Central Intelligence Agency

Washington, D.C. 20505

5 August 2019

Mr. John Greenewald, Jr.
The Black Vault
27305 West Live Oak Road
Suite #1203
Castaic, CA 91384

Reference: EOM-2019-00506

Dear Mr. Greenewald:

This is a final response to your correspondence of 16 March 2019, submitted on behalf of The Black Vault, for the referenced Executive Order 13526 mandatory declassification review of the following:

Studies in Intelligence
Summer 1984
Volume 28

We have completed a thorough search and located four documents which we have determined may be declassified and released in full. Enclosed at Tab A are copies of the documents.

We have determined that six documents may be released in sanitized form. We have deleted material that must remain classified on the basis of Sections 3.3(b)(1) and 3.3(b)(6) of the Order. Additional information must be withheld because withholding is authorized and warranted under applicable law as provided by Section 6.2(d) of the Order. Enclosed at Tab B are copies showing our deletions and citing our exemptions.

Further, we located material responsive to your request that we determined must remain classified on the basis of Sections 3.3(b)(1) and 3.3(b)(6) of the Order. As a result, the material cannot be released in sanitized form. Additional information must be withheld because withholding is authorized and warranted under applicable law as provided by Section 6.2(d) of the Order. We do not return documents that are denied in full.

As the CIA Information and Privacy Coordinator, I am the CIA official responsible for these determinations. You have the right to appeal this response to the Agency Release Panel in my care, within 90 days from the date of this letter. Should you choose to do this, please include the basis of your appeal.

Sincerely,

Mark Lilly
Information and Privacy Coordinator

Enclosures
Tabs A and B

STUDIES IN INTELLIGENCE

Journal of the America Intelligence Professional

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All statements of fact, opinion, or analysis expressed in *Studies in Intelligence* are those of the authors. They do not necessarily reflect official positions or views of the Central Intelligence Agency or any other US government entity, past or present. Nothing in the contents should be construed as asserting or implying US government endorsement of an article's factual statements, interpretations, or recommendations.

Approved for Release: 2019/07/15 C00613446

THE OSS AND THE MAGINOT AND SIEGFRIED LINES

Leonard C. Courier

On 8 September 1944 it began to look to many of us at General Patton's Third Army Headquarters, bivouacked in a field near Chalons sur Marne in France, as if the war was rapidly coming to an end. Paris had been liberated on 25 August and Brussels on 3 September. The forward elements of the US Third Army had reached the Moselle River. Everywhere the German armies were retreating in disarray toward the German frontier.

In May 1944 I had been transferred from Army G-2 in England to the Office of Strategic Services (OSS) and assigned to the Third Army OSS Field Detachment. In anticipation of the Normandy landings both the US First and Third Armies had received an OSS detachment, consisting of about twenty men each, to support Army G-2 as well as OSS agents parachuted into France prior to the invasion. Since the Normandy breakout on 1 August, we had been much on the move. In early September the work load of the OSS Detachment had slowed considerably as France was almost completely liberated and most of our agents had been safely recuperated.

Late in the afternoon of 8 September, I was informed by the commander of our detachment, Colonel Vanderblue, that he had a mission for me. I was to leave for Paris with a Third Army G-2 staff officer to try to locate a set of the original plans of the Maginot Line. Colonel Vanderblue explained that General Patton expected to reach the Maginot Line fortifications in the next few days, and that there was a possibility that the Germans might decide to defend some of the Maginot forts and bunkers before falling back on the Siegfried Line, which ran along the German border. To the dismay of Third Army G-2 there were no available plans or information on the Maginot Line, and Third Army maps did not even indicate the location of the Maginot Line fortifications.

General Eisenhower's Supreme Headquarters Allied Expeditionary Force (SHAEF) had no information either. A French liaison officer at SHAEF had said that the French High Command in 1939 had given the British a set of the plans, but inquiries in London had drawn a blank. Colonel Vanderblue added that French liaison had suggested that the old cartography office of the French Army in Paris, known as the Service Geographique de l'Armee (SGA), might be able to help. We were to start our inquiries there. The colonel concluded by stressing that, as the Third Army G-2 officer did not speak French, I would have to deal with the French authorities.

Early the following morning we took off for Paris, our jeep driver skillfully dodging the two-and-one-half-ton GMC trucks of the endless convoys of the "Red Ball Express" bringing up supplies from the Normandy beachheads to the front line. We were elated at the prospect of enjoying, even if for

only a few hours, the pleasures of Paris and spending at least one night in a comfortable bed, a luxury that had been denied to us since landing at Utah Beachhead in June.

An Irascible Old Man

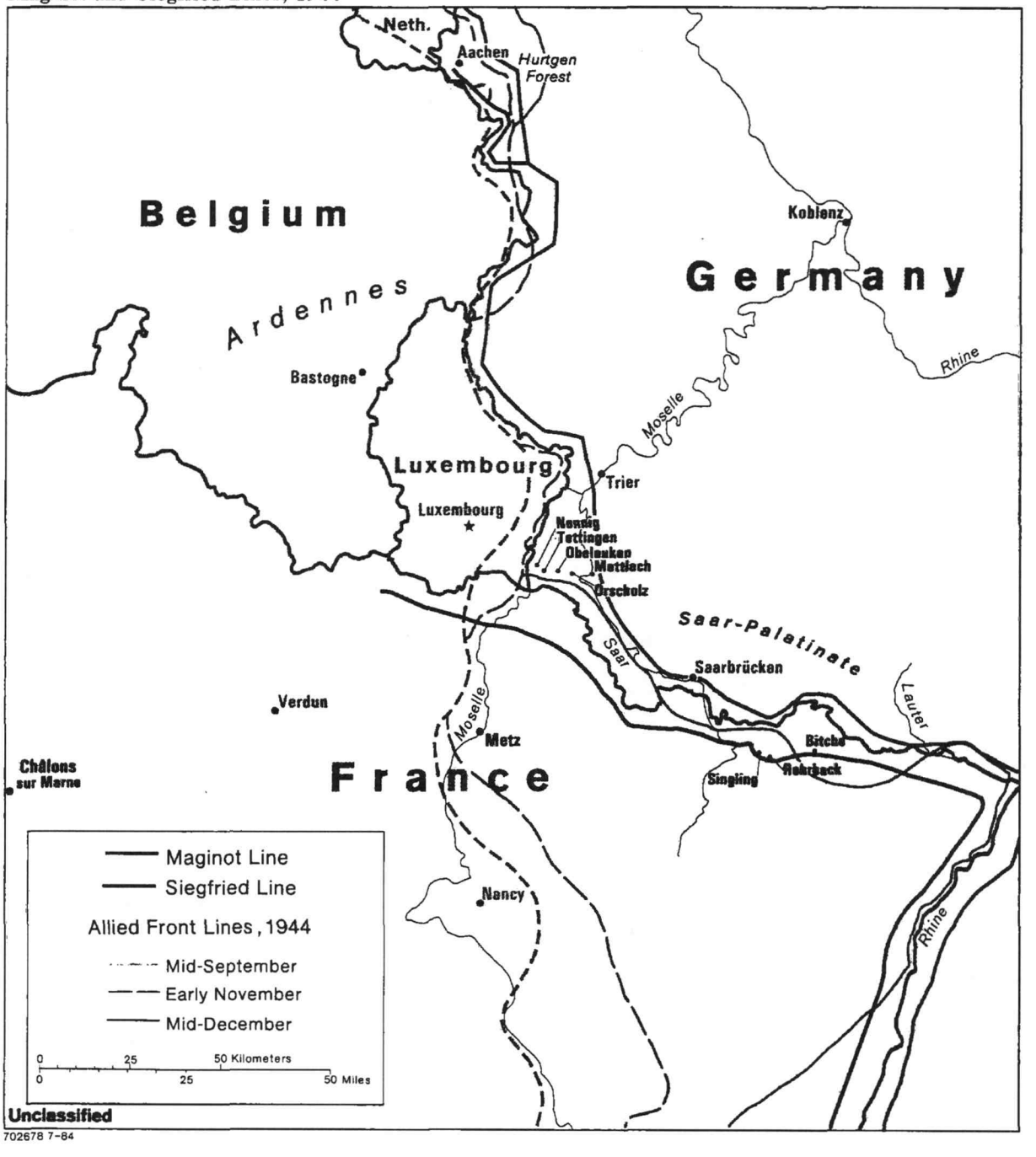
Upon arriving in Paris we were billeted in the Hotel des Deux Mondes on Avenue de l'Opera, and with the aid of a phone book discovered that the SGA was located on the rue de Grenelle in the 6th Arrondissement. When we arrived there, that late afternoon of 9 September, every house on the street appeared shut. The SGA was housed in a magnificent Seventeenth Century building with a large inner courtyard. The large double doors were closed and the building seemed unoccupied. We rang the door bell, but nothing stirred. I banged on the door with the butt of my M-1 carbine for about five minutes. Finally we heard the sound of feet shuffling across the inner courtyard, and a small window was opened by an irascible old man, who informed us that the office was closed. He told us to stop hammering on the door and to come back on Monday. I explained to him that we were Americans and had come from US Army Headquarters in the field to see the commanding officer of the SGA on a matter of urgent national importance. He peered through the window and realized that we were in muddy combat uniforms and meant business. He told us to wait, shut the small window, and disappeared.

A few minutes later we heard the shuffling feet again, and this time the old concierge opened the door and beckoned us to follow him. He led us across the courtyard, up two flights of stairs, and ushered us into a dark office where a small superannuated officer, in a faded horizon-blue French uniform of World War I vintage, was seated behind a large desk. He got up, and I noticed general stars on his sleeve. We introduced ourselves and saluted. He stared at us coldly and said stiffly: "I am General Hurault. Nobody has notified me of your presence in Paris. What can I do for you?" I explained that we had driven from Third Army Headquarters in Chalons sur Marne with orders from General Patton to ask for his assistance in a matter of importance to both our countries. He thawed when the name of General Patton was mentioned. He had heard of the general, he said, and of his successes in North Africa and Sicily, and was aware that his army had liberated Paris. The atmosphere relaxed and we were invited to sit down and to state our business.

I repeated to General Hurault what Colonel Vanderblue had told me, and expressed hope that he would be able to help us. He listened attentively and when I had finished said: "There are only three copies of the plans of the Maginot Line, France's most closely guarded military secret until 1940. One copy was given to the English in 1939, and the other two were buried in a safe place, and the Boches never got their hands on them." He had a look of satisfaction as he said this. A small triumph over the hated Germans. The fact that the Germans had physically occupied the Maginot Line and stripped it of its armament for the Atlantic Wall, and therefore had little need for the plans, did not diminish his feeling of gratification.

I asked him if he had the two remaining copies and whether we could borrow one of them. "Absolutely not" the General replied. "They are the

Maginot and Siegfried Lines, 1944



property of France. I know where they are and I can let you see them, but I cannot let you take them, as they are in my trust." We had reached an impasse. As convincingly as possible I repeated the urgent need that General Patton had for this vital information, which could save the lives of many Allied soldiers and bring about the quicker defeat of our common enemy. After reflecting for a few moments, General Hurault stated: " Do you have American Army maps of the Maginot Line area?" I confirmed that we had

brought a set with us as well as charts to convert French to British and American military symbols. "If that is the case," he said, "I have a staff of old experienced civilian cartographers who could transpose all of the information from our Maginot maps on to yours. There is one condition, however. My men have been virtually without food for the past few weeks. If you can arrange to feed them, I guarantee they will work for you twenty-four hours a day until they finish the job."

"General," I told him, "we shall be back tomorrow morning with the supplies." The general promised to have the plans available in the morning.

Rations and Plans

We spent the rest of the day and night scrounging supplies from various US Army depots in the Paris area, and succeeded in loading our jeep with dozens of cases of "Ten-in-One" rations. The following morning, Sunday, we were back at the SGA; this time the old janitor opened the door and smiled broadly when he saw the cases of rations. We drove into the courtyard, where about ten of the cartographers were waiting. They expressed their gratitude when we handed over the food supplies, and we had made instant friends. For the next two days they worked without a break, and produced a magnificent professional set of plans with the complete information transposed on to our maps.

Before leaving the SGA, as an afterthought, I asked General Hurault whether he had any information on the Siegfried Line. He checked in his files and came up with a copy of a typewritten five-page intelligence report, classified secret, and prepared on 20 November 1939 by the G-2 section of the General Staff of the French High Command. He handed it to me, and said we could keep it with his compliments. By the evening of 11 September we were back in Chalons.

The report on the Siegfried Line failed to interest Third Army G-2, probably because it was five years old, and I kept it as a souvenir. In retrospect I think Third Army G-2 was mesmerized at that time by the potential strength of the legendary Maginot Line, with its underground railways and lavish forts, and somewhat contemptuous of the makeshift Siegfried Line of small pillboxes and dragon's teeth antitank obstacles, doubting that it could stop the victorious Allied armies of September 1944 facing a demoralized enemy.

The Maginot Line information we had obtained proved useful in the subsequent months. General Patton underestimated German resistance on the Moselle River, and it was not until 22 November that Metz was captured. The reversed fortifications of the still-formidable Maginot Line, designed for all-around defense, and capitalizing on the wooded and compartmented terrain of Lorraine, were overcome only after deadly day-by-day slugging. In December 1944, the 4th US Armored Division of Third Army broke through the Maginot Line in the Singling-Rohrback-Bitche area. One hopes that General Hurault's information contributed to this success. The Siegfried Line or "West Wall" was to prove an even more formidable barrier for the Allied armies; it was to cause their heaviest casualties in World War II in fighting that lasted from September 1944 to March 1945.

Siegfried Line Report

The French G-2 intelligence report on the Siegfried Line of November 1939, given to me by General Hurault, is professionally done. The information it contains, of the so-called "Phony War" period, was undoubtedly obtained from German prisoners, as well as aerial reconnaissance and French infantry patrolling. Although dated 20 November 1939, it was distributed to the front-line units as late as 3 January 1940, as is attested by my copy which was that of the French 306th Infantry Regiment.

The report is entitled, "The First German Position between the Rhine and Moselle rivers and the Activity of the Different German Service Branches." It is divided into four parts covering the German Infantry, Artillery, Cavalry, and Engineers, with a concluding statement. The Infantry part is subdivided into six sections:

A. Battalions in contact.

B. Battalions of the Second Echelon.

C. Reserve Battalions.

D. Attitude of the German Infantry.

E. The Life of the Infantry in the bunkers.

F. Impressions produced on the German Infantry by the first combats.

The report states that, as of November 1939, the German line was defended, between the Rhine and Moselle, a distance of about 150 kilometers, by some fifteen divisions. The defense line between Neuburg (Rhine) and Mettlach on the Saar River consisted of permanent fortifications. In front of the fortifications was an observation line in the Lauter and Hardt regions, where the first line battalions occupying the bunkers were hidden by wooded areas and surrounded by zones of minefields and booby traps. The second line battalions were in support, preparing a line of defense with antitank obstacles in the Nennig-Tettingen-Oberleuken-Orscholz region,* between the Moselle and Saar river at Mettlach. The reserve battalions were billeted in villages about ten to fifteen kilometers behind the front line.

The report describes in detail the active attitude of the German infantry, their aggressive patrolling and raids at night by the specially trained "Stos-struppen" equipped with the new machine pistols (Schmeissers). The German fortifications are then depicted as offering few comforts to the occupants, as the pillboxes were designed only for combat and not for living purposes, with the communications between the bunkers left in the open. The bunkers were without running water and cots, and lacked air. The defenders received no hot food. The command posts were in special bunkers designed for observation but which also could be used for firing.

* By coincidence the Nennig-Orscholz area, known as the Siegfried Line Switch position, was to cause in January 1945 heavy casualties to the attacking US 94th Division, which was the newly activated division to which I was assigned when I first joined the Army in 1942.

GRAND QUARTIER GENERAL

ETAT-MAJOR GENERAL

2ème Bureau

N° 1751/2 - F.T.

Le 20 Novembre 1939

"S E C R E T"

L. SIEGFRIED

N O T E

SUR LA FORME DE L'OCCUPATION DE LA PREMIERE POSITION ALLEMANDE ENTRE RHIN ET MOSELLE ET SUR L'ACTIVITE DES DIVERSES ARMES

Le dispositif allemand entre RHIN et MOSELLE comprend actuellement, en première ligne, une quinzaine de Divisions, dont au moins Huit de formation, sur un front de 150 Kilomètres.

A la date du 20 Novembre, le dispositif allemand est donc défensif.

Il est traversé de NEUBURG à METTLACH par un système de fortifications permanentes sur lequel il s'appuie.

I- INFANTERIE- Dans toutes les divisions, le dispositif de l'infanterie apparaît uniforme: trois régiments accolés ayant chacun un bataillon au contact, un bataillon en deuxième échelon et un bataillon en réserve.

La largeur des sous-secteurs varie entre 2 et 4 Kms.

La relève a lieu par roulement entre les bataillons, à des intervalles de temps compris entre huit et quinze jours.

A- BATAILLON AU CONTACT.

Si les fortifications permanentes sont suffisamment rapprochées de la ligne de surveillance, (LAUTER et HARDT) le bataillon de I° échelon occupe tout simplement les "bunker". Dans le cas contraire, il forme les avant-postes de la position fortifiée. L'organisation de ces avant-postes varie selon le terrain ou peut-être selon l'impulsion particulière de la Division: dans certains secteurs, le bataillon en contact remue le sol, installe des emplacements de tir, des observatoires, des P.C. etc... reliés par des tranchées et boyaux, et couverts par des défenses accessoires: la position à défendre est nettement déterminée, facilement repérable. Ailleurs les organisations sont confuses, réparties irrégulièrement sur une grande profondeur. Ailleurs enfin, il est très difficile de distinguer une amorce quelconque de travaux: le bataillon est invisible, dissimulé dans les bois, et les localités; il est à présumer que les compagnies n'y occupent pas toujours les mêmes emplacements, qu'elles nomadisent à l'intérieur du sous-secteur; mais c'est vraisemblablement dans ces zônes en apparence mortes, que nos troupes doivent s'attendre à rencontrer le plus de mines et de pièges.

Il est à signaler à ce propos que l'emploi de tels engins n'est pas sans danger pour la défense elle-même: malgré les précautions prises (cheminements prévus pour la circulation des patrouilles et des corvées), les accidents causés aux Allemands par leurs propres mines sont assez nombreux et leur inspirent une appréhension continuelle.

Il n'est pas douteux que les bataillons de I° échelon aient reçus la mission d'opposer à toute tentative ennemie une résistance ferme qui ne doit céder que sur l'ordre d'un échelon élevé (armée).

Les éléments de surveillance sont projetés en avant des unités auxquelles ils appartiennent, à une distance pouvant aller jusqu'à 6 kilomètres. Ils s'organisent en postes assez espacés (500 à 1000 mètres).

Ces postes sont très vigilants. On doit admettre que, de jour, aucun mouvement se produisant à portée de leurs moyens d'observation ne leur échappe.

...../.....

(5)

Les sapeurs se comportent alors comme des fantassins, capables de servir, outre les armes habituelles de l'infanterie, des engins spéciaux: lance-flammes, appareils émetteurs de fumée, charges d'explosifs, etc... A ce titre, ils entrent souvent dans la composition des Stosstruppe.

Une de leurs fonctions consiste à disposer rapidement des mines dans les tranchées, observatoires, abris etc... momentanément évacués par l'adversaire.

A plusieurs reprises, les sapeurs allemands ont fait, par leur intrépidité, l'admiration des fantassins, devant lesquels ils tiennent à passer pour des soldats d'élite.

CONCLUSION.

Le mode d'occupation du front de la SARRE et du PALATINAT est caractérisé du côté allemand, par la densité très faible de l'infanterie en ligne.

La solidité du dispositif n'est cependant pas douteuse.

Elle tient non seulement à l'existence de fortifications permanentes et d'ouvrages de campagne, mais aussi aux qualités manoeuvrières et au moral des troupes.

On doit signaler en particulier chez celles-ci, le goût de la recherche du renseignement -(Aufklärung), qui se traduit par:

- le souci constant de l'observation,
- l'activité des patrouilles,
- l'exécution fréquente de coups de main minutieusement préparés.

Le commandement allemand démontre ainsi qu'à ses yeux, l'esprit offensif est indispensable aux troupes, même lorsqu'elles ont à remplir une mission défensive.

Pour ampliation
Le Colonel GAUCHE
Chef du 2° Bureau
Signé: GAUCHE

Pour le Général Commandant en Chef les forces terrestres, pour le Major-Général, l'Aide Major Général
Signé: ROTON

306° R.I.
N° 1670/CD

COPIE CONFORME NOTIFIEE pour Information

à M.M. les Commandants des:

I - II - III/306 - C.H.F. - C.R.E

Aux Armées, le 3 Janvier 1940

Le Chef de Bataillon MAURY, Commandant p.i.
le 306° Régiment d'Infanterie

The report also stresses the effective fire of German light and heavy mortars, even without the support of divisional artillery. Except for a few antitank guns in bunkers, the fortifications had virtually no fixed artillery pieces. The report expresses surprise that German engineers attacked as front line infantry, using flame throwers, smoke screens and demolition charges.

It concludes: the enemy occupation of the Saar-Palatinate front is characterized by the presence of only a few infantry units. The strength of the defense line, however, is not to be doubted as it depends, not only on the permanent fortifications, but on the morale, aggressiveness, and the maneuvering ability of the German infantry.

The document is signed by Colonel Gauche, Chief of the Deuxieme Bureau. Gauche was a remarkable intelligence officer. In December 1938 he predicted with extraordinary precision that Germany would soon overcome Poland and, with its eastern frontier secure, turn against France. He correctly estimated that the Germans would use massed tanks with close air support in the attack. He forecast, moreover, that the Nazis' final objective would be Russia.

One begins to understand in reading this report why the French Army of 1939-40, indifferently trained and equipped, had little enthusiasm for an assault on the Siegfried Line, despite the vast French numerical superiority, while the German Army was subjugating Poland. The spartan aspect of the Siegfried Line was obviously a source of wonder for the French used to the luxuries of the Maginot Line with its underground barracks, hospitals, mess halls, and movie theaters. The few half-hearted attacks in the Saarland met with complete failure, and until the German assault of May 1940 in Holland, Belgium, and the Ardennes, the French chose to observe the Siegfried Line and avoid provoking its defenders.

After the German victory over France in 1940, the Siegfried Line was abandoned until the British and American armies arrived at the German frontier in September 1944. The Germans hastily reoccupied the line, at first mainly with second-rate troops: teenagers, old men, and battalions formed of men suffering from the same ailment, such as stomach ulcers. The Americans found the Siegfried Line very much as described in the 1939 report: small pillboxes in depth, well sited in wooded terrain surrounded by antipersonnel mines. Even second-rate troops proved to be formidable opponents, firing from the protection of their concrete bunkers. The Allied infantry had to capture the pillboxes one by one, often more than once, as German counterattacks succeeded in temporarily reoccupying them. The effectiveness of the spartan Siegfried Line was never better demonstrated than in the bitter and bloody struggle for the Hurtgen Forest, where the US Army suffered 33,000 casualties, virtually decimating some of its finest veteran divisions.

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THE EVALUATION OF INTELLIGENCE *

Helene L. Boatner

Facing the press after the Bay of Pigs disaster, President John F. Kennedy quoted an old saying: "Victory has a hundred fathers and defeat is an orphan." [1] A colleague at CIA has adapted this bit of wisdom to the business of intelligence analysis as "Failure has many fathers; success is an orphan." Our failures attract a great deal of attention, while our successes usually go unheralded—and sometimes unrecognized even by ourselves. Our greatest successes occur when nothing happens.

In evaluating the contribution of intelligence to US foreign policy, there are two major issues:

— How successful are we (which depends on how you define our role in the policy process)?

— How successful can we reasonably expect to be (which varies greatly by topic)?

Intelligence and Policy

The role of intelligence in the policy process is a longstanding topic of debate—among intelligence analysts, among policy officials and between the two groups.[2] The issue was a favorite topic of Sherman Kent, who headed the Office of National Estimates from 1952 through 1967.

For analysts, the fundamental question is how intrusive a role intelligence should play.

— Those who are purists on the question of separating intelligence from policy would prefer to deliver authoritative judgments—buttressed by facts, when available—and watch the policymakers accept those judgments and act accordingly.

— At the other extreme are analysts who argue for intimate involvement at all stages during the formulation and execution of foreign and defense policy.

Consumers, for their part, have varying views of what intelligence should do for them.

— Some believe intelligence units exist to deliver facts in response to their questions and that policymakers should make the analytic judgments, as well as the policy decisions that follow.

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* This article is adapted from a paper prepared for the twenty-fifth annual convention of the International Studies Association, March 1984, Atlanta, Georgia.

— Other policymakers value analysis, forecasting, and speculation in principle, and want the intelligence community to take the initiative in raising issues. But even they often resent such offerings if they happen to run contrary to existing policy or to the policy preferences of the individual.

The two groups have somewhat different perspectives on the relative importance of the situation abroad to the policy decisions being made.

— Intelligence analysts typically see foreign developments within their purview as the central issue for policymakers—they expect the policymakers to do what is "right" on their accounts. They like to believe that the intelligence input to decisions is of prime importance. And they take pride in seeing the world "as it is."

— Policymakers are usually juggling a variety of foreign and domestic considerations within the confines of a particular view of how the world should operate—a policy perspective.

— Normally, moreover, policymakers see a shapeable world, while intelligence analysts see a less tractable world.

Early debates on this subject emphasized the dangers of close interaction between the two groups. Kent, for example, was something of a purist, believing that too much contact with the policy community could undermine the objectivity of our work. My own view of our role, after listening to a decade of criticism of our work as not relevant enough to the real concerns of policymakers, lies more toward the activist end of the spectrum and strongly in favor of analysis and estimating. I would define our job as contributing to formulation and execution of policies that have a good chance of succeeding.

— In my opinion, we cannot contribute effectively unless we are involved in the process.

— Assembling facts and making them intelligible is a vital function, but the judgments we draw are the essence of our business—and by far the hardest part of the job.

— To maintain the independence of our judgments, however, our involvement must stop short of policy advocacy.

— Drawing that line is not easy. The lure of actually making policy is ever-present and seductive. A former chief of Israeli Military Intelligence summed it up eloquently: an intelligence chief who gets too close to the policy process "is then unable to detach himself from the festivities of policymaking just like the other self-gratified members of the court who bask in their connections with power." •

The basic argument for involvement is that intelligence officers need to know what is going on in the US Government in order to contribute in a timely and effective manner. And policy officials are prone to keep their initiatives, and the options under consideration, secret from anyone who is not involved in the deliberations. Ray Cline has made no secret of the fact that he resigned as head of the State Department's Bureau of Intelligence and

• See "The Intelligence-Policymaker Tangle" following this article.

Research because Henry Kissinger would not share information that was essential to effective intelligence support, and Cline cites such secrecy as a major cause of intelligence failure.[4] There is no element more important to good intelligence support for the policy process than a clear set of priorities established, and continually revised, at the policy level—a point made in the final report of the Church Committee and nearly every other study done on the subject.[5] Only by sitting in on the policy deliberations can we detect the shifting needs for intelligence support in a timely fashion.

Reasonable Expectations

Intelligence analysts can be certain of two things beyond death and taxes:

— They will make errors. (Even if they never go beyond reporting facts, some of those "facts" will be wrong.)

— Their message will usually be unwelcome, since they usually will be pointing out problems and drawing attention to obstacles facing the policymaker.

Not surprisingly, therefore, intelligence analysis is a profession that appeals to the brave, the dour, and the aspiring martyr.

In judging the quality of analysis, a number of factors have to be considered. Accuracy (on both facts and judgments) is one key ingredient. Timeliness is another—if the analysis does not arrive before the critical US decisions are made, it serves no useful purpose. Effective delivery—a clear message forced to the attention of the people who need it—is another essential. Finally, objectivity is the characteristic that separates intelligence analysis from advocacy or from catering to the policy preferences of our customers. Of these, accuracy and objectivity are the two that come in for the greatest amount of discussion.

How right or how wrong we can expect to be varies a lot by topic.

— Some distinctions are obvious, like our differing access to facts in open versus closed societies.

— Concealment and deception are potential hazards on many subjects.

— But the accuracy of our assessments also depends on whether relationships between the facts we have and the ones we lack are fixed (physics), generally predictable within some range (economics), or highly irregular (politics). The more human decisions affect the relations between the known and unknown facts, the harder it is for an analyst to assess the present, to say nothing of predicting the future.

— Moreover, the future is always to some degree governed by the intentions of human beings; intentions are always hard to glean and subject to change.

— The problem is compounded if you are dealing with advanced technologies. The object of your analysis is not merely a machine or weapon but also a scientist, or group of them, who may have made a

major technological breakthrough or a major technological mistake. In either case the decisions to apply the technological developments to actual weapons development will be made by human beings balancing a wide range of political, economic, and military considerations.

To make matters more challenging, it is the discontinuities we are trying to predict. Henry Kissinger once commented that "all intelligence services congenitally overestimate the rationality of the decisionmaking process they are analyzing," and he is certainly correct.[6] Some of our most famous "failures" have involved this factor. But any analyst who begins with the presumption that all decisionmaking processes are irrational and likely to produce irrational results is left with nothing to analyze. This approach is about as helpful as an admonition to believe only reliable intelligence, about which Clausewitz commented: "What is the use of such feeble maxims? They belong to that wisdom which for want of anything better scribblers of systems and compendia resort to when they run out of ideas." [7] The trick is to remind ourselves constantly that irrationality is possible and accidents happen. We also have to remind our readers that non-Western thought processes can lead to decisions that might appear illogical or irrational to us but are entirely sensible in another cultural context.

In very general terms—and subject to many exceptions—I would characterize the spectrum of difficulty in intelligence analysis as follows:

The easiest task is to report on implementation of a decision already made that involves a wealth of straightforward evidence:

— an army on the move,

— policies and actions of organized groups in an open society,

— construction, production, or delivery of physical objects (ships, grain, oil, tanks).

For problems of this sort, the most important job of an analyst is what we practitioners call collection tasking—figuring out what you need to know to follow the problem and how that information can be obtained.

Unfortunately, dealing with the "easy" questions is seldom enough. More often, the important questions we face deal with decisions not made or evidence that is not clear. We are asked to assess the reactions of various countries to alternative US policy moves, to predict the outcomes of wars on the basis of imperfect knowledge of opposing armies, and to make economic forecasts without access to vital economic data. Generally speaking—and my own background as a political analyst no doubt influences my thinking—I would say that military analysis is somewhat "easier" than economic analysis and economic somewhat "easier" than political analysis—in the sense of the probability of being "right"—but not in the sense of the need for rigor, experience, and training.

In sum, we are not soothsayers. We cannot predict the future with confidence. But we can reduce the range of uncertainty facing the policymaker, promote more thorough and enlightened debate within the policy

community, examine the probable consequences of policy alternatives, and alert our customers to possible disrupting events and potential areas for progress toward US objectives. If we do these things effectively, we have succeeded, in my view.

Consumer Reaction

Consumer reaction to our various products varies considerably, but all our attempts to survey consumers show consistent results.

— Receptivity to what we call basic intelligence ("give me the facts") is uniformly high. People throughout the government appreciate access to a storehouse of biographic material, maps, directories of foreign government officials, data on weapons, economic statistics, population figures, insider reports on cabinet meetings or terrorist plans, and a variety of other data. In short, customers value transfer of knowledge from us to them.

— Reactions to our regular current intelligence products are more mixed—from comments that they are uniformly good to charges that they are superficial. (In large measure I think the variation relates as much to what the particular customer expects as to what we deliver.)

— We get consistently high marks for our responsiveness to requests for products tailored to the specific needs of policymakers engaged in crisis management, because sensible decisions cannot be made in fast-breaking situations without up-to-date information. (If you were reading your daily newspapers after the tragic shootdown of a Korean airliner last year, you got a good example of the amount of detail we can pull together in a hurry when the situation demands it.)

The greatest criticism of US intelligence analysis has always focused on "estimates"—a form of the art that refers to longer range predictions and usually carries a connotation of intelligence community participation. Many customers feel that they can project the future as well as we, if they have the same facts. And they are particularly prone to be critical if they do not like the conclusions we reach. Dick Betts, for example, has cited Lyndon Johnson's view that negative CIA assessments on Vietnam were undermining the policy process, not contributing to it.[8] Perversely, policymakers have also been known to dismiss our estimative work as unnecessary if it happens to support existing policies, although President Johnson was delighted with our gloomy findings on the Soviet economy in the early 1960s and President Carter was similarly pleased with our estimates of the world oil outlook.[9]

Certain peculiarities of the human thought process also increase the level of criticism on estimates. Numerous experiments demonstrate that knowing the outcome of any situation inevitably leads ex-post-facto judges to perceive that outcome as much more likely—hence more predictable—than it was. And as Roberta Wohlstetter has argued in her brilliant post-mortem on Pearl Harbor, hindsight also makes it much easier to separate "signals" from "noise." [10]

Strengths and Weaknesses

For someone who is on the inside of the intelligence establishment to try to assess the quality of our work in a public forum presents certain practical difficulties. For one thing, my objectivity is suspect. Moreover, most in-depth examinations of the product in the past have taken the form of "post-mortems"—which is to say, examinations of situations in which intelligence failed, at least in part, to warn of impending trouble or to accurately predict events. A number of our internal evaluation efforts of this sort have gotten into the public domain, notably via the Pike Committee. As a result, our failures are fairly well documented on the public record, while our successes are not. But even some of the failures involved elements of success. Success is, in any event, difficult to judge.

For example, we clearly did not predict that the Soviets would introduce missiles into Cuba in 1962. But did the fundamental error of judgment lie with US intelligence or with the Soviets? Our judgment was based on a careful assessment, reached after serious consideration, that the Soviets were not prepared for the major confrontation with the US that such a move would entail. And our reason for our judgment turned out to be correct—they were not prepared for confrontation and when it came they reversed themselves. So we were fundamentally right about the USSR's strategic position, although we erred in assuming that the Soviets would correctly assess the strength of US reaction to such a move. Moreover, intelligence performance during the missile crisis was superb—reporting and analysis provided all the information needed to force Khrushchev to withdraw the missiles.[11]

Then there is the problem of self-defeating prophecy. If we judge that one country is planning an action that is undesirable from the US perspective, and if the US undertakes a private demarche, and if the action does not occur, have we succeeded or not? Did US representations to New Delhi and Moscow during the India-Pakistan war of 1971 dissuade the Indians from their reported plans to try to destroy the Pakistani army in West Pakistan? Or were there no such plans, as the Indians claimed, and many US officials believed? [12]

Yet another problem is action and reaction. Much has been written on the accuracy of our estimates of Soviet strategic weapons deployments over time. And there is no doubt that we have made mistakes, as well as a number of "right" estimates, in this area. But the political impact of intelligence judgments may well have had a major impact on weapons trends. Here the argument is that the "missile gap" controversy of the late 1950s led to a major US defense buildup. The Soviets, in response, accelerated and expanded programs already underway (and tried to put missiles in Cuba). The buildup on their part led in turn to perceptions in Europe and the US that the West faced an increasing threat and to a buildup by the US that is now in its early stages.[13]

There is also the difficulty of how human beings use evidence. Psychological research indicates that readers typically underestimate how much they learn from new facts or new analyses—and hence give less credit than they should to the contributions of intelligence to their own knowledge or thought

processes.[14] This, too, is illustrated by Henry Kissinger's belief that it was he who made the analytic leap in 1970 from soccer fields near a naval facility in Cuba to an increased Soviet naval presence there; he has no doubt completely forgotten that he heard it first from the intelligence analysts. And he also does not seem to realize that it turned out to be an analytic error; we learned later that soccer had become quite popular in Cuba by 1970 and was not a good indicator of Soviet presence.[15]

That said, let me offer my own opinion of our historical track record and the present state of affairs with regard to quality of analysis. There is no gainsaying that we have made some major errors—the Middle East war of 1973 and the overthrow of the Shah are two of the most notable. However, most of the attention to our work on the 1973 war has centered on our negative assessments immediately before the war broke out; far less mention has been made of very good work a few months earlier, both in an interagency paper and in the Department of State, pointing to the possibility of war by fall and outlining in some detail the events that might bring about such a result. At that juncture, we clearly understood that Sadat might initiate a war for political reasons, knowing that he would not win militarily. By the time the war began, our analytic perspective had shifted, and we discounted war because we were confident that the Arabs could not win and that they knew it. The real question, therefore, is why we lost sight of the right answer, not why we never found it.[16]

On Iran, the public report of the House Permanent Select Committee on Intelligence dealing with intelligence performance faults the users of intelligence equally with the producers—for their lack of receptivity to the negative information they did receive, as well as their failure to question their own confidence in the Shah.[17] Kissinger argues that Iran was not primarily an intelligence failure but rather a conceptual failure in understanding the impact of rapid economic development.[18] For my own part, I believe that our misestimates of how the Iranian situation would evolve lay less with our lack of understanding of the social forces at work—although we certainly did not do well on that score—than with our belief that the Shah had accurate information about his own country and would act effectively to handle the situation.

We have also made some relatively inconsequential mistakes that have been blown all out of proportion for political reasons. For example, we discovered a Soviet brigade in Cuba in the fall of 1979 that had probably been there undetected for years. Substantively, this mattered little. But the political climate of the time was highly charged and the matter of the brigade got linked to the very contentious issue of SALT ratification. Consequently it was the subject of glaring headlines and heated exchanges—in the US and between the US and the USSR.[19]

The public focus on such errors has left an erroneous impression that intelligence seldom spots impending developments before they are obvious to all. As I said at the beginning, our greatest successes leave few ripples, and most are not a matter of public record. But some are. For example, we correctly alerted policymakers to the impending Sino-Soviet split at a time

when conventional wisdom held that the USSR and China were still firm allies. We alerted President Eisenhower and the National Security Council to the possibility of a Soviet earth satellite several months before the first Sputnik was launched, and we have been highly successful in predicting the advent of major new Soviet strategic systems well before they have become operational. We were very accurate in predicting the timing of the first Chinese nuclear explosion. We did a remarkable job on the Arab-Israeli war of 1967—predicting it, predicting who would win, and predicting how long it would last. And this was done in the face of great skepticism at the senior policy level. Thomas Powers cites this performance as the single most important factor accounting for the high regard in which Richard Helms was held by the Johnson Administration. We were right—much to the displeasure of many in the policy community—in judging in 1969 that the Soviet SS-9 missile would not have a MIRV capability. We made some mistakes on certain tactical or specific questions concerning Vietnam—notably with regard to the Tet offensive of 1968 and the role of Sihanoukville as a transshipment point. But the overall record of intelligence assessments on Vietnam from 1954 on is very good, and especially so considering the political pressures involved.[20]

More recently, our work on Soviet oil production, while initially flawed by inadequate consideration of the ability of the USSR to finance oil imports at the level we suggested, destroyed the then prevalent assumptions about Soviet oil production capabilities (and incidentally probably caused the Soviets to increase their resource commitments to energy production). Our examination of alternative withdrawal lines was vital to the Egyptian-Israeli agreement on the Sinai. We began discussing the possibility of a Soviet invasion of Afghanistan months before it happened, and we were right about Soviet reluctance to invade Poland. Recent reports of the two congressional oversight committees have given us good marks on predicting the Chinese invasion of Vietnam, on forecasting the world oil market, on alerting the Carter administration to the possibility of a mass emigration from Cuba, on Central America (with particular kudos for our work on Nicaragua in the period before and after Somoza was overthrown and our work on the Salvadoran guerillas), and on Soviet involvement in international terrorism.[21]

Indeed, in the long run, I believe that much of the criticism of intelligence analysis in recent years, sparked in large measure by public release of some of our own post-mortems, has had efficacious results. The fact that the analytic elements of the intelligence community were understaffed and underfunded emerged clearly, and you may have noted that we are actively recruiting for personnel these days. Less noticeably, we have the funds necessary to finance foreign travel, support conferences, let contracts, and underwrite training—all essential to improving our capabilities. One major benefit that stems from these more generous budget allocations is increased interaction with the private sector, which helps to counteract a tendency to insularity. And we have examined our own ways of doing business and made some changes.

From my perspective, there are several key areas where I think we can still do better. We don't put as much emphasis as I think we should on the

responsibility of analysts for guiding intelligence collection assets in an active way. We have been habituated to making our best estimate of how a particular situation will evolve; we need to move further than we have toward examining less likely outcomes if they have significant implications. Examination of alternative outcomes has to leave room for the possibility that one or another actor will have motives we do not fully understand or a view of the "facts" we do not share. We still tend to seek consensus when "point-counterpoint" might be more effective and helpful for our consumers. We are presently well attuned to the policy process at the highest levels of government, but we need to do better at forging links with policymakers at lower levels, so we can find out what kinds of research and analysis can make the greatest contribution to the process. We need to do better at ensuring that our products reach the people who need them. And we need to encourage more movement of people into the intelligence business at middle and senior levels and more movement back and forth between the analytic, policy, academic, scientific, and business communities.

We have our strengths as well. Critics notwithstanding, we have excellent personnel. We work in a "can do" environment—intelligence analysts as a group are willing to put out the effort to produce what is needed, when it is needed, using the information available to them. They accept midnight phone calls, canceled vacation plans, and wasted theater tickets as part of the job. And we have been given a clean bill of health on the politicization issue by a long string of investigators, including our oversight committees.[22] We have access to a massive amount of information that really does provide unique insights into foreign capabilites and foreign intentions. In the studies I and my group have done, we have consistently found more to praise than to criticize.

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TITLE: BOOK REVIEW: The Chinese Black Chamber

REVIEWER: Nathan X. Woodeman

VOLUME: 28 ISSUE: Summer YEAR: 1984

STUDIES IN INTELLIGENCE

A collection of articles on the historical, operational, doctrinal, and theoretical aspects of intelligence.

The Chinese Black Chamber: An Adventure in Espionage. By Herbert Osborne Yardley; Houghton Mifflin Company, Boston; 1983; 225 pp.

If you are looking for a scholarly contribution to the history of intelligence, this book will fall far short. But if you are looking for an adventure story, written by a man whose life was filled with adventure, and if you like reading about treason, captured documents, intercepted transmissions, prisoners of war, seductive mistresses, dark alleys, and assassins—then this book is for you.

The subtitle is more appropriate than the title. This is an adventure story. While the backdrop of the book is Yardley's stay in Chungking, China from 1938 to July 1940, when he assisted the Nationalist Chinese in their war against Japan, the real story is Yardley himself. The book is a diary, each chapter an adventure from one of the months of his stay. Certain stories weave their way throughout the book, such as the defection of a high ranking general to the Japanese and the attempts to assassinate him. And Yardley complains in almost every chapter about the wretched living conditions, especially after the bombings begin. Even in these passages, though, there is an obvious sentimental flavor, much as we all look back upon a trip to a less than garden spot, remembering as much the intrigue as the despair. But mostly each chapter is a little bit of his life. Some chapters are exciting, some are amusing, some are sad. All are enlightening and riveting.

This is Yardley's book and he lets us know that from the start. He calls the top officials of the Chinese intelligence service the Hatchet Man (Number One) and the Donkey (Number Two). He escapes from his bodyguards as often as he can to stroll among the coolies in the rank and fetid back alleys of a dying city. He ducks into tea houses frequented by an odd assortment of Europeans who, in spite of the bombings, have remained in Chungking, dealing in the profits of war. He plays poker with men who would surely slit your throat if you gave the least offense, yet walks out with all of their money. This is what the book is about.

Yardley does devote some pages to his work. In great detail he discusses an early success in cracking a simple Japanese transmission from an agent in Chungking. After preliminary analysis he told the Hatchet Man that the transmissions were weather reports for Japanese bombers. He was right. Yardley even discusses the difficulties he faced in translating Morse code into Japanese kana, and the greater difficulty the Chinese had in fitting their language into a transmittable code. But this is mere digression, a pause in the main plot. Soon we are back on the trail of the adventurer.

Yardley developed an almost fatherly affection for his interpreter, a man named Ling. In this account they do much drinking, a little whoring, go to the movies and buy seats in the balcony for "a better view of the rats racing in the aisles and on the stage," and generally have a good ol' time. Ling no doubt

fostered this affection from the start. On their first day together, young Ling sought the expert advice of Yardley, whose reputation preceded him, on a question of biology relating to a difference between Oriental and Occidental women. After considerable difficulty, Yardley found an assistant to demonstrate the difference, forever placing himself in young Ling's debt.

Some of the stories are quite amusing. At one point, Yardley met a General Tseng, who was head of sabotage in the Chinese Secret Service. Yardley explained various explosive devices which passed as ordinary objects, such as incendiary pencils. The general was intrigued and ordered work to begin. Later, two Chinese chemists, demonstrating some of their work, blew up the laboratory as Yardley and Tseng dived for cover.

Every good adventure story has a romantic subplot, and this is no exception. Though Yardley hardly believed in monogamy, he was a bit taken by a beautiful woman named Fidelity, the concubine of the treasonous general. Though details are sketchy, their relationship was close. She played the Lady in Red, providing information about the general which proved invaluable in his elimination.

I could go on and on, recounting the stories. But Yardley does it better than I could. The book reads so well it is disarming. So set aside an afternoon, make yourself comfortable in your favorite chair, put up your feet, and enjoy.

NATHAN X. WOODEMAN

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THE INTELLIGENCE-POLICYMAKER TANGLE *

Yehoshafat Harkabi

The publication of the Kahan Commission report, with its indictment of the IDF ** Intelligence Chief, reopened the debate on the relationship between the intelligence services and their clientele, the policymakers. The formal description of how intelligence supplies the policymakers with information and evaluations as a basis for molding policy is simplistic and incomplete. The relations between these echelons are complex and tension-ridden, as is evident when one looks beyond formal hierarchical structures and processes at the influence of informal relations on the workings of administrative bodies.

The study of the functioning of intelligence services, which has greatly developed in recent years, does not focus only on how the intelligence service produces its reports—information gathering and analysis. It also deals with the crucial area where the usefulness of the service is put to trial; namely, the transmittal of the intelligence service's product to the policymaking bodies, the "interface" between intelligence and policy.

Intelligence is not an autonomous operation whose *raison d'etre* lies in itself. Intelligence activities depend on having a clientele to serve. However, its clients are not necessarily receptive to intelligence, for what they often look for is not so much data on the basis of which to shape policy but rather support for pre-formed political and ideological conceptions. The intelligence service finds itself in difficult straits, for it is aware that many of its efforts will not be utilized or appreciated, and the use made of its assessments and reports will differ from its expectations. Matters get worse the more ideologically motivated is the regime, for then policy is made more on the basis of ideological inputs than on the basis of intelligence reportings on reality, which to the extent that they contradict the ideology may be discarded, and the intelligence service ends up frustrated.

Policy can be judged according to the extent of its "sensitivity" to intelligence—will it change if a certain evaluation requires such a change? As a concrete example, what intelligence reporting could induce a change in Israel's present policy on Judea and Samaria? Does the rigidity of a political position make it impervious to intelligence? An ideological regime may revel in exotic covert intelligence operations, encourage them, and still keep intelligence evaluations at arm's length. Nor is there simple transitivity between the quality of the intelligence and the quality of policy. Good

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** Israeli Defense Forces.

intelligence is no guarantee of good policy and vice versa. Even if intelligence portrayed reality correctly and its evaluations were accepted, policy also includes other components, such as goals, objectives, and assumptions about causal relations between policy and outcomes, which are not necessarily intelligence products.

Policymakers too have their legitimate complaints against intelligence, claiming that it supplies them with a motley catchall collection of information, containing everything but what is needed at the time; or that it expresses itself in equivocal and reserved language that leaves them perplexed; or still worse, that its evaluations are not reliable and excessively opinionated.

The intelligence service should enter the policymaking process twice: first, by providing data and assessments of the situation, which will contribute to the shaping of policy; and secondly, after the policy has been formulated. Intelligence should also evaluate the likely reactions of adversaries and third parties to that policy and its success or failure. However, it often happens that statesmen refrain from seeking the intelligence service's opinion on this, for basic reasons. For by making such a request of the intelligence they elevate it to the position of judging their policy. Thus, a tangle is created whereby the intelligence arm which is a subordinate body becomes an arbiter, a kind of supervisor over its masters. What is more, the statesmen may harbor suspicions that the intelligence services may cite the difficulties and weaknesses of their policy. Not fortuitously has the intelligence service been dubbed "negativistic," a discouraging factor, for it may tend more to point to drawbacks than call attention to opportunities. Hence, Kissinger stigmatized the intelligence service for pushing toward "immobilism."

The intelligence service itself will not volunteer for the role of policy-monitoring, fearing that it may mar its relations with its superiors, the policymakers, and may cause it to collide with conceptions sacred to them, or with their dreams. For example, once the idea of getting the Phalanges into action in Beirut became a desire, almost an obsession, among the Israeli policymakers, a presentation of the hazards of such a policy placed the intelligence in an uncomfortable position. Similarly, it may be supposed that an organization like the KGB would be inhibited from presenting evaluations that clash with Marxism and with Soviet policy. The intelligence service, therefore, will not volunteer to serve as a traffic signal light flashing red and green alternately to the advancing policy carriage.

Understanding above Warning

There is an exaggerated tendency to present the intelligence service as if it were an institution for the sounding of tocsins. The intelligence service is primarily an institution for the provision of information which is meant to lead to knowledge and understanding, and is not merely a warning mechanism. The principal line of defense against surprises is "understanding," not "warning." Warning is in order in times of emergency and before the onset of calamity—but those are few and far between. And if indeed the intelligence service is expected to warn about impending dangers stemming from an action initiated by the *enemy*, it is hard to expect that it also be an institution that warns

against the injurious outcomes of our own policy, or our home-made surprises. That is an important difference, which it seems, the Kahan Commission was not alive to. Certainly, the intelligence service would do well were it itself, on its own, to point out the probable consequences of policy, but it is advisable that the chiefs-of-state understand the intelligence's reluctance to become overseers, august or meek, on their policy and address it with explicit queries, as an invitation for the intelligence's intervention. People are not aware of how complicated and difficult is the intelligence service's work of collecting, analyzing and evaluating information. The intelligence service will not willingly seek out additional troubles for itself. It is not sheer squeamishness.

In short, the intelligence service is an institution more for the giving of answers than for sounding warnings, especially about our policy. It is the task of leaders to put questions to it, and if they do not ask, let it not be said that they assumed that the service would inform them of its own accord. True, since the intelligence service provides reports on an ongoing routine basis, the impression might be formed that it offers its opinions on every relevant issue automatically. That is an error, and it would have been helpful to Israeli policymaking had the Kahan Commission been alert to it and drawn attention to these aspects.

It may be argued that the intelligence service does not fully discharge its duty by providing the policymakers with information and assessments, and that precisely because its product may be critical for policy, the service must see to it that its reports are properly understood. However, the intelligence service will refrain from testing whether the policymakers have properly understood the material that has been passed on to it, that it will shrink from taking the role of a pedantic teacher correcting misunderstandings on the part of the policymakers. Indeed, a pretension on the part of the intelligence service to be the policymakers' "mentor" is liable to be counterproductive.

It may come to pass that senior intelligence functionaries may differ with the policymakers' policy. Their critical stance *vis-a-vis* the adopted policy may be based on an evaluation of the historical trend, yet they may not be able to adduce factual proof for their position. In most instances, the error of the policy line emerges in a clearly decisive way only in the long range, for the feedback circuit in such matters is slow. In the short range a mistaken policy line does not necessarily entail outcomes that refute it. It may then appear to the policymakers that their course is succeeding, and that the facts abet it. Hence, the intelligence service cannot use such facts to validate its criticism of policy, for in a confrontation with the policymakers it can avail itself only of facts whose message is clear and evident; and thus its assessments of long-range trends may not, in such cases, be serviceable for it. The intelligence criticism of policy may then appear as arbitrary and irksome, even as stemming from lack of sympathy toward the policymakers themselves. Thus, here too, the intelligence service may choose to withhold counsel. Later, when the error of the policy becomes clear, there will be those who will protest that the intelligence service should have warned in time about the mistaken policy, and an inquiry commission may even find the service culpable.

The intelligence service is aware that it treads on precarious ground and is liable to be singled out for blame in any error, since in every political or military decision there is an assumption on the situation or a component of knowledge, the lack of which can be imputed to intelligence. For instance, a commander can decide to outflank and attack from the left, not because the intelligence service advised him to do so. Were decisions based only on intelligence data, decisions and policy would simply "follow" from it and there would be no need for policymakers. If his attack fails, the commander can shift the blame to intelligence by contending that it did not warn him that the left flank was strong and could not be crushed. Any military action can fail, either because our troops were not good or because the enemy's troops were. There is no institutionalized body whose job is to evaluate our troops, and thus it is easy to transfer the blame for a military failure to intelligence, which, as it were, slighted the enemy's ability. The intelligence service has been frequently described as the staff's "whipping boy." Thus, the intelligence service is usually a frightened institution. In many fields a human error of evaluation or judgment is considered as extenuating circumstances; however, it is the fate of intelligence that its error of evaluation is always enshrined in its bill of indictment. Whereas the popular saying has it that "to err is human," an almost superhuman perfection is expected of intelligence. We are living among our own people with no problems of accession to knowledge and still are stunned by domestic political developments. But if intelligence does not successfully forecast a political denouement in a foreign country, brows are wrinkled: how is that possible? What inefficiency.

Insurance by Quantity

After the intelligence service has failed in reporting on some information or evaluation, it is likely to take out insurance for itself by way of enlarging the quantity of its reports and including everything in them, so that it may not be found wanting in reporting. It will then flood the policymakers with intelligence reports. However, over-reporting may be detrimental for the intelligence service influence as important items may be lost in the multitude of the less important and trivial ones. True, what will eventually prove important does not always immediately catch the eye. The statesmen may be able to defend themselves against overabundance of intelligence reporting, by employing an aide to sift and summarize the material for them. Such an aide fills the role of "intelligence waiter" who marks for his superior what is worth his attention. What is significant in the eyes of the "intelligence waiter" and the intelligence service is not necessarily identical. Despite the vital role such an assistant fulfils for his master, such an intermediary arrangement may also complicate things, for the intelligence service does not know what information has reached the policymakers, of what they are aware, and of what not. Furthermore, statesmen may tend to look or rather browse over intelligence material, often at the end of an exhausting day when they are fatigued or half drowsy.

Presumably, it is good that the chief of the intelligence service be on close terms with the policymakers and have their trust. However, such bosom companionship too has its drawbacks. True, the more he is a part of the inner

Byzantine court that develops as a matter of course around state chiefs, the greater is his influence; however, he then also loses perspective and his independent critical vision, and gradually succumbs to the conceptions of the policymakers. He is then unable to detach himself from festivities of policymaking just like the other self-gratified members of the court who bask in their connections with power. Thomas Hughes urged that intelligence should give the policymakers' utmost support with utmost reservation. That surely is no simple combination.

In its reports the intelligence service must differentiate between statements of fact and evaluations concerning the future, which are always a matter of conjecture. It is an error to present an evaluation of future trends as if they were facts. The desire of the intelligence people to present a clearcut unqualified opinion is commendable, but it may mislead them to present their hypotheses about the future developments as if they were foregone conclusions and final judgments not to be disputed. In reporting evaluations one should not transcend the amount of certitude the data warrants, and even the probable should not be offered as the absolutely certain. The intelligence service should not be inhibited from making the policymakers privy to the uncertainties of evaluation, especially regarding future important developments, tendencies and intentions. The more the service does that, the more the policymakers will understand the quandaries and limitations of the intelligence services and will not nurture expectations that cannot be met and which in the end may be counterproductive for both policy and intelligence.

The intelligence service is judged according to the final quality or significance of its output—its reports. The words of our Sages in *Pirkei Avot*, "according to the pains so is the reward," do not apply to intelligence. The toils involved in obtaining the information on which the reports are based have low visibility, and the intelligence service is prevented from talking about them or from recounting its woes. But without information collection, there is no intelligence evaluation. In fact, in intelligence most of the efforts in manpower and resources go to information collection. If those efforts, and the efforts to extract evaluations from the information are not appreciated, feelings of bitterness will develop in the service, as if the policymakers, and even the country as a whole, are ungrateful. These feelings swell when the intelligence people compare the sophistication and advanced methods employed in collection of the information and the production of intelligence against the cavalier fashion or improvisation with which policy decisions are many a time reached.

The intelligence service is represented to the policymakers by its director. He participates (if invited) in meetings or caucuses at which important decisions are made. However, as an individual he cannot provide an exhaustive representation of, or reflect the knowledge and wisdom that has accumulated in his institution. However broadminded and gifted he may be, it is one of the tragic ironies of intelligence that its chief may constitute a "bottleneck" who detracts from the quality of his service, thus unwittingly deflating its value and its impact. The consumer of intelligence must understand that and therefore pay heed to the institutional reports and not only to what comes directly from its chief's mouth.

Intelligence services in our world cost a great deal of money. The Israeli public has no idea how costly this service is. However, to the extent that the policymakers are not aware of how the intelligence can be useful, and what its limitations are, and do not direct it and ask it questions expressly, the utility of intelligence is partial and resources are wasted. The great outlays for intelligence are justifiable only if the policy based on its information is of high quality. An unrealistic policy, whether autarkic or autistic, has no need for intelligence and the intelligence service cannot help it. Intelligence efforts are worthwhile only where they contribute to the shaping of a wise policy.

TITLE: Par-Faits (And Other Faits)

AUTHOR: [redacted] 6.2(d)

VOLUME: 28 ISSUE: Summer YEAR: 1984

STUDIES IN INTELLIGENCE

A collection of articles on the historical, operational, doctrinal, and theoretical aspects of intelligence.

PAR-FAITS (AND OTHER FAITS)

[redacted] 6.2(d)

What follow are additional quotations from Performance Appraisal Reports, selected by [redacted] over the course of years in which it was his duty to examine such documents, and embellished with his introductory comments. The first compilation appeared in the Spring 1984 issue of *Studies in Intelligence*, Volume 28, Number 1. In this installment, as in the first, the quotations are rendered faithfully, with misspellings and other errors intact. And, as before, all persons referred to and quoted are to remain anonymous. 6.2(d)

The officer who kills with kindness:

"He is endowed with a certain lethal gentleness."

For one given to stepping in various matters of substance, but always with aplomb:

"Although he sometimes errs on matters of substance he rarely errs on matters of form."

The case of the reluctant back-slapper:

"When he was reminded that it is a fundamental to stop and develop . . . he has replied that he is not a back-slapper. Since I credit him with high intelligence, I can only assume that he has intentionally missed the point."

In addition to not being a grandfather . . . . :

(First PAR of a 22-year-old case officer) "This officer lacks field experience."

One who can pat his head hard but has trouble rubbing his stomach at the same time:

"He commits everything to paper voluminously but poorly."

The fiscal intolerant:

"Subject has no use for Agency funds."

The open-minded supervisor:

"I both like and dislike this officer."

When sticks and stones could hurt, keep a distance:

"Subject has left this Branch. Hence there is no objection to his seeing this fitness report."

Nobody said it would be a rose garden:

"Through no fault of his own, Subject was deprived of his household goods."

The chap from Column A:

"I think he is one of the best ethnic Chinese I have met."

Where, When, Why?

"He is already fully loaded."

When a flexed alias might be a spectral pectoral:

"He has learned to use and flex his alias identity."

Just your garden-variety misanthrope:

". . . basically, he doesn't like people."

Cause?

"She is hypoclitical."

Effect?

"Although unmarried she has growth potential."

Handicapped by a head-on collision of genes:

"Only a biological accident robbed her of the opportunity to demonstrate that she could perform equally well as a field case officer."

As a seal balances a Potemkim ball . . . (or although it takes both hands):

"Subject skillfully balances this Potemkim village."

Observed while moonlighting:

"He supervises one part-time wife."

The running amok of profundity:

"If there is no operational progress made in a one-man station, the incumbent cannot share the blame."

But absence makes the heart to ponder:

"This employee is not located under me physically; However, I concur."

The "Whistling Dixie" specialist:

"His breath is, however, narrowed by his speciality."

When in doubt beat your highchair with a spoon:

"He lacks self-confidence but is aggressive."

The successful obscurantist:

"He has a promising relationship with an obscure government official."

The subtle, dental floss kind:

"This student did excellent work but he could have done better if he had drilled more."

When a tactile or gutsy statement is needed:

"His 'feel' is excellent and his stomach is often more reliable than our considered thoughtful processes."

When you desire to thoroughly screw up, not merely mix, your metaphor:

"He is learning the bureaucratic necessity of documenting a base and learning what can serve as an effective stick to compliment his carrot."

Setting high goals:

"He must try to not make mistakes that are unavoidable."

Dealing with the prima donna:

"At times I would like him to control himself as well as he controls his branch."

If it can be simply stated, try and complicate it with at least one word foolishly out of context:

"Furthermore, there are extenuating circumstances which should be factored into the final calculus."

Clever:

"Less the reader be led to believe that the purpose of this report is to cannonize Subject, it should be noted that he lacks certain saintly traits."

Giving the rated officer credit for activities for which he may or may not be responsible:

"He got off to a fast start. Within the first six months of his arrival (in [redacted] the U.S. hostages were taken in Iran and the Soviets had invaded Afghanistan." 3.3(b)(1) 6.2(d)

Putting it in a nutshell:

"The ability to converse in a language in which the participants are fluent narrows the possibility of a misunderstanding based on language."

Good bread and butter approach:

"He proved himself an accomplished officer in all phases of clandestine activities including management and supervisory rolls."

The 17-word-a-minute typist—but she hits each key as hard as she can:

"Her deficiencies are directly related to her effort to do a better job."

In Sick Gloria Transit:

"She has greatly improved her penchant for typographical errors."

The none-of-your-business aside:

"He has the capacity to do an intelligence analyst."

One way of saying you can't tell whether he's coming or going:

"He presents a symetrical appearance."

A secretarial sequitor?

"She was my secretary until she left on maternity leave. It has been a pleasure to watch her grow in this new and challenging role."

The non-complainer:

"She has never complained about the long hours required to service four officers on a daily basis."

Those important adjuncts:

"She has become a very important adjunct of the personal life of the COS and his front office."

The tortoise:

"He is a steady worker who keeps the workload of his assignment to a minimum."

A wondrous thing to see—the aplomb and precision of an overweight meat cleaver:

"She continues to handle all of the new requirements with the aplomb and precision of a 10 pound meat cleaver."

Risking that they bite the hand that kneads and feeds them:

"She massages and feeds [redacted] NOC officers." 6.2(d)

A man for all seasons:

"He expects to start night school classes in the fall; meantime he is studying Spanish with a friend who is in school."

The timely grunter:

"Subject's handling of the English language is inferior but he makes up for it with promptness."

When one is walking backward through life:

"To a large degree his future is behind him."

Telling it like it is:

"He is a section chief responsible for the perpetration of CA."

Going forward in a forward leaning, ongoing continuing continuum:

"He has served in a position of furnishing continuous continuity to this base."

Quick as a steel trap on shaky ground:

"He was quick to offer comment but just as quick to adjust his thinking when it became apparent to him that he was on infirm ground."

Lost in the shuffle:

"Had the Directorate not been reorganized he would have been okay."

Sort of like being pounced upon:

"One of his prime weaknesses is poor spelling, a matter he has been counceled upon."

Although creeping and ever so subtle:

". . . Subject is displaying indications towards acquiring maturity."

Those unspoken devious duties:

". . . duties too specious to list."

The office was sparsely furnished:

"It is a pleasure to have her on my desk."

The office Amazon:

"She is a very strong secretary who supports six officers."

The great cop out:

"There is little doubt that if the intelligence clerk herself had more aptitude or perhaps intelligence, Subject could have demonstrated that he warranted a higher grade as a supervisor."

Keep it wrong and redundant. Repeat, go back and do it over again once more:

"This is Subject's last field rating for some time after several concurrent tours at the same time."

Doggedly barking up the wrong tree:

"Subject has doggedly plowed ahead and attempted to provide momentum in areas that are potentially non-cooperative."

Colorful:

"Members of his crew were all green, including his young secretary."

The pedestrian crier:

"He was so moved that tears began strolling down his face."

Alive and alert:

"Subject is a highly conscious professional."

Make a verb out of anything:

"I would nuance the rater's comments."

Make an adverb out of anything:

"He handles his financial accounting as he does all his other responsibilities—scrutinously."

For special needs such as age, impotence, etc.:

"I believe he was laboring under a certain motivational disadvantage."

Sharing:

"He, in turn, exercises partial supervision over the activities of one secretary."

The carefully considered, from what can be observed, litote:

"I have considered carefully and from what I have observed, there is no reason for me to not concur in the letter grades and most of the narrative of the rating officer."

Hoping:

"Now he needs lady luck to smile just a bit in order to capitalize upon that base in terms of a personal achievement to cap this tour."

When all else fails:

"This officer reports promptly for work."

This article is classified CONFIDENTIAL.

TITLE: Do You Like Maps?

AUTHOR: [redacted] 6.2(d)

VOLUME: 28 ISSUE: Summer YEAR: 1984

STUDIES IN INTELLIGENCE

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DO YOU LIKE MAPS?

[redacted] 6.2(d)

So geographers, in Afric maps,
With savage pictures fill their gaps.
And o'er uninhabited downs
Place elephants for want of towns.

Jonathan Swift

It was a hot, muggy June day in 1951 when I was admitted to Temporary Building 11, located near the intersection of Twenty-third Street and Constitution Avenue in Washington. Although I was there for an interview with an official of the Central Intelligence Agency, I knew little about the CIA at that time beyond its insistence that I complete a tiresomely long application form. But hints of CIA and its activities gleaned from newspapers and magazines had piqued my curiosity. And when the secretary announced that a Mr [redacted] would see me, I hoped to learn—or at least receive an inkling—about job opportunities that might lead to an exciting, perhaps exotic career. 6.2(d)

[redacted] then Chief of the Geography Division, Office of Research and Reports, was a man of few words. He asked: "Do you like maps?" 6.2(d)

The question of my affection for maps, or lack thereof, had seldom crossed my mind. As a graduate student in geography, I had used maps as a source of information and as a way to present and record data. And as a former navigator in the United States Army Air Corps, the importance of accurate maps and charts—and my dependence on them for survival—had been amply demonstrated. My first reaction to Brammell's question was to recall maps I did not favor, such as those based on the mercator projection that portrayed the Soviet Union occupying most of the northern hemisphere and of the erroneous impression this created in the minds of cartographic innocents. A particular pilotage chart once used in navigation school also came to mind; I had grievously misread the chart, leading me to direct the pilot of our twin-engine Beechcraft toward Mexico rather than to San Marcos, Texas. Despite these quirky thoughts I managed, after a brief pause, to respond that I did indeed "like maps."

"Good," replied [redacted] "I think you'll enjoy working with us." With that he stood up, indicating the end of our brief conversation. Before the summer was over, and after suffering through the indignities administered in Building 13, then housing the Polygraph Division of the Office of Security, I entered on duty with the Geography Division in the profession of intelligence.

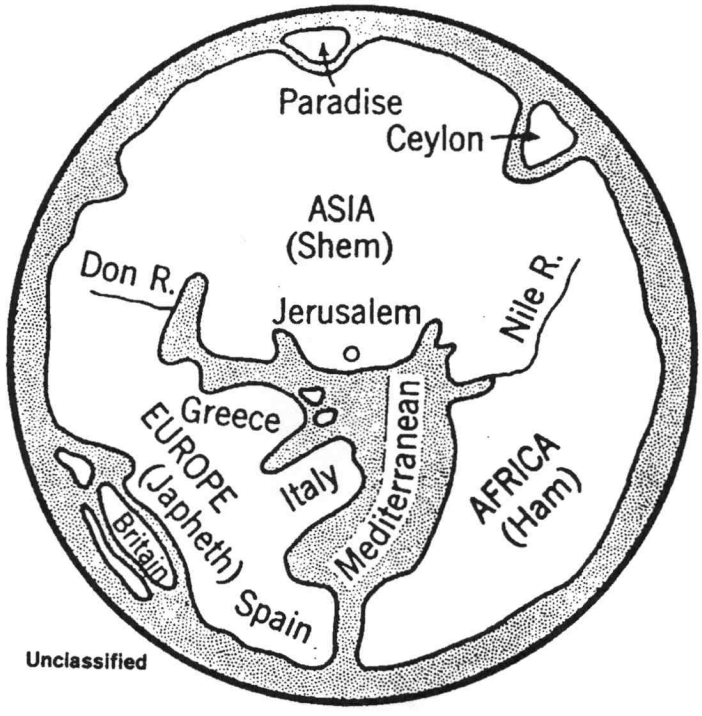
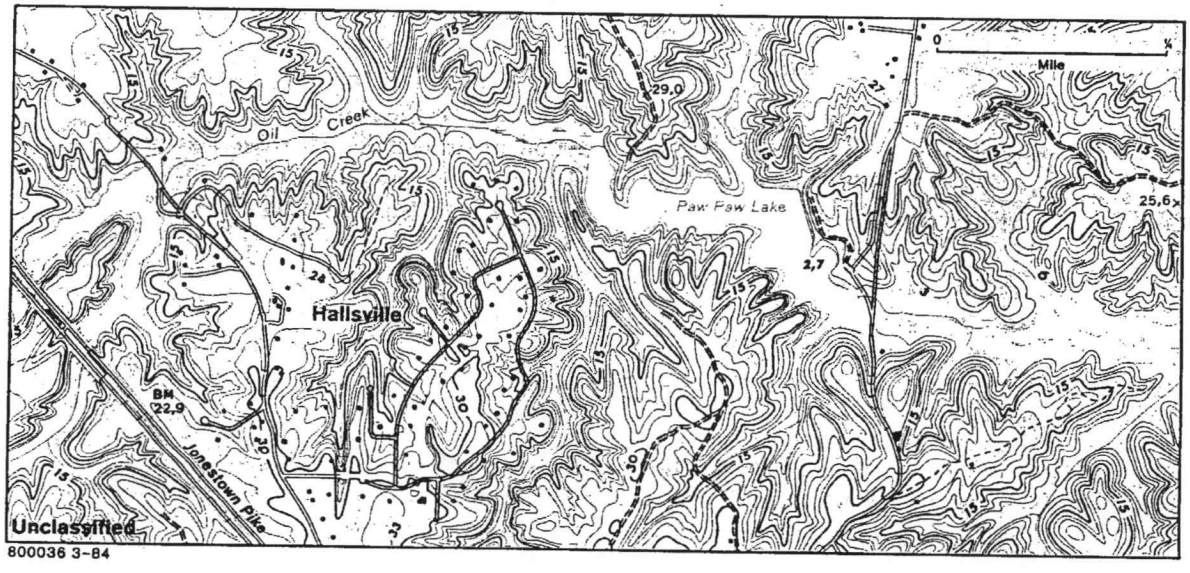


Figure 1. Progress in Mapping. The "T in O"[1] map of the world, strongly influenced by religious history and thinking, was in common use in Europe until the thirteenth century. Greek maps made more than a thousand years earlier were much more accurate representations of the world known to the Greeks. These maps were forgotten, later "rediscovered", and in use at the time of Columbus. The lower map is a section from a modern topographic map at 1:25,000 scale, providing good terrain definition (contours at 3 meter intervals), transportation routes from trails to paved roads, areas covered by vegetation, and individual buildings.

[1] Mediterranean Sea, Don and Nile Rivers form a "T" inside a circular Ocean.



Knowledge about Place

Maps are ways to represent knowledge about place; the map is a means, a device, to help understand the complexities of the earth. As a representation of the earth's reality, maps depict the spatial relationships existing among physical, cultural, political, and other natural and man-made features that have attributes of space and place.

Maps originated as a means of improving communication. Some of the earliest known maps delineated property limits and land ownership in densely settled areas. (The tax assessor, no doubt, soon followed.) The maps of the ancients were centered on the country or area where the map was made. Areas unknown were left blank or decorated with cartographic or mythological graffiti. Measurement was essential for accuracy, as was the realization of the difficulty of depicting the round earth on flat paper, for which projections were devised to lessen the distortions inherent to map making. Knowledge of the earth was gained, and sometimes lost. Columbus sailed West to reach India, believing the earth was about two-thirds smaller than its actual size, even though Eratosthenes by 200 B.C. had made a reasonably accurate estimate of the earth's dimensions.

The intensified European exploration of the earth from the Sixteenth Century onward and the growth of trade and communication heightened the need for improved navigational materials and equipment and specifically for accurate sailing charts and maps. Charts showing coastal features and navigational hazards usually were regarded as state secrets. By the late Eighteenth Century many countries had established national survey and mapping organizations to survey their territories and compile detailed topographic maps. National leaders came to realize that it was difficult to govern—and to fight one another—without adequate maps. Geodetically accurate topographic maps were also necessary to the building of a modern, technically advanced society.

Many people, including intelligence officers, are unaware of the variety in uses of maps. Others give lip service to the utility of maps, but fail to understand the significance of scale, projection, and purpose. Historians and others, for example, often place small and frequently unreadable maps at the beginning of their books and articles, an apparent propitiatory act that in most cases tells more about the author and publisher than the map conveys to the reader. Still others feel vaguely reassured if a map or two is nearby, perhaps hanging on a wall, to ensure that the participants in a conference do not mistake Africa for South America.

While many think of maps as primarily useful to show simple relationships and prosaic physical and cultural details, the data and types of relationships mappable are infinite. For example:

— *The National Atlas of Japan* contains maps of the "Mean Date of the First Coloring of the Red Maple," the "First Warble of the Bush Warbler," and, by administrative unit, the number of tatami (reed mats) per household.[1]

— Maps were used to illustrate key findings in what is rumored to have been the most widely read article in the staid *Annals of the Association of American Geographers*, a presumably well-researched work that described the characteristics, clientele, dynamics, and distribution of brothels in Nevada.[2]

— A series of maps in the *Geographic Review* illustrated the geographic implications of football in the United States, depicting such factors as areas of higher than average per-capita production of players and the interregional migration of high school players to colleges and universities.[3]

— A recent atlas contains a map with the provocative title "Urban Heavings in the Seventies" that depicts the worldwide locations of urban strikes and riots during that fractious decade.[4]

Maps and Intelligence

In intelligence, the use of maps and other graphics has increased over the years along with a greater sophistication in the use and understanding of the effect of color, symbols, and design to convey meaning. Some of the ways to use maps:

— As intelligence sources containing valuable locational and distributional data—sometimes unique and highly classified, such as of missile sites, and sometimes unclassified but representative of official policy, such as territorial claims.

— As analytic tools serving as graphic representations of a discrete portion of the earth, useful to assess the spatial or locational factors of the data arrayed (and sometimes added) and their significance.

— As a means to present research results, particularly to highlight key findings.

— As a means to record and report data, particularly in fast-moving situations.

Maps are crises crutches. Surprise events—the building of the Berlin Wall, seizure of the *Mayaguez*, invasion of the Falklands—bring instant demands from intelligence producers and consumers for map coverage. In crises, maps are used to track rapidly changing developments, to help identify a glut of often unfamiliar place-names, to provide background details from which briefing boards can be constructed, and to analyze military and clandestine situations, particularly where operations are taking place or are planned.

The relationship of maps and intelligence extends to the acquisition of information used in the compilation of maps. The history of such intelligence operations goes back to Biblical times when Moses instructed his spies "to see the land, what it is; and the people whether they be strong or weak . . . what cities they be that they dwell in."

Modern wars have spurred topographic mapping. The advent of aerial photography and the recent development of more sophisticated imagery

systems have made possible the rapid acquisition of vast amounts of information, thereby greatly speeding new mapping programs as well as the updating of older maps. The availability of imagery has also spawned the making of large-scale photomaps on which points of interest are highlighted, e.g., photomaps of Beirut and environs. Maps and their imagery-derived mutants have significant intelligence value and play an important role in communicating facts, relationships, and findings to assist decision makers in choosing courses of action.

The use of maps to serve intelligence needs and to help resolve problems is illustrated by several examples.

The Great Game In Asia: Knowledge is Power

A biting wind swept through the Himalayan pass, whipping the Buddhist prayer flags that marked it. A lone traveler, head bowed, slowly descended into the forbidden land of Tibet. The year was 1865; the traveler was Nain Singh, an Indian born in the high Himalayas who spoke one of the Tibetan dialects; and the purpose of his journey was shrouded in secrecy.

A few days later Nain Singh joined a caravan of traders from western Tibet bound for Lhasa. He arrived in Lhasa in January 1866 and remained there until the traders began their return journey some three months later. Slipping away from the caravan one night, Nain Singh hurried south to his destination—the Indian hill station of Dehra Dun—where he was received by Survey of India (SOI) officials anxiously awaiting his return.

Nain Singh was no ordinary traveler. He had been carefully selected and trained over a period of years by SOI officials in reconnaissance survey techniques. During his time in Tibet, Nain Singh had surreptiously paced his route, observed latitudes with a sexant, measured elevations by boiling water, and kept precise notes of his observations.

The results of Nain Singh's efforts were impressive. At last SOI officials could start filling in the large blank places on their maps of Tibet with reasonably accurate information. Not only were SOI officials gratified over obtaining geographic details about Tibet, but the program spelled progress to officials in Great Britain intent on obtaining reliable maps of Tibet. For London, this mapping caper represented another card in the "great game in Asia" that preoccupied British and Russian governments during the latter half of the Nineteenth Century as they vied for influence in Central Asia.

From 1864 to 1885, the SOI trained dozens more for missions similar to Nain Singh's. Collectively known as the "pundits," they took different guises, some as traders, others as pilgrims or holy men, exploring different areas and following different routes. Those who traveled as pilgrims, for example, carried genuine rosaries, except that their rosaries contained only 100 of the regulation 108 beads and each tenth bead was slightly larger to aid in counting paces. The cylindrical Buddhist prayer wheel hid compartments for storing notes, and clothing and baggage concealed pockets where equipment could be carried. The accuracy of the pundits' reconnaissance surveys proved remarkable when many years later the British were able to map parts of Tibet.[5]

Almost a century later a minor replay of the "great game" took place. Tibetan refugees who joined the resistance movement (1959-66) to oppose the Chinese occupation of Tibet were instructed in the art of field sketching and mapping as part of their overall training in intelligence reporting prior to reentering Tibet. At that time maps of Tibet still were based in part on the work of the pundits, and were not superseded until imagery-based maps were produced in the late 1960s.

"Make Me a Map of the Valley"

On 26 March 1862 Jedediah Hotchkiss, a topographic engineer, was summoned to the tent of General T. J. (Stonewall) Jackson. "I want you," said Jackson, "to make me a map of the Valley, from Harpers Ferry to Lexington, showing all the points of offense and defense in those places." [6]

Jedediah Hotchkiss drafted his maps of the Valley of Virginia under trying circumstances. He was superb in the skills of field reconnaissance. On his horse, laboriously bending over his sketchbook and drawing "curious lines" on a scrap of paper, Hotchkiss was a familiar sight to Confederate soldiers. From notes and observations, Hotchkiss would rapidly draw his maps, particularly important for Jackson, who had little facility in visually grasping the lay of the land. Hotchkiss supplemented his maps with quick field sketches, using colored pencils for greater clarity in defining nearby surface features and in showing troop locations. Hotchkiss' maps and sketches, according to Civil War historian Douglas Southwell Freeman, "were to contribute to the speed and boldness of all Jackson's future operations in the Valley." [7] Throughout all but the final year of the Civil War, Union generals were repeatedly bamboozled by Confederate armies that moved swiftly—and usually undetected—via the Valley of Virginia to threaten the North and Washington itself.

Moscow and its Maps

Acquisition of topographic maps produced by the Soviet Union has been a high priority US intelligence objective dating from early in World War II. Topographic maps, which are highly detailed, geodetically accurate maps containing contour lines (lines that connect points of equal elevation), are essential to military planning and operations and for precise target locations.

During the 1950s many operational studies based largely on available topographic maps were prepared for use in exfiltration and infiltration operations in denied areas, principally Eastern Europe and the USSR. Some coverage of the western USSR had been acquired by Germany during the Second World War and hence by the US. But many areas, particularly newer urban and industrial areas east of the Urals, were without reliable map coverage. As the change from manned bombers to missiles took place, the need grew for geodetically accurate topographic maps. Moscow, of course, recognized their value and placed strict security controls on their use and dissemination; despite considerable efforts and a high priority, various collection efforts have been largely unsuccessful in ferreting topographic maps out of the USSR.

The advent of satellite imagery in 1960 and the immense areas that could be covered led to a joint CIA/Department of Defense program using the new imagery as a base for compiling maps at the scale of 1:250,000. CIA analysts added intelligence annotations to the maps. In 1965 the program was expanded to include China, extensive areas of which were also poorly mapped. Later, satellite imagery specifically designed for mapping use permitted the compilation of topographic maps with fairly good geodetic control.

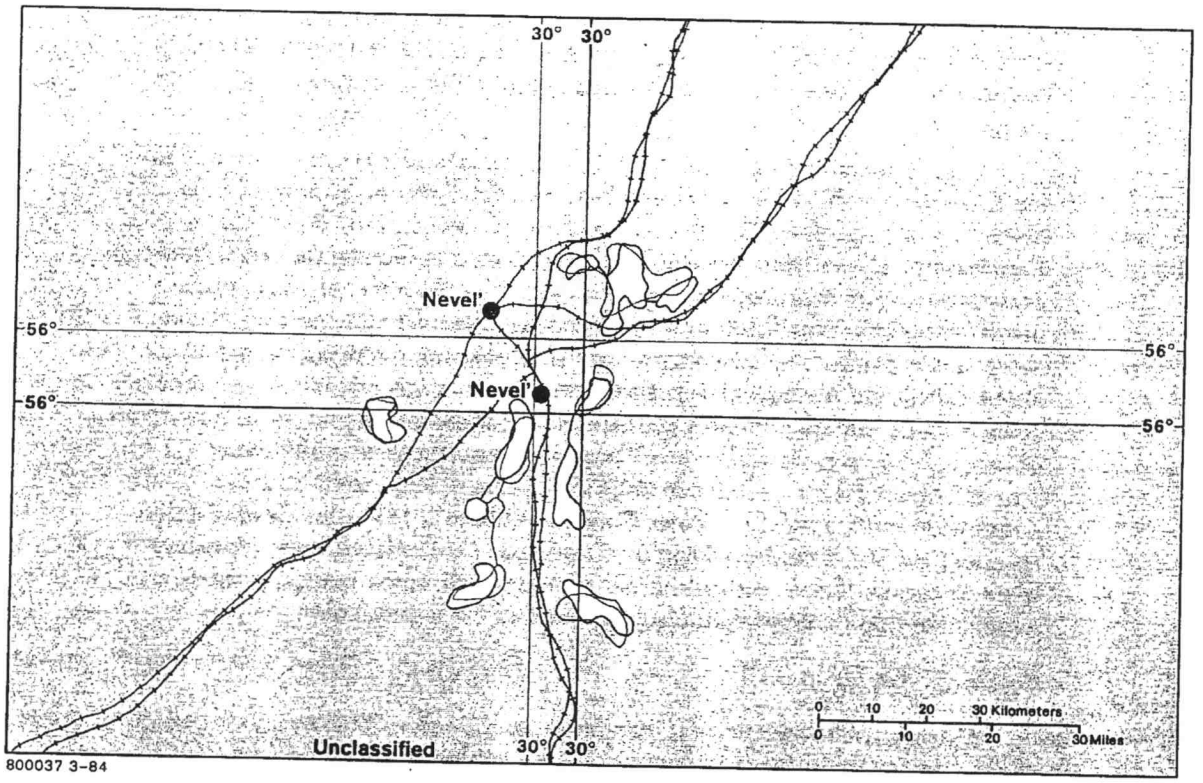


Figure 2. Nevel' Area. The extent of locational distortion in the 1967 Soviet World Atlas is demonstrated by contrasting its map of the Nevel' area (in red) with the corresponding map contained in the 1954 edition of the Atlas (in this instance using the lakes as a control). Note the resulting shifts in the geographic grid and the town of Nevel'. The railroad lines have been twisted out of their true alignment, with one line cutting across a lake which has been conveniently distorted in the 1967 edition.

Moscow's preoccupation with security led to a bizarre decision in the early 1960s that went far beyond the restriction on the release of Soviet maps for public sale. Maps, including those in the prestigous *Atlas Mira* (world atlas), were degraded by a systematic distortion program that depicted cities and towns several kilometers or more from their true location. To do this also meant that Soviet cartographers had to relocate and realign all base map hydrography and transportation detail to make everything "fit."

Soviet officials, fearful of improved US intelligence collection systems, were seeking ways to frustrate US efforts to develop conventional and radar-matching maps for bombing Soviet targets. The great effort and time spent in devising such obvious cartographic distortions seems irrational, given the technology available to the US mapping establishment and about which the

Soviets presumably had some knowledge. There is some evidence that Soviet scientists were privately chagrined by the clumsy and foolish attempts at deception.

An Unseemly Scramble

Japan's attack on Pearl Harbor in December 1941 not only demonstrated the lack of preparedness by US defense forces but also brought to light the general untidy state of US readiness for global conflict. This lack of readiness extended to the availability of maps. The US did not have the maps and atlases essential for intelligence research and planning military operations against its enemies.

A small beginning had been made in the autumn of 1941 to create within the Coordinator of Information—to become the Office of Strategic Services (OSS) in July 1942—a section to provide a centralized point for map information. The mission was eventually broadened to include the acquisition, evaluation, and distribution of maps. But the coming of war initially overwhelmed the small unit and in the hectic months following Pearl Habor there was a frantic and often unseemly scramble for maps and information about previously obscure places. In the search for maps, various government agencies sent out individuals on procurement missions, mostly to university libraries and to private collections. These missions were often duplicative. The paucity of maps for certain areas, such as the Pacific and Asia, led to a nationwide radio appeal by Major General William J. Donovan, head of OSS, in mid-1942. In time, coordinated efforts and a systematic foreign procurement program, along with airborne photo-reconaissance mapping missions, augmented and updated map resources needed for wartime use.

The SA-5 Debate

A major intelligence controversy arose in the mid-1960s over the mission of a defensive missile system then being deployed in the Soviet Union. Intelligence derived from study of the configuration of the system and its components had been used by analysts to support two different viewpoints. Some analysts said it was an antiballistic missile defensive system; others held that it was a surface-to-air missile system directed at aircraft, specifically low-flying aircraft.

The Defensive Missiles Systems Division, Office of Scientific Intelligence, decided to approach the problem from yet another viewpoint and asked that the Geography Division, Office of Basic and Geographic Intelligence, undertake studies of the physical characteristics at and near several of the deployment sites. The purpose of the study was to determine the effects of terrain masking on the capabilities of the target acquisition radars. The studies prepared were done through detailed map analysis, supplemented by imagery; a formula was devised to calculate the effect of the earth's curvature to determine the maximum distance of radar intercept of targets at specified altitudes.

From an examination of several SA-5 sites, a wrapup study concluded that "location of the Moscow area SA-5 sites on relatively high ground well

forward of obstructive terrain features indicates a potential to intercept low-level targets at distances limited only by the earth's curvature." Thus, this analysis helped pin down the primary mission of the SA-5, information which was vital in the context of the complex debate and negotiations that led to the signing of the ABM Treaty between the US and USSR in 1972.

Every Road, Every House, Every Tree

In her autobiography, *My Life*, Golda Meir recalled the prolonged negotiations in 1974 over the disengagement of Israeli and Syrian forces on the Golan Heights and the role played by then Secretary of State Henry Kissinger. She stated that "there wasn't a road, a house, or even a tree there about which he didn't know everything there was to know." [8] In her tribute to Kissinger and his "shuttle diplomacy," Golda Meir was reflecting on the critical importance of maps in the negotiations.

In Middle East negotiations, the United States has provided maps for the negotiations, so that there will be a common data base for each side. Almost every locality, mountain, ruin, and other landscape feature possesses some historic, symbolic, or religious significance that complicates negotiations on territorial readjustments.

Maps used in negotiations have included large- or medium-scale topographic maps or maps compiled from several topographic map sheets. Maps prepared especially for use by US negotiators have shown population distribution, the location of settlements, water supply data, ethnic composition of various areas, and military installations—topics important to an understanding of the range of problems and issues involved in territorial negotiations and exchanges. In most cases the larger scale maps used by the negotiating teams to reach agreement on disengagement, resettlement, and territorial exchanges have been updated by imagery and intelligence reports. Frequently, photography was annotated to identify specific points, show various installations, and highlight areas discussed by the negotiators.

In the 1974 Syrian-Israeli negotiations, maps were prepared to show whether the pre-1967 Syrian settlements in the Golan Heights still existed or had been razed, and to identify the location of new Israeli settlements. The up-to-date intelligence [redacted] to the basic topographic map was essential, since Syrian negotiators were often ignorant of the status of individual settlements in the Israeli-occupied areas. Annotated photomaps, town plans, and similar types of briefing materials were instrumental to the success of these talks. Henry Kissinger noted in his memoir, *Years of Upheaval*, one of the many proposals put forward to President Assad called for a ". . . line . . . drawn 200 meters west of Quneitra measured from the line of buildings on the west side of the western road." This was indicative of the extreme detail required.[9] 3.3(b)(1)

After the October 1973 War, in the negotiations that led eventually to the March 1979 Egyptian-Israeli Peace Treaty, geographic tools and analysis proved valuable in selecting and verifying roughly three parallel north-south roads so that the Egyptian, Israeli, and UN forces could be equally serviced, in

determining the placement of lines through the Sinai passes, and in recommending the best locations for US monitoring sites, [redacted] and the Egyptian and Israeli surveillance stations. Although delineation of the lines in the Sinai passes, Mitla and Giddi, was done in Washington, Israeli representatives were not satisfied with the alignment until a senior Agency geographer personally examined the area. According to Edward R. F. Sheehan's book, *The Arabs, Israelis, and Kissinger*, the CIA official [redacted] now retired) strolled through the Giddi pass with Israeli General Mordechai Gur and stated, "General, you're still inside the pass." [10] (Meaning that the original Washington view, rather than the Israeli, prevailed.)

3.3(b)(1)

6.2(d)

Maps provided for the Camp David negotiations included several annexes, prepared by a technical working group made up of Israeli, Egyptian, and US personnel. The base map, compiled from existing US topographic maps, was initially updated with road and other transport details by US representatives. In preparing the maps for use in the treaty, Israeli and Egyptian representatives carefully purged the map of hundreds of "offending" names and references, particularly those reflecting Israeli occupation of the Sinai. The representatives let stand the names of physical features, regardless of their cultural origin.

Maps, Map Users, and Truth

The examples cited indicate the value of maps in intelligence analysis, operational planning, the presentation of intelligence findings, and in reporting. There are many opportunities for greater uses of maps in both analysis and in the communication of intelligence results.

Unfortunately, many analysts seldom think of maps as useful in their research. Moreover, availability of imagery may cause analysts to forget the use of maps as a research tool. They are overlooking something that is valuable, often essential. Some examples:

— Resource estimative analyses. Predictions of oilfield production potentials rely in part on data supplied by structural or schematic geologic maps, geographic profiles, and other maps based on geophysical exploration and drilling records.

— Analysis of territorial disputes and boundary disagreements, including jurisdiction over maritime areas. Maps are frequently cited in polemics, but authoritative maps are mostly limited to those that are part of the documentation resulting from treaty implementation, e.g., demarcation maps prepared by official boundary survey teams and signed by officials from each country. In some cases official maps may not be available, requiring the plotting of the coordinate locations of boundary points on a suitable base.

— [redacted]

3.3(b)(1)

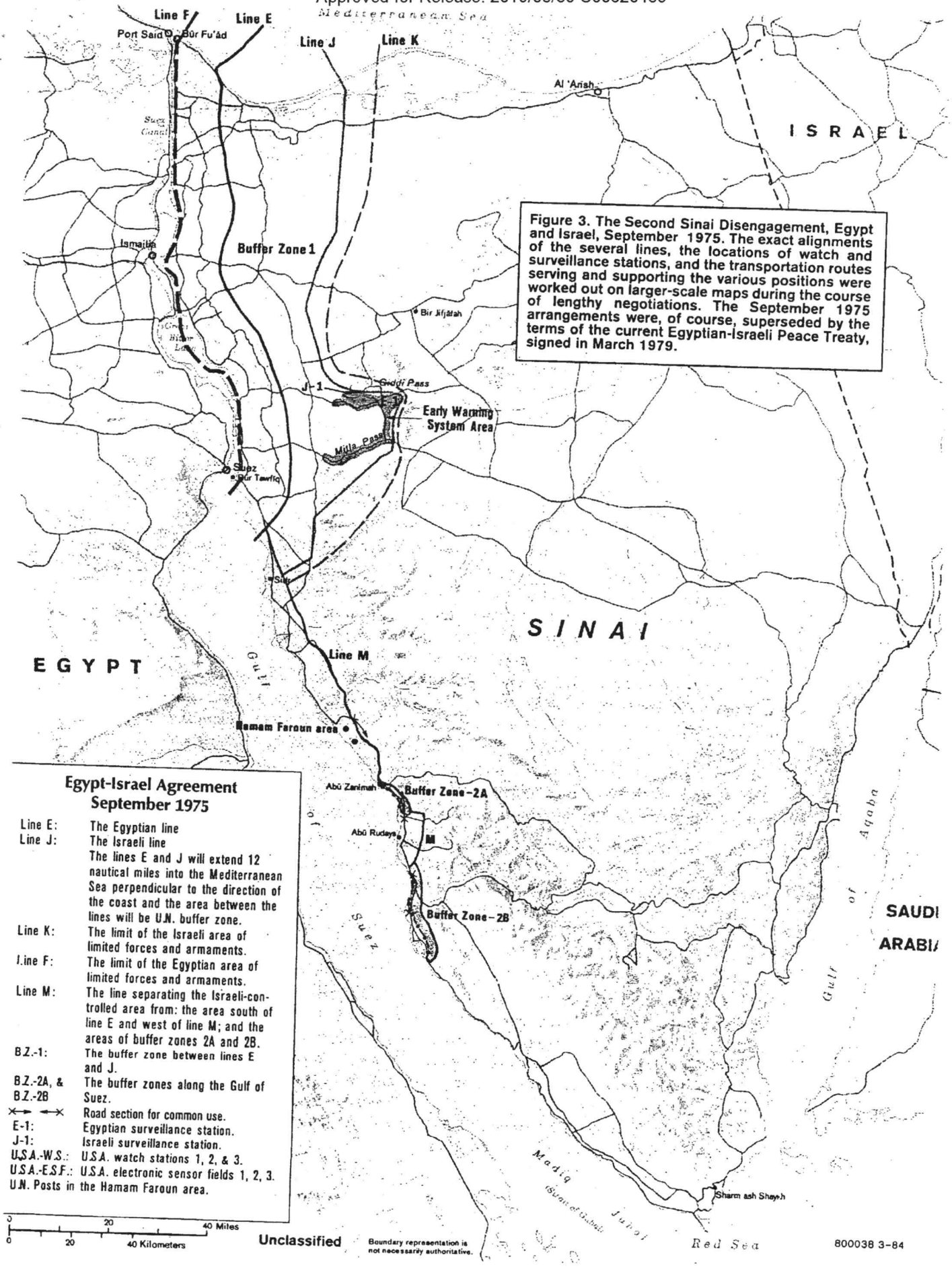


Figure 3. The Second Sinai Disengagement, Egypt and Israel, September 1975. The exact alignments of the several lines, the locations of watch and surveillance stations, and the transportation routes serving and supporting the various positions were worked out on larger-scale maps during the course of lengthy negotiations. The September 1975 arrangements were, of course, superseded by the terms of the current Egyptian-Israeli Peace Treaty, signed in March 1979.

Egypt-Israel Agreement September 1975

Line E:	The Egyptian line
Line J:	The Israeli line
	The lines E and J will extend 12 nautical miles into the Mediterranean Sea perpendicular to the direction of the coast and the area between the lines will be U.N. buffer zone.
Line K:	The limit of the Israeli area of limited forces and armaments.
Line F:	The limit of the Egyptian area of limited forces and armaments.
Line M:	The line separating the Israeli-controlled area from: the area south of line E and west of line M; and the areas of buffer zones 2A and 2B.
B.Z.-1:	The buffer zone between lines E and J.
B.Z.-2A, & B.Z.-2B	The buffer zones along the Gulf of Suez.
×—— ——×	Road section for common use.
E-1:	Egyptian surveillance station.
J-1:	Israeli surveillance station.
U.S.A.-W.S.:	U.S.A. watch stations 1, 2, & 3.
U.S.A.-E.S.F.:	U.S.A. electronic sensor fields 1, 2, 3.
U.N. Posts in the Hamam Faroun area.	

— Political and economic studies that have a significant spatial character. Analysts can use maps to sort out complex aspects and relationships for making intelligence judgments. Examples: problems associated with refugee groups located in sensitive frontier areas where complex ethnic rivalries exist, the availability of access routes to the refugees, the dispensing of aid to the refugees, the feasibility of military action against the refugees from nearby countries, and similar problems in which locational factors are important.

— Locational factors in military and strategic analysis. Maps are highly important tools in the analysis of most military situations and in the construction of scenarios anticipating military actions and responses. For example, possession by Iraq of aircraft equipped with the Exocet air-to-ground missile required map analysis of probable target areas in the Persian Gulf area based on airfield locations, aircraft range, and range of the missile.

Maps as Shorthand

Complex topics and data often can be explained succinctly through use of a skillfully compiled map. How better to undersand the complex linguistic and dialect patterns existing in much of Europe than by maps? International trade in petroleum and petroleum products is easier to comprehend if data are transformed by graphic techniques and displayed on a map base. A map is essential to understand complex maritime claims. The most successful unclassified Agency products, measured by the number of copies distributed and favorable comments received, were the atlases published by the Office of Basic and Geographic Intelligence (later the Office of Geographic and Cartographic Research) during the 1970s. These atlases focused on areas (China, polar regions, Indian Ocean) and topics (USSR agriculture) by blending carefully designed maps and graphics with text on the major characteristics, problems, and potentials of the subjects. The Agency's most lavish use of maps, photos, and other graphic materials has been in highly classified and limited readership products that describe and evaluate the Soviet strategic forces.

Maps often add dazzle to dull data. A decade ago, a 729-page report was published, consisting mainly of voluminous tables of the type that warm the hearts of statisticians and glaze the eyes of others. The tables represented the results of a massive research project undertaken by the National Cancer Institute that tabulated deaths from cancer for every county in the United States for the period 1950-69. The report gathered dust until the information was repackaged and later printed as a 103-page *Atlas of Cancer Mortality in U.S. Counties*. A national map used different tints to show the incidence of cancer deaths by county. A great red blotch covered the industrial northeast with the center of this oncological disaster area roughly coinciding with the state of New Jersey. The atlas became news. Headlines talked about "cancer alley," and photographers and television crews stalked the northern end of the New Jersey Turnpike to film the miles of smokestacks, refineries, and other manifestations of industrial America.[11] Nothing had changed since the original report—except the manner of presentation.

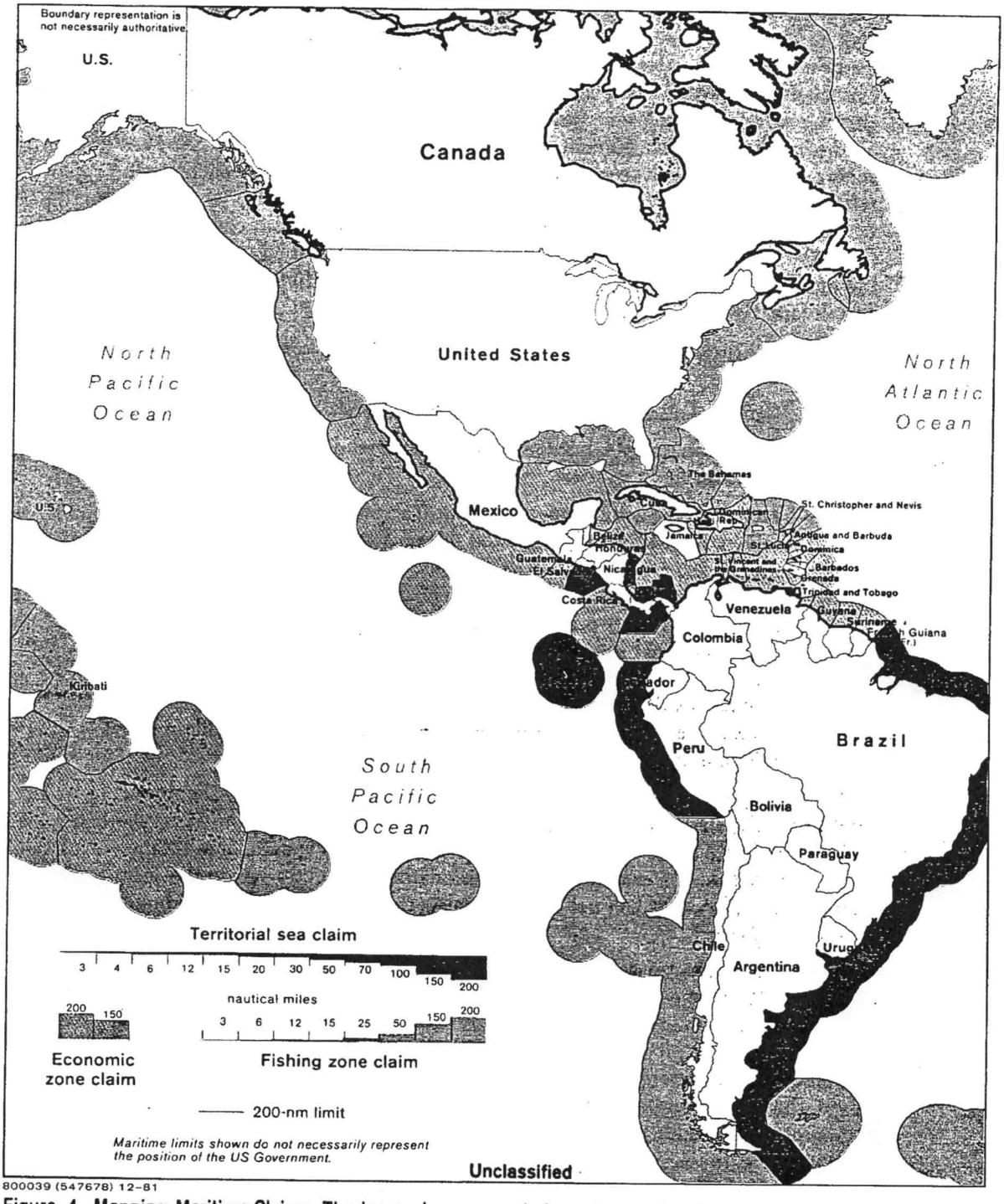


Figure 4. Mapping Maritime Claims. The increasing economic importance of national maritime areas has given rise to UN-sponsored international conferences on Law of the Sea issues to attempt to reach agreement over the definitions of the various types of maritime claims. National claims to maritime jurisdictions and their cartographic representation are the responsibility of the Office of The Geographer, Department of State.

An example of a map that is both an excellent intelligence source and a striking presentation of research findings is a map of Lebanon in a recently published German atlas showing the distribution of religious adherents—Christians, Muslims, Druze, and Jews.[12] All populated places are shown by circles proportional to their size; a scale in the legend is used to determine approximate population numbers. The circles are color coded as to the percentage of the religious group found in each locality; numbers in each circle refer to an accompanying list of place names for the hundreds of smaller settlements not identified on the map. The map allows users to comprehend the major areas of religious concentrations and to compute, by use of the scale, the approximate numbers of religious adherents in the individual settlements and in larger areas.

With all their advantages, maps also have limitations—sometimes apparent but often unrecognized:

— Maps symbolize reality; they also distort it.

— Maps communicate, but the message received depends on the presentation and the map user.

— Maps do not usually receive the critical scrutiny that the written word is given. John K. Wright dissected this uncritical view of maps and the lack of logic behind it in his paper, "Map Makers are Human." Wright warned that "the trim, precise, and clean-cut appearance that a well-drawn map presents lends it an air of scientific authenticity that . . . may not be deserved." [13] In 1946 the chief of the cartographic unit, then in the Department of State and later transferred to CIA (the organizational progenitor of the present Cartography and Design Group) noted that "it is a well known fact that the branch seldom produces a map without noticeable errors."

Map projections are important. The difficulty of depicting the round earth on flat paper introduces distortion and sometimes confusion when the map covers large areas of the earth. A common problem is with long-distance air or sea routes—for example, from Washington to Toyko—where the most direct route via Alaska will not be clear unless the proper projection and map orientation is used.

Map scale dictates detail. A page-size map of France limits the amount of detail and to some extent purpose of the map. A wall map of France, on the other hand, at a much larger scale can display a much more detailed slice of "reality," though predelictions of the particular mapmaker in translating purpose into cartographic product will make each map distinctive. Highway maps of a state or group of states, though made for the same purpose but by different cartographic units, will vary significantly in the amount of detail provided and in the readability and ease of use. The degree of detail relative to scale that the cartographer may think appropriate may not be that wanted by the requester—particularly if the requester is a senior level official. The requester may want only one message on the map and order "clutter" removed.

Maps distort reality; it is sometimes unintended. The professional cartographer is sometimes loath to leave large blank areas on maps. In the desire to

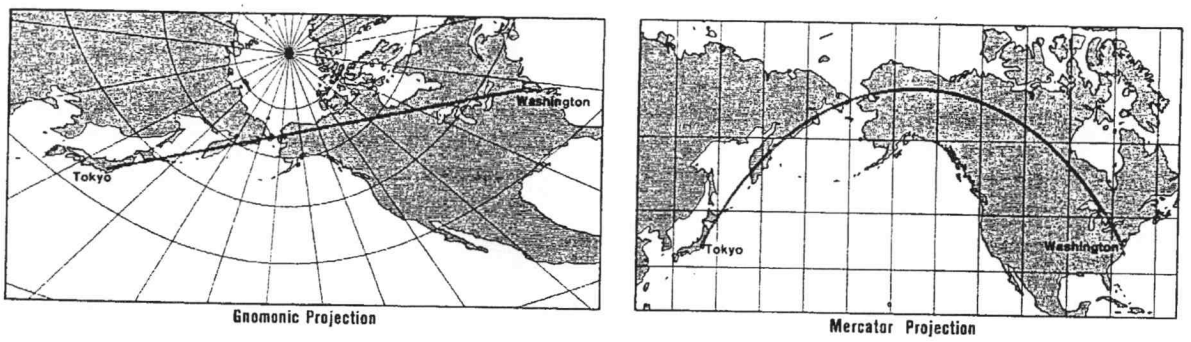
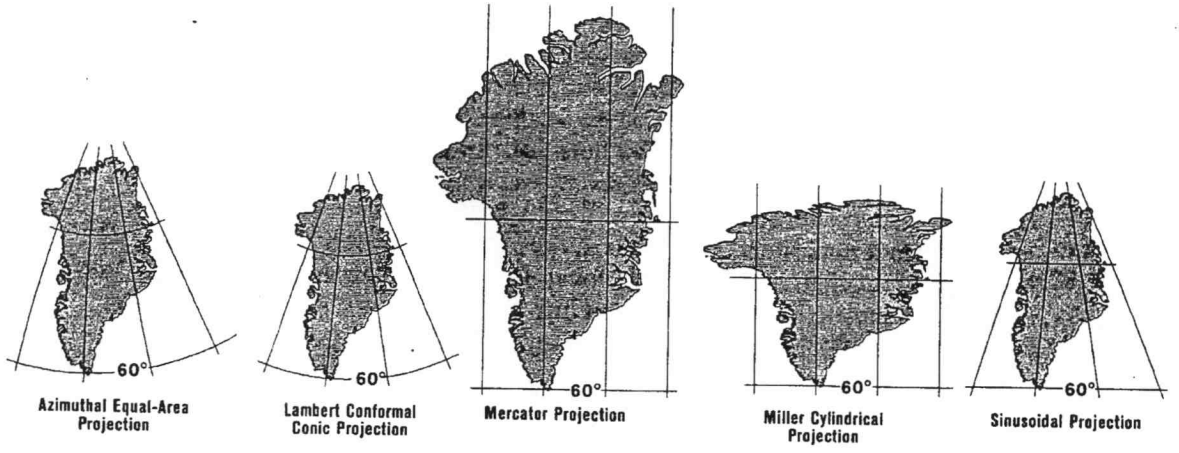


Figure 5. The problem of transforming the spherical Earth onto a flat surface is illustrated by navigation lines (above) and different ways of representing an area of the Earth's surface (below). In the example below, Greenland is shown on five different projections, all with the same scale at 60° North.



"complete" the map, the cartographer may fill in the blank areas with symbols that mislead the viewer. Erroneous conclusions about population density may be drawn from a superficial scanning, particularly if populated places are not symbolized by size. Examples abound of maps "pleasing" to the eye but in fact distorting meaning and purpose. Monmonier's comment in his essay, "Maps, Distortion, and Meaning," is appropriate: "Acclaim by other cartographers is no guarantee that a map is suited to its audience." [14]

Maps are out of date the day they are printed; and because they are mostly compiled from other maps the perpetuation of error is a constant problem. Intelligence maps that portray order-of-battle and other types of military data particularly susceptible to rapid change are kept up to date by the demands of current reporting. But some types of map detail that in themselves are seldom topics of intelligence interest may continue unchanged and outdated. Administrative maps, for example, may not reflect current status, particularly in countries where a change in government may cause experimentation in the number and designation of internal administrative units. Place names are often altered in the wake of political change or when a new system of romanization is adopted, such as China's 1979 shift from Wade-Giles to the pinyin system (Peking became Beijing). There is also the problem of official names policy and unofficial usage, and differences in reporting names in cables and press treatment. Consistency is not always possible nor even desirable. Medium- and large-scale maps often do not reflect such changes as new reservoirs, transportation additions and deletions, and similar detail because of the infrequency of their revision. Many of these changes are not made for some time because of practical difficulties in keeping the cartographic data bank current.

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The objectives of those who make maps and those who use them in intelligence reports are to communicate intelligence findings, to assist readers in sorting out the spatial dimensions of the analysis, and to provide a convenient graphic reference for important locations and installations highlighted in the text. Although the objectives are to prevent ambiguity in meaning and message, map use is not effortless and users should be aware that maps alone are imperfect communicators. Map use requires participation on the part of the user, similar to that required to decipher statistical tables, and this effort is needed to complete the communication link.

As a measure of the growing awareness and acceptance of graphics in intelligence presentations, statistics of the Cartography and Design Group show that the annual number of maps produced has risen from about 6,000 in the mid-1960s to approximately 16,000 in the early 1980s. The increased output reflects not only an awareness of product value but also the advent of improved technology.

The wider use of maps does suggest that intelligence consumers increasingly "like maps." The question put to me in 1951 as I embarked on a career as an Agency geographer seems even more important now, and it applies to all in the profession and discipline of intelligence.

This article is classified SECRET [redacted] 6.2(d)

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TITLE: BOOK REVIEW: Taking Sides

REVIEWER: [redacted] 6.2(d)

VOLUME: 28 ISSUE: Summer YEAR: 1984

STUDIES IN INTELLIGENCE

A collection of articles on the historical, operational, doctrinal, and theoretical aspects of intelligence.

Taking Sides: America's Secret Relations with a Militant Israel. By Stephen Green; William Morrow & Co., New York; 1984; 370 pp.

Once again, the intelligence community is confronted with its own analysis by an author drawing liberally from declassified documents, this time to demonstrate "America's secret relations with a militant Israel." The primary thesis of *Taking Sides* is that since 1946 Israel has had total military superiority over *all* the Arab states combined and that Israeli militarists have manipulated successive US administrations to thwart the peace process, develop nuclear weapons, and seize Arab land. No book of this type would be complete without an expose of the *Liberty* incident, and the author does not disappoint us. He adds a new twist by asserting *both* the US and Israeli governments had foreknowledge of the attack and failed to stop it. I can hardly wait for the next installment.

Mr. Green draws copiously from FOIA-obtained sources to document his thesis as well as substantiate the historical record. At first glance, he seems to have done his homework. It becomes painfully obvious to the informed reader by Chapter 3, however, that he selects his facts to fit his thesis. Alternative explanations to a variety of events too often are casually dismissed or not explored. Conspiracy theories and pure speculation abound. Now I enjoy a good conspiracy theory as much as the next person, but I find it hard to believe that almost every US policy failure or lost opportunity in the Middle East over the past thirty-five years can be ascribed to an Israeli-Zionist plot. Ineptitude, yes; benign neglect, yes; conspiracy, no.

By using FOIA-obtained sources, Mr. Green makes the mistake most common among researchers using formerly classified documents: he treats them as the "true truth" rather than what they are—raw, unevaluated reporting from the field, personal observations or opinions in private memoranda, or simple diplomatic instructions frequently overtaken by events. For example, he quotes the US Defense Attache in Cairo reporting that the Jordanian Arab Legion fighting in Jerusalem in 1948 nearly ran out of ammunition, and hence the Jews were responsible for violating the cease-fire. Mr. Green never questions how the attache in Cairo would know this or why it was not reported by the Embassy in Amman. What the record does show is that both sides repeatedly violated the cease-fire and local observers were singularly unable to substantiate, much less document accurately, who was at fault.

It is clear that Mr. Green has an axe to grind with the Jewish state. In Chapter 3, for example, he discusses at great length the formation of the Jewish state and tries to make the case that the Jewish Agency, David Ben-Gurion, et al., broke US law repeatedly to procure arms, influence Congress, and recruit soldiers. They even used coercion in the displaced persons camps in Europe to recruit for the Jewish army in Palestine *before* May 1948. Thus

Israel had in place a strong, well-equipped army substantially larger than those of its opponents combined.

What he describes is essentially true, but so what? The deck was stacked against the Jews by the Mandate authority which was tacitly assisting Britain's Arab clients against the Jewish Agency. Mr. Green seems to lament the fact that the Israelis did not "play fair" in establishing their state. But what else were they to do? After all, they had a definite goal in mind (statehood) and were willing to fight hard for it. Can the same be said for the divided, leaderless Palestinian community? In fact, the Arab invasion of Palestine was intended to divide the land among Syria, Egypt, and Jordan, not necessarily to assist its Arab inhabitants.

Interestingly, the author claims that his exhaustive research finally lays to rest the myth of Israeli inferiority on the battlefield during the 1948 war. He is right, of course, but this has been common knowledge for more than a decade. He cites US intelligence estimates at the time to support his contention, but I can verify through good unclassified sources available 15 years ago that these assessments were not all that accurate in their specifics. He also dwells on atrocities committed by both sides during this period, but particularly by Menachem Begin's Irgun. He infers from rather flimsy evidence that the Israeli government planned or condoned the activities of the Irgun and its extremist breakaway group, the Stern Gang. The Israeli government did exploit the notoriety of Irgun activities, such as the Deir Yassin massacre, when these assisted the government in realizing its goals such as the displacement of the Arab population from Jewish areas. But the government did not take part in Irgun activities and, in fact, broke up the Irgun and Stern Gang by force after independence was secured.

On the positive side, Mr. Green quotes CIA often and our analysis consistently seems to be on the mark. For example, he quotes Rear Admiral Hillenkoetter in 1948 on the long-term significance of the shift in the strategic balance toward Israel:

> The success of the Arab campaign is doubtful. . . . However, they can be expected to support guerrilla activities indefinitely. Arab guerrilla incursions, political nonrecognition, and economic sanctions will completely isolate Israel from the rest of the Near East. Under such circumstances, its security will be continuously threatened, its economy stifled, and its future existence consequently will be entirely dependent on the continuing good will of some outside power or powers.

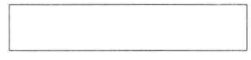
I could not agree more and it is refreshing to know our analysis withstands the test of time.

But even our cogent analysis is subject to Mr. Green's abuse. He hypothesizes that the notorious Lavon affair in 1954 was intended by Israeli intelligence to embarrass then Prime Minister Sharett and discredit his secret negotiations with Egyptian leader Nasser, thus thwarting any chance of peace with Egypt. He dismisses the conventional wisdom that the affair was a half-baked scheme to drive a wedge between the United States and Egypt and cites

as evidence a 1979 CIA assessment that rates the Israeli intelligence services among the best in the world with "expert personnel" and "sophisticated techniques." He seems to think Israeli intelligence is incapable of amateurish operations or flawed analysis, but the record indicates otherwise.

He also quotes Allen Dulles in 1961 that the Lavon affair was singularly responsible for the failure of Sharett's secret peace negotiations with Nasser and opened the door for the Egyptian-Soviet arms deal. In fact, Israel was at the bottom of Egyptian priorities between 1952-54 and nothing necessarily supports the view that these negotiations were going anywhere or would have resulted in an Egyptian-Israeli peace agreement. Besides, Nasser negotiated the arms deal with Moscow in early 1954, several months before the Lavon affair.

My recommendation is to save your time and money. Some of Mr. Green's conspiracy theories make entertaining reading, but little else. The United States must come to grips with Israel if we are to pursue a coherent policy in the region. We cannot do so, however, if we allow our relations with Arab friends to drive our relations with Israel as the author implies we should do.



6.2(d)

TITLE: BOOK REVIEW: Secrets

REVIEWER: [redacted] 6.2(d)

VOLUME: 28 ISSUE: Summer YEAR: 1984

STUDIES IN INTELLIGENCE

A collection of articles on the historical, operational, doctrinal, and theoretical aspects of intelligence.

All statements of fact, opinion or analysis expressed in Studies in Intelligence are those of the authors. They do not necessarily reflect official positions or views of the Central Intelligence Agency or any other US Government entity, past or present. Nothing in the contents should be construed as asserting or implying US Government endorsement of an article's factual statements and interpretations.

INTELLIGENCE IN RECENT PUBLIC LITERATURE

Secrets: On the Ethics of Concealment and Revelation. By Sissela Bok. Pantheon Books, New York; 1982; 332 pp.

Secrecy is a dominating characteristic of intelligence work, whether it is a question of the safeguarding or compromise of one's own secrets or the acquisition by stealth of the secrets of another. American intelligence professionals function in a society that places a very high value on openness. The tensions and ambiguities evoked by the conflict between that value and the need for an effective intelligence service make Sissela Bok's latest book particularly worth reading for anyone involved in the undertaking, management, or oversight of US intelligence activities. Well organized, cogently argued, and written in spare and elegant language, *Secrets* will make every reflective reader review his or her thinking about the role of secrecy as it affects personal life and the interaction of the individual with society.

In her opening sentences Mrs. Bok sets her theme before the reader:

> We are all, in a sense, experts on secrecy. From earliest childhood we feel its mystery and attraction. We know both the power it confers and the burden it imposes. We learn how it can delight, give breathing space, and protect. But we come to understand its dangers, too: how it is used to oppress and exclude; what can befall those who come too close to secrets they were not meant to share; and the price of betrayal. (xv)

Although she detects a strong popular and intellectual tradition of identifying what is secret with what is evil, she arrives at a neutral working definition. Secrets are simply what is intentionally hidden.

She then explores the moral connotations of secrecy, both the need for secrecy ("Secrecy is as indispensable to human beings as fire, and as greatly feared. Both enhance and protect life, yet both can stifle, lay waste, spread out of all control.") (18) and its dangers ("secrecy debilitates character and judgment, it can also lower resistance to the irrational and the pathological." (25) "Because it bypasses inspection and eludes interference, secrecy is central to the planning of every form of injury to human beings.") (26); and she sets forth two presumptions, or criteria, for judging the appropriateness of social controls over the secret. One is *equality:* "Whatever control over secrecy and openness we conclude is legitimate for some individuals should, in the absence of special considerations, be legitimate for all." (27) The second is "in favor of *partial individual control* over the degree of secrecy or openness about personal matters. . . . Without a premise supporting a measure of individual control over personal matters, it would be impossible to preserve the indispensable respect for identity, plans, action and belongings that all of us need and should legitimately be able to claim." (27) Given these presumptions,

she writes, she must also ask, "*What considerations override* these presumptions?" (28) What reasons may be "advanced in favor of unusual secrecy, probing, or revelation by some," and when must "even the partial control exercised by an individual in personal matters . . . be overridden?" (28)

Mrs. Bok spends the next seven chapters, roughly a quarter of the book, exploring the ways in which individuals come to experience secrecy as they grow to maturity and define their identity vis-a-vis society. She describes the relationship between the developing awareness of self and the recognition that one has—as others have—secrets. She considers the impact of being an outsider to secrets (the fear, respect, and awe they can inspire), and an insider (the tension such a state sets up between concealing and revealing, the sense of power that having a secret can give). She shows how the coming to terms with the need to conceal, and conflicting pressures to reveal, secrets can develop judgment. As an example of the impact of "intense and pervasive" (44) secrecy on moral development, she considers the effect of membership in secret societies (a heightened sense of brotherhood, but a surrender of personal judgment and a loss of autonomy).

The remaining chapters of this first part of the book deal with "Secrecy and Self Deception," "Confessions," and "Gossip." They treat, respectively, the paradoxical practice of keeping secrets from oneself; the revelation of one's personal secrets to another; and the unauthorized revelation and discussion of the secrets of others that is one aspect of gossip.

She is continually giving the reader examples of the ambivalent nature both of keeping secrets and of revealing them. On confession she comments, "Depending on the methods used and the aims for which self-revelation is sought, outsiders to the tradition at times see as brain-washing what participants take for healing and reconciliation." (77) On the other hand, she asks, with what appears from the context to be special reference to psychiatrists, "To what extent should they . . . try to probe ever more deeply, or on the contrary, leave the amount and kind of disclosure up to the confessant? And if they wish to probe more deeply, what means do they feel justified in using? Does their role in the institution they serve offer special justifications for manipulative probing . . . or for the use of pressure or deceit?" (81) And again, "denying people the right to decide whether or not to reveal their own personal secrets would interfere in the most fundamental way with their freedom."

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Mrs. Bok turns her attention in the remaining eleven chapters to "large-scale collective practices of secrecy, revelation and probing" as they are present "in medicine and industry . . . or in government and law. . . ." (102) It is these chapters that will be of particular interest to readers of *Studies*.

This part of her inquiry opens with a discussion of secrecy, power, and accountability. As in the opening chapters of her book, she makes clear her premises: a belief in the "highest worth" of each human life, and a recognition that all human beings are "caught up in a joint existence beset with

unpredictable and at times incomprehensible difficulty." (102-3) She assigns this "joint burden of suffering, ignorance, and evil" (103) to three factors: "the scarcity of so many resources needed to satisfy even the most basic human needs" (103); human powers of reasoning and judgment that are inadequate for coping with suffering, scarcity, and inequality; and the "weakness and vices of character that interfere relentlessly with efforts to resolve conflicts and make reasoned choices." (104)

She illuminates the discussion that follows with the references one might expect to the Pentagon Papers, the Watergate tapes, and the Bay of Pigs. ("If we superimpose the difficulties of collective secrecy on those of collective choice, it is easy to see why secret collective choices are so likely to exhibit poor judgment.") (109) Less conventionally she also cites the hypothetical case of the "journalist who fabricates a lurid expose and then invokes the principle of confidentiality regarding sources when asked for corroborating evidence." (106) She concludes that "terms such as 'confidentiality' or 'national security' or 'the public's right to know' are used as code words to create a sense of self-evident legitimacy," and declares that her "aim is precisely to question these premises. . . ." (115)

She devotes successive chapters to professional confidentiality (the relationship between doctors or lawyers and their clients, the situation of the intelligence officer—"CIA agent" (121)—who takes an oath not to disclose classified information); trade and corporate secrecy (protection against the betrayal and theft of trade secrets, the restrictions that the practice of corporate secrecy may impose on the freedom of action of employees, its use to conceal dangerous aspects of a product, the effort to protect commercial secrets in the name of national security); secrecy and scientific research (the tradition of scientific openness balanced against the need for the temporary protection of ongoing research, pressures in the name of security to keep secret the results of research); secrets of state; and military secrecy.

It is in this searching inquiry into the significance and implication of institutional practices of secrecy that Mrs. Bok moves from the more purely philosophical and sociological into the political realm. Here, as in the earlier parts of her book, she gives the impression of approaching her task in a spirit of determined fair-mindedness. This is not to say that she avoids making judgments, but she does not flinch from the complexities and ambiguities of her subject, although one will not always agree with her choice of emphasis.

On balance, as she favors the protection of the individual's ability to keep secrets (so long as they are not damaging to others), she is very wary of institutional practices of secrecy, although she recognizes that these practices may on occasion be necessary and even beneficial. For example, in her treatment of administrative secrecy in the chapter on secrets of state, she asserts that all organizations need some shelter from total transparency of decision-making, so as to be able to arrive at choices and carry them out. Not only would full transparency cripple choice and policy making, it could rule out the crucial elements of surprise in the implementation of plans, an element that can be essential in challenging powerful established interests, or lead to the possible injury of innocent persons, for instance, by making generally

available personal information on taxpayers or job applicants. She argues, however, that the natural interest of all governments in concealment, as an insulation against criticism and interference, to permit the correction of mistakes and the reversal of direction without attracting an embarrassing public attention, means that there is an innate tendency for practices of secrecy to spread, increasing the chances of abuse. Mrs. Bok comes down firmly in favor of laws like the Freedom of Information Act as a way of checking this tendency, without any apparent recognition of some of the bizarre effects of the Act in its current form. In fact, she asserts categorically that "a shift back to anything resembling an official secrets act would be unwise and dangerous." (181)

She recognizes the need for secrecy in negotiations but argues that generally there should be no secrecy about the fact that negotiations are taking place and the identity of the parties involved, and she defines as crucial the criterion that there should be no secrecy about the terms of settlement agreed upon. After an analysis that this reader found persuasive, she states flatly of the practice of disinformation, it is "hard to think of any form of government secrecy of such dubious benefit to individual societies, yet so capable of damaging nations collectively." (190)

In her chapter on military secrecy, she admits the "undeniable force" (192) of the appeal to it in promoting national security but pleads for maintaining a critical attitude toward this appeal; for the "burden of excessive secrecy can be heavy; and the suffering it inflicts, domestically and abroad, may far outweigh even the strict military objectives it was meant to ensure." (194) She then draws, tellingly in this reviewer's opinion, on the report by a review group established by the Joint Chiefs of Staff to look into the causes of the failure of the Tehran rescue mission, for an example of the self-defeating aspects of military secrecy. She sees virtually uncontrollable pressures for increasing secrecy given the rivalry between East and West, the arms race, and the influence even on their rivals of the controls police states impose on their populations. She finds the only hope for countering these pressures in an informed public debate even though she expresses doubt "that democratic processes can persist in the face of current amounts of secrecy, of public ignorance about what should be the public's business above all else. . . ." (202) And it is this belief in the value of public debate that leads her to express approval of the publication of the Pentagon Papers, as making available, to the US public, information of critical importance on how the United States became involved in the Vietnam war.

From this discussion she conducts the reader into an examination of whistleblowing and leaks. And although she expresses admiration of Ellsberg and Russo for openly violating the rules of secrecy, taking responsibility for their acts and accepting the possibility of criminal conviction, she demonstrates a keen awareness of the moral ambiguities of both whistleblowing and leaking and of the behavior of journalists who assist in the process. The more general public acceptability of such practices that she perceives in the aftermath of Watergate "makes it easy to overlook the dangers of whistleblowing: of work and reputations unjustly lost for those falsely accused, of

privacy invaded and trust undermined." (213) On balance she sees whistleblowing as preferable to leaking because it is an open, rather than a covert, act; but because of the breach of trust involved, she finds it justifiable only in the face of serious danger, neglect, or abuse and after an effort to resolve the problem through channels. Although whistleblowers "perform an indispensable public service" because of the abuses of institutional secrecy, "they do so at great human cost. . . ." (228)

Her remaining chapters on intrusive social science research, investigative journalism, and undercover police operations are illuminating and give her further opportunity for well argued judgments on controversial aspects of the keeping and revelation of secrets. For example, she subjects investigative journalism to a refreshingly disenchanted scrutiny. She accepts it as a necessary counterweight to abuses of institutional secrecy in our society but sharply questions the validity of the concept of the "public's right to know" and its use as justification for unprincipled invasive probing by journalists. "A *legal* right to free expression," she points out, "cannot do away with the need for *moral* scruples in choosing what to publish." (255) And again, "The press and other news media rightly stand for openness in public discourse. But until they give equally firm support to openness in their own practices, their stance will be inconsistent and lend credence to charges of unfairness." (264)

In a brief conclusion she states the two convictions to which she was led by the process of writing the book: One is the "sheer extent of all we do not know about the aspects of secrecy, and the need for comparative and interdisciplinary studies devoted to them" (282); the other is the urgency of the situation, given the "accelerating pace of technological innovation and the present worldwide political tensions . . . unsettling the already precarious standards for keeping, probing, and revealing secrets." (284)

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I have summarized Mrs. Bok's argument in some detail because I found in it, rather than in her conclusions, the value of reading her book and I hoped to give the prospective reader an appreciation of the breadth, complexity, and often provocative nature of her analysis. As I have indicated, I did not always agree with her: I think she needs more personal exposure to the official guardians of secrets, to gain a more balanced view of their motives and responsibilities. Certain preconceptions appear to lurk behind references such as one to "Administrators who . . . publish documents to sabotage peace negotiations. . . ." (174) I looked in vain for a trace of humor or even a hint of irony to add a sparkle to the lucid flow of her prose. I found inadvertently amusing a reluctance on Mrs. Bok's part, which I understand to be widespread in liberal intellectual circles in Sweden, to voice explicit criticism of the Soviet Union. (Mrs. Bok is the daughter of Gunnar and Alva Myrdal as well as the wife of the president of Harvard University.) There are fewer references in the index to the USSR than there are to Nazi Germany, and there is no index reference to the influence of Communist Party practices on the keeping and revelation of secrets in the Twentieth Century. Yet Nazi Germany lasted only roughly a sixth of the time that the Soviet Union has been in existence, and the

Nazi leaders never attained anything like the untrammeled powers of intrusion into individual privacy or of control over institutional secrecy that the Soviet authorities arrogated to themselves from the outset. Again, the passage on disinformation is so carefully written that were a reader ignorant of this concept to come upon it, he would have no reason to know that the Soviet Union and its allies are far and away the most persistent users of the technique.

I am not suggesting that Mrs. Bok should have written a book other than the one under discussion, one instead largely devoted to placing blame on the Soviet Union for our current problems. But I believe her reluctance to draw explicit conclusions in this area to some degree skews her analysis and may lead her to be unduly pessimistic about the strength of the traditions upon which our society can draw to limit the misuse of secrecy.

Nevertheless, no reflective observer can doubt the serious potential for corruption in institutionalized secrecy. The leadership of any intelligence service subject to the laws and loyal to the constitutional principles of the United States needs to be alert to this danger, for the requirement for secrecy makes it easier to use the service for inappropriate ends and to mismanage the resources, human and material, placed at its disposition. In her exploration of the implications of secrecy, Mrs. Bok provokes the reader who is also an intelligence officer to reflect on the moral ambiguities he faces as he carries out his professional responsibilities. Such heightened awareness is one of the best guarantees against abuse of his authority and the diminished public support and thus, ultimately, the diminished effectiveness of the service that would ensue. It is for this reason that although I do not share all the author's views on her subject, I strongly recommend *Secrets* to the readers of *Studies*.

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SIGINT IN SPACE

N. C. Gerson

This paper attempts to trace the events that thrust the space age first upon the United States and then upon SIGINT. I believe that my closeness to the early space effort led to my pressing for SIGINT in space. During the gestational years three threads became interwoven to produce a nationally integrated space program. The first was rocket exploration of the upper atmosphere; the second, the International Geophysical Year; and the third, the rather bitter interservice rivalry that then prevailed in this field.

My involvement with rocketry began in 1948. I was chief of the Ionospheric Physics Laboratory, in the Geophysics Research Directorate of the Air Force Cambridge Research Center (AFCRC). We were engaged in an intensive study of the upper atmosphere and its effects upon radio wave propagation.

Serious US concern with rocketry after World War II had been sparked by the availability of captured German V2 rockets. In essence, after three decades of neglect, the US began to restudy the works of Konstantin F. Tsiolkovski (USSR), Hermann Oberth (Germany), and Robert H. Goddard (US). Further, during the 1946-1948 period, the US had the practical knowledge of Wernher von Braun. To obtain hands-on experience, the V2s were to be fired from the USA rocket range at White Sands, New Mexico. Also, rather than fire the rockets with ballast, the warheads were to contain instruments which could measure properties of the upper atmosphere.

In 1948 the principal Department of Defense groups engaged in rocket-borne exploration of the upper atmosphere were the Ballistic Missile Laboratory, the Rocket Sonde Research Section of the Naval Research Laboratory (NRL), and AFCRC. Each service prepared and defended its own program and budget. Although they acted independently, the groups interchanged information through a V2 Rocket Research Committee. Initially, the launch vehicles were the V2s. Later, rockets manufactured in the US were introduced (Wac Corporal, Honest John, Viking, Aerobee).

It was unfortunate, but true, that a considerable amount of tension existed between NRL and AFCRC. An unhealthy rivalry sapped the total US effort.

The first few years witnessed both successes and failures. Many of the latter could be attributed to problems in the propulsion system (leading to unpredictable rocket behavior), unreliable telemetry, or experimental deficiencies. Some of these problems persisted into the 1960s.

The International Geophysical Year (IGY) was an eighteen-month period (July 1957 – December 1958) during which most nations joined together for a

detailed investigation of the planet as a whole. They recognized that national boundaries had no influence upon weather, ionospheric storminess, earthquake formation, and tidal changes, and that to better understand and predict these phenomena, a more thorough understanding of planetary physics was necessary.*

The International Council of Scientific Unions (an arm of the United Nations) endorsed Berkner's suggestion and invited all nations to participate. In response to this call, the US National Academy of Sciences established the US National Committee (USNC) for the IGY in 1953. I served as secretary of the USNC Executive Committee and as chairman of lesser committees.

The USNC first sought to develop an internal US program in geophysics, and then to coordinate the program internationally to insure that (a) global duplications were eliminated, and (b) gaps in coverage at national boundaries did not occur. All major nations joined the endeavor. The final program was truly global in nature. It incorporated studies on the continents and on the seas, in Arctica and Antarctica, and included rocket- and satellite-borne probings of the upper atmosphere.

The USNC Technical Panel on Rocketry contained many individuals on the old V2 coordinating committee, now named the Upper Atmosphere Rocket Research Panel (UARRP). It also included researchers not on UARRP, and thus was more broadly based. During early meetings the panel confined itself primarily to experiments which essentially continued or improved already ongoing efforts. S. Fred Singer and James A. Van Allen expanded their rockoon (balloon launched rockets) program for studying cosmic radiation to other areas on the earth. Singer in 1952 published his MOUSE (Minimum Orbiting Unmanned Satellite – Earth) proposal. He brought this proposal to the attention of the Rocketry Panel but it was not endorsed.

Commitment to Satellites

The first convocation of the Special Committee for the IGY, known as CSAGI from the initials of its French name, met in Rome in 1954. It presented an opportunity to begin integrating the various national programs. Berkner forced a decision on US plans for satellite explorations. He asked a number of us (including Joseph Kaplan, Hugh Odishaw, Harry Wexler, Wallace Joyce, Allan Shapley, Homer Newell, S. Fred Singer, John Adkins, Athelstan Spilhaus) to visit him one evening. He broached his concern; rumors were circulating that the Soviet Union was about to propose that CSAGI endorse the launching of earth satellites as an integral portion of the IGY program. Satellite-borne instrumentation would allow direct investigations of the upper atmosphere. Berkner wanted us to propose a US position.

* The IGY was conceived by Lloyd V. Berkner, president of Associated Universities Inc., Brookhaven, New York. The IGY was a continuation of a series of Polar Years. The First Polar Year of 1872 was conceived by Karl Weyprecht, a lieutenant in the Austro-Hungarian Navy. It was followed fifty years later by the Second Polar Year of 1932. The objectives of both were extensive examinations of weather, auroras, geomagnetism, and ice conditions in the Arctic and Antarctic. Berkner's proposed IGY shortened the period between Polar Years to 25 years and expanded their scope to include middle and low latitudes.

The discussion lasted well into the evening. It was quickly apparent that practically everyone present felt that the US should either independently propose, or join in proposing, the launch of earth satellites during the IGY. We all understood that such a stand committed the US to implementing scientific satellite experiments before the end of 1958 or shortly thereafter. However, it was the considered judgment of most that such a schedule was not unrealistic. Several of us had a working knowledge of the difficulties and problems affecting launches: thrust availability, costs, and experimental possibilities. Berkner himself was familiar with the total US effort, including progress in propulsion systems, and from a much higher level in government than any of us.

Newell raised objections: there were no readily available boosters; solar cell outputs were too low; energy requirements could not be met; experiments could not be prepared in time; proven experiments were not at hand; batteries may boil. He stated that the US could not fabricate and launch an acceptable experiment in time, that the difficulties were too great, and that there were also doubts about Soviet capabilities. The rest of us felt comfortable about a positive stand for the US. Finally Berkner asked for a vote. It was unanimously in favor: the US would propose incorporation of a satellite program within the IGY framework. With this decision in hand, Berkner on behalf of the US, and Pushkov on behalf of the USSR, jointly proposed that an earth satellite program be included in the IGY. The plenary session of CSAGI adopted this recommendation.

After we had returned to the US, the machinery of government slowly began to clank. Berkner, who was on a first name basis with the President, briefed Eisenhower. On 29 July 1955 the President announced US participation. The government now had formally committed itself to support the decision of our rump meeting.

Deliberations within the Executive Committee of the USNC took an unexpected turn. Kaplan, the chairman, stated that the US effort would be wholly civilian in concept and fulfillment. Let the USSR use its military capabilities to launch a satellite for the civilian-scientific IGY; the US would not.*

The USNC found a surplus Vanguard rocket; it was refurbished to serve as a booster for the IGY satellite. About this time rumors reached several of us on the USNC to the effect that the Army planned to launch a rocket which would "accidentally" attain earth obit. I was later told that Kaplan had objected and that as a result, the Army was told to cease efforts toward this end.

* In "Beyond the Atmosphere," NASA (1980) contrasted actions of the two nations by considering the space effort of the US as primarily open and scientific, and that of the USSR as primarily military. It is not possible to characterize these activities so neatly. Both nations designed realistic programs to accommodate their respective national interests in both research and defense. Furthermore, the long term goals of one were not distinctly different from those of the other. Thus, their objectives *a priori* included a mixture of military applications, national prestige items (lunar and planetary probes), and space research. Both nations appreciated that research represents vital national insurance for the future.

As refurbishment of the Vanguard progressed, a meeting was held at the US National Academy of Sciences to discuss the satellite programs planned for the IGY. My invitation, in a telegram dated 30 September 1957, noted that the gathering constituted the international working party on rockets and satellites. Attendees comprised delegates from the US and USSR. The Soviet delegation, led by General Anatoly A. Blagonravov, invited us to a party at their Embassy on 4 October 1957. The meeting included prepared papers on scientific and technical topics, followed by a discussion period. Both nations outlined their respective projects. In typical national fashion, the US provided much more information than it received.

A point of discord occurred during another meeting on the morning of 4 October 1957. It stemmed from US pressure for the Soviets to provide an official launch date for their IGY satellite. The Soviets were pushed rather relentlessly and intently—almost to the point of embarrassment. Finally Pushkov, answering forcefully, stated that, at the present state of the art, to predict the launch of a rocket is difficult. It becomes even more difficult to predict the launch of a satellite. There were too many uncertainties, too many things that could go wrong. Why state a date in advance when such doubt exists? He would prefer to provide a date after a successful launch.

Richard Porter was the chief US delegate at the meeting. At lunchtime the press got to him. He expressed himself freely and at some length. The Soviets, he claimed, were way behind the US. There was no other possible explanation for their reticence in providing a launch date for their satellite.

Sputnik 1

The sessions resumed that afternoon. Although I had an invitation for the party at the Soviet Embassy that evening, I had planned to miss it. Practically every other delegate attended. At the height of the festivities (I was later told) Berkner received a telephone call: the "beep beep" of the 40 MHz signal radiated by the earth's first satellite, Sputnik 1, had been found. Berkner returned to the room, stood on a chair, clapped his hands, and publicly commended the USSR on its accomplishment.

The USNC pursued its "open" space effort. The Vanguard was publicized and readied. The experiment was encapsulated and emplaced in the "bird." Complete television coverage took place during the day of launch to show the world that the US only utilized civilian-scientific talent in its space program. Vanguard did not cooperate. It fell over and burned—with complete television coverage. The US had learned a lesson. The Army was called in and asked to launch the next attempt. Van Allen prepared new instrumentation for observing cosmic radiation (essentially a particle counter to measure the intensity of particles bombarding the earth). The satellite, named the Explorer, discovered the radiation belts that now bear Van Allen's name. The US had not been first in space, but its scientific efforts to date had been best—we had discovered a hitherto unknown major feature of the planet.

The space effort soon was to acquire a national focus through establishment of the National Aeronautics and Space Administration (NASA).

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In 1956 I left AFCRC and joined the National Security Agency (NSA). My attention turned toward applied research in SIGINT.

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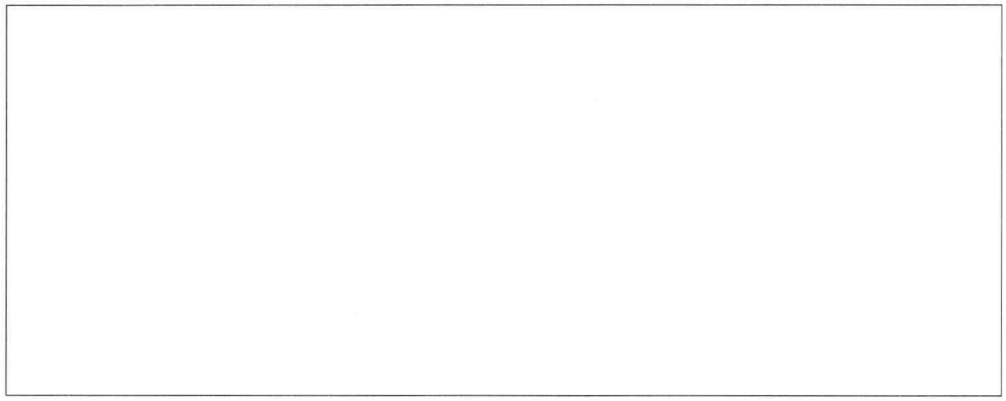

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We were fortunate. After just about one week of operation we intercepted Soviet radar operating on the Arctic coast. (As a by-product of my involvement, I could never look at the moon again without thinking of our experiment.)*

What about an intercept site on the moon? It is conceivable. In time the logistic problems would be overcome, and a lunar base for that one otherwise unattainable signal might become reality. One question is whether an atmosphere could be produced on the moon, and if so, what its properties would be like.

The greatest problem is the small lunar gravity (one-sixth that of the earth) which would not allow retention of an earth-like atmosphere for any length of time. There are other problems: distilling the needed gases from lunar rocks, the thermodynamic properties of the atmosphere, and the warming of the dark side of the moon once an atmosphere is established.

In thinking about the problem, I proposed an atmosphere of 20 percent oxygen and 80 percent argon with a surface pressure about equal to that of Denver. (On the earth the composition is 21 percent oxygen, 78 percent nitrogen and 1 percent argon.) Argon rather than nitrogen was chosen as a potential "filler" gas because of its greater molecular weight. The thermodynamic properties of this atmosphere were extremely interesting and completely different than I had expected. The unsurmountable obstacle was the loss of gas; the low gravity allowed the oxygen to "boil off" at an almost irreplaceable rate. Obviously, the answer is to utilize domed cities. The needed gases could still be extracted from the rocks by using solar energy.

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This paper has recounted the events that led NSA to one course of action. It illustrates the progression of thought on problems of the time, and the chain of events that led inexorably to our present concepts. What we need now are ideas for tomorrow.

This article is classified SECRET.

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* The dish at AIO has been updated considerably since [redacted] 3.3(b)(1)
Its surface now is spherical over its 300-meter radius to within two centimeters. It remains one of the best radio telescopes the US ever constructed, and by any reasonable measure, probably the cheapest in relation to the research potential that it provides.