time frames measured in seconds. I want it raw. I want it quick. Often enough even a suspicion that the other side might do something prompts a commander to take certain precautions. For example, he reduces the number of fighters that are escorting the bombers because of the possibility that an attack is approaching.

So the time-sensitive, operationally significant types of problems have to be handled very expeditiously. They are quite clearly definable and the command and control system or information distribution system that deals with it can be defined in terms of numbers, speeds and so forth. The other kind of intelligence we can afford to take time with, it can be fitted in. Does that answer the question?

**Student.** Well, I was thinking of some of the operational problems with using intelligence effectively. There was an example in Vietnam where tactical targeting for the Air Force was actually being done back in St. Louis — that creates a round-trip problem and a time-sensitivity problem that somebody ought to solve.

**Richardson.** I witnessed that, and when the Air Force people came out and worked with us, we had exchanges — they liked what we were doing. That's absolutely true. They had a centralized targeting control there in Vietnam. Things they were charged to do that had been appropriate three days earlier but weren't necessarily appropriate that day.

**Student.** Are you saying, then, that we should design our procurements, our hardware development programs, to be sensitive to changes which have come to our attention as a result of the intelligence system?

**Richardson.** We should be able to modify them through the course of development, based on new information. The AEGIS ship is now over 20 years in development.

**Student.** How would you propose, then, to control development and procurement costs, given the sometimes questionable reliability of intelligence data and the time-sensitivity of that intelligence data, and the contractual process under which we now contract out for

almost everything we do? Maybe I should clarify my feelings about the time-sensitivity of the intelligence data. We know best about what the Soviets have done after they have done it, and we know least about it before they have done it.

**Richardson.** That's quite true. My response would be that if you need to spend more money to update some feature of the system that we now see needs to be changed, it's cheaper to do it early. If we feel that the magnitude of changes is such as to put a program in jeopardy, we ought to terminate it. But mostly what happens is that the basic system remains good, and it simply needs to be changed. In the Navy's SLQ-32 program, for example, because of design-to-price approaches, when the original proposals came in they were evaluated. Certain features were then deemed of high value, while other features were of lower value — let us say, for example, because the character of the Soviet threat as then seen didn't require very high altitude coverage of incoming missiles. Later, as we learn more about the pertinent Soviet weapons, we might find that the system that was very effective against incoming missiles at very low altitudes is useless against high-altitude incoming missiles. What do we do? Well, we do exactly what we did in the case of the SLQ-32 — set about modifying the system.

**Student.** You've stressed the difference between strategic and tactical uses. Why aren't some of the things you're saying as applicable in the strategic as they are in the tactical world? The same problem exists in the strategic world, doesn't it? We're in the same predicament, continually trying to assess where the enemy is going to be ten years from now, because it's going to take us the ten years to develop a system to meet the threat he's going to have in ten years. Actually, he has some of the same problems as regards us.

**Richardson.** I quite agree. All I did was exclude strategic from consideration so as not to have to cover too many topics.

**Student.** But it's the same problem essentially. Let's just take the SLQ-126. That was a design-to-price electronic warfare system, responding to the best threat assessment available at the time. We designed the system, put a contract out on it. Everything was done on the best available basis, and indeed the system was flexible enough for modification. But how do you go about controlling costs? Flexibility costs money. That was a relatively easy system to modify. But if you're going to make a basic change in fighter aircraft, you'd have a problem.

**Richardson.** Well, let me explain what the SLQ-126 is. It is basically an electronic deceptive device that fouls up the terminal guidance system of the incoming missile. And what happened was, whereas the system as originally conceived was effective against a certain number of that era's surface-to-air missiles, there are more missiles now, more terminal sensor systems, and the system is not effective against those newer weapons. There is now a new procurement on the street. At some time a choice will be made and they'll presumably proceed with a replacement version of that system. Meanwhile, the SLQ-126 and SLQ-137 systems remain effective against some portion of Soviet capabili-

ties. They have some use, though that use is getting less and less as time goes on. Well, one of the things that we once had that we no longer have is the quick response capability, called QRC. I feel it's very, very important to redevelop the ability to put in development a tentative answer to a tentative (but not too tentative) threat modification or new threat, so that a good bit of the research and development work can be done and the system can be brought along much more quickly.

I'm not addressing your point about how to control costs. I don't know the answer to that, other than that if you really need it, you ought to buy it.

**Student.** That's one of the problems I have with what you are saying. In both military and social programs you face the bottomless pit problem. Now, the design-to-price electronic warfare set had nothing to do with Defense policy, it was an internal Navy decision to put only a limited number of bucks into electronic warfare. The dollars could be spent to buy as much electronic warfare as possible, but dollars were not going to be taken from the destroyer program, the aircraft program or the communications program and put into electronic warfare. "This is as much as you can have." So it was not a decision of the Office of the Secretary of Defense — it was an internal Navy decision that said, "This is all the bucks that are in the kitty." You say if you need something, you just go and buy it. How do you rationalize the decision that had to be made then and will always have to be made: that the pot is only so big and if you want to buy an airplane you've got to give up a ship? You can only increase the budget within certain limitations.

**Richardson.** Well, I mentioned sacred cows at the outset. The Navy still has a substantial gun club. I'd shuck off some gun things in order to do some of these intelligence things. This has to do with the Navy's new directions in the '80s. Bear in mind that I'm talking about improving the conceptualization process at the start. I'm a naval aviator, and an ex-carrier task force commander, and an air wing commander. But if I had to make a choice, I'd choose to spend money on more electronics and to impose discipline on electronics (I'll talk more about imposing discipline in the procurement process, on the conceptual aspect of procurement) and not on more aircraft carriers. I'd get rid of an awful lot of sacred cows. Take a look at the DDGX, for instance, and tell me if you think it's really a good new naval weapon system, or whether it should go to the Coast Guard. I am very lukewarm about building another design-to-price ship in that category. They build them because they're cheap, not because they can do a job. And they aren't cheap anyway. We'd just better not build second-rate weapons when we know they're second-rate.

We had a Presidential Scientific Advisory Committee (PSAC) meeting in the summer of 1969 which said some things about the US Navy in electronics vis-a-vis the Soviet navy which are just as valid today. PSAC said that it appeared that the Soviet navy approached the advance of electronics technology in a wiser way. They were looking at the prospects that were being opened up for new weapons while the US Navy was simply superimposing new equipment on old, keeping alive old ways of doing things, updating them more or less. No coherent policies were emerging relative to electronics.

Let's look at what that meant. Just within the last two to three years — specifically since the time that Admiral Hayward came in as Chief of Naval Operations — the idea came

into being that the battle group — a carrier, half a dozen destroyers and cruisers and a submarine or two — constituted a least common denominator in naval force deployment. Therefore these ships have to be mutually supportive. Their communications system has to be designed not just to maximize communications flow, but to recognize the possibility of quickly adapting to emission control conditions with reliability in the adapation. I looked at one operational requirement in this regard four years ago. It had to do with building a new walkie-talkie for flight deck operations. There was no mention of emission control in this flight deck walkie-talkie. Only recently have we set about correcting the state of affairs that was described by that Presidential Scientific Advisory Committee panel back in 1970.

In conceptualizing weapons, then, the sort of problem we have to deal with is that to this day, as we are building new systems — intelligence information distribution systems, command systems, task force communications, voice links, data links, whatever — they are still being developed in isolation from one another.

**Oettinger.** But you have argued that excessive centralization creates long lead times and dampens innovations, and if a walkie-talkie guy wants to get his walkie-talkie done under constraints of bringing it in at a particular price, and either he's unaware of emission control or doesn't give a damn, you swing back and say, "Gee, if somebody had overseen this, brought the two together and rationalized it, maybe we'd be better off." You keep flipflopping back between the two — as we all do. With all the human foibles, how do we do better than we do — avoid the extremes and their abuses?

**Richardson.** I would like to centralize certain functions at the top command level, in the Office of the Chief of Naval Operations, who is the best suited to handle it. Not in the Office of the Secretary of Defense — get them out of there and into the Office of the Chief of Naval Operations. That is decentralization. Something somewhere between a sailor and the Secretary of Defense, not either/or.

**Oettinger.** I presume that's because that's the highest level where you can have centralization as well as some understanding of what's going on.

**Richardson.** They seem to believe that. There are some penalties involved, or potential penalties. Other things have to be done. Current authorities exercised in the Office of the Secretary of Defense could be delegated back to the Services — and that could happen — and the Secretary of Defense structure and the procurement processes would just protect the overall aspects, and they can do that. But the services need to regain their birthright to develop the weapons, and they have to be held accountable to one another in a joint function. That does not necessarily go out the window.

**Oettinger.** That's an excellent articulation of the problem. Speculate on the solution.

**Richardson.** All right. Let's build a bunch of airplanes of some type. I think OPNAV, the Office of the Chief of Naval Operations, is the office that's best suited to do that — and I

think current contractual procedures provide for efficient production if you buy them in relatively large numbers.

But I really want to focus on another procurement — command and control development, the development of a command and control support system — definition, funding and procurement of a system that you're going to put on ships at sea, and some commander at sea is going to have to live with it. Specifically, the tactical flag command center is an update of command capabilities in the operating forces. That type of system has to be developed interactively with the fleet. In fact, the Defense Science Board made just such a recommendation, and there's Defense Department guidance out to the effect that it will be done that way. You do one of them, then test it in the real world, get a hands-on feel for it in the fleet, and then you define it and develop it, in some number. Throughout the development process there must be close interaction between fleet representatives, OPNAV and the Materiel Command that's bringing it along, particularly between the fleet and OPNAV. As for the choice between aircraft or ships, or most any other kind of equipment that can be fitted into some overall system, it seems to me that the other interactions we're already accustomed to within the services work pretty well. We don't develop individual systems in a way inferior to the Soviets. In general I think we have developed some very capable aircraft (not missiles, and I am very doubtful about our command and control system). The aircraft carriers are extremely powerful and flexible. They have some inherent weaknesses; we can do some things to make them much less vulnerable, we can constrain ourselves in how we use them. But they are a superior system, a hard-to-kill asset.

**Student.** Earlier you said the Russians are better able to do what you suggest than we are, but now you say our systems are better. Could you clarify what you mean? And if the Russians do have a better integrative approach, what management techniques do they use that we don't use?

**Richardson.** One management technique they used was to put Gorshkov in charge for some 26 years now. He's a very good man, and brings programs through from beginning to end. We rotate people every two or three years. One of the things I think we ought to do, and it doesn't cost a cent, is to keep a CNO in his job for eight years. That's the sort of thing; they have continuity and we don't.

**Student.** Why don't we?

**Richardson.** Well, I think it's cultural. I don't want to argue whether a corporation is better served by having its team manager serve in every department and then move to the top. I believe we do need to rotate officers, but I think we do it too often. We don't have people in jobs long enough, and we don't specialize enough. Those are some of the things that I think can be done, and they cost less, they don't cost more. I think we overdo rotation and the benefits are reduced by it. At one time when I had Sixth Fleet three different individuals served as my cruiser-destroyer division commander in one six-month deployment. They were rotating them every two months. I didn't have a single one last

throughout a six-month deployment. The carrier division commanders were there for the whole time. That to me was ridiculous. I fussed about it, but couldn't change it.

**McLaughlin.** I can see all sorts of benefits for the needy: putting program management coordination in OPNAV or the Office of the Chief of Naval Operations, and trying to do the testbedding in the fleet. But that still doesn't seem to cope with the problem we have: what happens when the fleet has to operate with the Air Force? What happens when the fleet has to operate with the Army? What happens when you try to put together a rapid deployment force and they cannot communicate?

**Richardson.** That's true. I think a much better job could have been done in integrating the command and control capabilities. Just within the last few days I questioned the MRASM, the medium-range air-to-surface missile. The Navy very happily joined with the Air Force in that. It makes much more sense from a budgetary point of view when you can marry such systems. But the Navy dropped the program, and I've been trying to find out exactly why. The Navy's system had to have a different approach to some degree. The Navy didn't ditch the program because it was mad at the Air Force. Did it ditch it because the whole design was not right for Navy use? I could understand that. But why was the program dropped?

**McLaughlin.** But in terms of command and control systems, and the National Command Authority's desire to run joint operations, doesn't that simply underline the need for the Office of the Secretary of Defense to have a role in specifying joint systems?

**Richardson.** The Office of the Secretary of Defense very clearly has a role, and I would certainly not want anybody here to have the idea that I'm doing away with OSD. What I'm saying is that there's a class of problems that they must deal with, that if they aren't trying to deal with all the problems, they can deal with what they ought to be dealing with much more advantageously. Furthermore I wouldn't stop with just joint operations, I'd move into combined operations and how we're going to marry our operations with those of the British, the Japanese, and wherever else we want to go. We're going to have problems, very difficult ones. Fortunately some of the new command and control technologies help bridge those gaps. I can envision some sort of translator receiving and distributing information from other systems which otherwise is incomprehensible.

Let me make one last point, because I do want to leave some thoughts with you relative to the marketing of intelligence. This one has to do with the Department of Defense. I was a member of an interdepartmental policy review panel that looked into weaknesses in the intelligence structure because it failed to predict the October 1973 war. This was a very high-powered group. It included David Lewis, the chairman of McDonnell Douglas, Dr. Edward David, recent Science Adviser to the President, and Mr. Mettler, now Chairman of the Board, TRW. There were three military people on it, I being one. One thing struck me, and I talked to General Holloway (formerly CINCSAC), whom I had not known, about it. He and I both agreed wholeheartedly that the basic problem is that the interface between the commanders, in that case the Secretary of Defense, and their opposite

numbers in the intelligence community wasn't tight or continuous. The commanders seemed to expect the intelligence community representatives to knock on the door and say, "There's going to be a war," whereupon, all of a sudden, they would drop what they were doing and launch off on whatever war operations they had in mind. They were expecting the intelligence community to be mindreaders, and that's wrong.

What intelligence can do is provide you evidences, and then you must initiate actions based on those evidences. If I'm a patient, I don't want the kind of doctor who says, "Go away and come back when your fever is 104°." I want one who's going to look at me when my fever is 99.5°, and start treating me. That's what I think we have to do in using intelligence. Now, Kissinger later — in a very sensitive effort, dealing with Anwar Sadat — did just that. He made continuous use of intelligence, and I think that's a marvelous case of proper utilization of intelligence information to a beneficial end. Sadat's flipover from his pre-October 1973 political stance to what it is today is due in large part to Kissinger's skill in using intelligence in a particular set of circumstances. Intimacy — continuous intellectual involvement between intelligence and its customer, be he program manager or operator or whatever — is crucial to bringing things to successful conclusions. And that's what my several examples of intelligence utilization are intended to portray.