

~~RESTRICTED~~

ARMY SECURITY AGENCY SCHOOL

SPEECHES DELIVERED BY

MR. WILLIAM F. FRIEDMAN  
COLONEL HAROLD G. HAYES  
LT. GEN. STEPHEN J. CHAMBERLIN

On the Occasion of the Graduation of

THE FIRST ADVANCED CLASS

ARMY SECURITY AGENCY OFFICER GENERAL COURSE

7 May 1948

Do NOT Destroy Return to the NSA Technical Library when no longer needed	C-1079 72 COPY No. 2
---	-------------------------

~~RESTRICTED~~

~~RESTRICTED~~

## SPEECH GIVEN BY MR. FRIEDMAN

I deem it a great honor and a rather unusual privilege to have been selected to say a few words of an introductory nature and to serve somewhat in the capacity of master of ceremonies this morning. I say that it is a great honor and a rather unusual privilege for two reasons. First, I feel honored because, as Colonel Hayes will explain to you presently, this is a somewhat historic occasion in the annals of the U. S. Army. It is the first graduation of its kind in the Army and, indeed, in the United States --- that is, it is a graduation wherein the graduation exercises of a school specializing in a field usually surrounded with so much secrecy are not being conducted at midnight in a pitch-black room. Also, it is the first graduation exercise of the Advanced Course in the Army Security Agency Officers School.

It is a rather unusual privilege, I feel, to have been selected for this honor, because it doesn't often happen that a man is so fortunate as to be permitted, by the Supreme Power who guides all our destinies, to live long enough to see a science and a school devoted to that science grow as I have seen them grow. Science, as we all know, moves very, very slowly. In the past few years, of course, there has been a great acceleration in the speed with which all sciences have been advancing, but in our field the advances have been exceptionally notable. And it is rather unusual for a man to see, in his own short life span, so remarkable and so large a segment of advancement occur as has occurred in the period from 1918 to 1943.

Now I wish it were possible to indicate from this platform, for the greater interest of our guests, some of the significant advances in cryptologic science which I have witnessed in my lifetime and which those who are graduating today have had the opportunity to study. But I am sure that all present appreciate the reasons why this is not possible. I find myself this morning in somewhat the same position I found myself in a dream I had the other night.

I dreamt that my call had come, and as I was being ferried across the River Styx, the chap who was running the ferry, a transport engineer whose name in Greek mythology is Charon, asked to see a copy of my orders. I pulled out a copy from my briefcase and immediately became embarrassed. I felt as we all do in a dream which finds us nonchalantly sauntering down the boulevard -- nonchalantly, that is, until we suddenly discover that we are minus certain necessary articles of apparel. For when I looked at what I was about to hand the ferryman as a true copy of my orders, I saw only a completely blank sheet of paper. This, however, did not seem to take Engineer Charon by surprise, for he proceeded at once to produce a bottle containing some chemical and a brush which he used to apply some of the liquid to the blank sheet of paper. In a moment his face lit up and he said: "Oh, yes, Friedman, I've been waiting for you. I know just where to take you." He ferried me then to a landing, where I debarked and found an imposing arched gateway into a thickly wooded park. By the gate was a simple sign stating: "This way to the HSA."

I immediately recognized that the SA stood for Security Agency, but whether the H represented Heaven or Hell was not clear to me. I'm sorry to have to tell you that it never did become clear, for reasons which you will soon realize. However, I proceeded along a dark path in the direction indicated by an invisible hand, coming presently to the main gate of a reservation surrounded by a double fence. The guards at the gate

~~RESTRICTED~~

required me to present another copy of my orders and the same chemical procedure there produced results which got me inside the enclosure. I reported to the proper authorities at Headquarters Building and was signed in without undue delay.

I was thereupon sent to the Training School where I spent some weeks while the authorities went through the slow and complicated steps of obtaining for me a cryptographic clearance and a loyalty check. I can't and won't attempt to tell you what I learnt in the Training School; one thing I did not learn, however, was what the H in the HSA stood for. None of the other trainees knew, either; and the instructors, when asked, gave answers that were very ambiguous, or else they were in secret language, the key to which they held back. In due course, I received a certain type of badge. It had my photo, name, date of birth, serial number and MOS-9600 H. I now was ready for my first job assignment. A guide took me into a building which I could see was divided into large and small rooms, and because of my special badge I was allowed to wander at will.

In one of the large rooms I saw a number of groups of people each intent on what appeared to be the same task, --- or was it pleasure? -- namely, rolling dice. "Aha," I thought, "The H must stand for Heaven. I'm going to like this place." So I sauntered casually toward a rather small group and stood behind one of the players, to do a little kibitzing. To my astonishment I began to recognize some of the players. A famous mathematician named Bernoulli, kneeling on the floor, was rolling the bones; Trithemius, Porta, Cardan, Viète, Kasiski, Bazeris, the Marquis de Viaris, and other famous cryptographers, all on their knees, were absorbed in watching the results. I will not attempt to duplicate the language used by Bernoulli to accompany the throwing of the dice or that used by the others who were watching; maybe I didn't understand because it was all in a special kind of secret language. But curiously enough, the proceedings were not very rapid. In fact, after each throw Bernoulli called out the results to a scribe who was sitting at a desk off a little to one side and who recorded them in tabular form in a large book.

I went over to the scribe who turned out to be Poisson and asked him: "What's cooking?" "Can't you see," he replied without looking up, "We are messing up the laws of probability to confound the students of the Army Security Agency Officers School on Earth?" Then he looked up, gave me a searching glance, and asked: "Who are you and how did you get in here?" With some embarrassment I found that my badge had somehow become hidden behind my beard. I hastily pulled the badge out from behind the shrubbery and displayed it. He took one look at it, read my name slowly, hopped down from his stool, rushed over to the group, and exclaimed: "Friedman's reported in for duty -- you know, the one they call 'Uncle Willie' at the ASA." Trithemius stroked his whistlers solemnly and said: "Friedman, eh? Wasn't he the fellow who gave the first cryptologic course, in 1918, and then lived on for thirty years to help with the 1948 course? He's just the fellow we're looking for. Maybe he's the one who will tell us at least something about the new developments that have turned up in those thirty years. It's a terrific job to find out anything at all about the ASA -- they're all so security-conscious! Front and forward, Friedman, and tell us all about it." With some fear I replied: "I can't! I took a solemn oath not to tell; and besides, an Executive Order doesn't permit it." "Executive Order," exclaimed Trithemius, "Whose Executive Order?" "A Presidential Executive Order," I replied. Trithemius reached for the telephone, dialed zero and soon began speaking. "There's a chap here named Friedman who has just reported in from Earth. I've ordered him to tell us what's been going on at the Army

Security Agency for the past thirty years and he refuses to talk. Says he's under a special secrecy oath and besides, he says, there's now a Presidential Executive Order against it." He listened for a few seconds, hung up the receiver, turned to me and said: "The Chief of the HSA has authorized me to say that in case you won't talk of your own volition and the rest of us fail to get you to talk, two things are going to happen. First, as a special punishment, you will be assigned the job of expunging from every single book on cryptanalysis -- most, especially from your own -- all such phrases as 'It is obvious that' and similar nonsense. Second, he's going to hold up beginning immediately, all appropriations for the Departments of Wine, Women and Song!" The threat of such dire consequences and the fact that the whole group became so menacing in its demeanor towards me awoke me. Indeed, I awoke with great fright. That's why I never found out what the H in HSA stood for, or to which echelon of the Hereafter the HSA was attached.

Today, as I said before, I find myself in a somewhat similar position of not being able to tell you in what respects our science and our School curricula have progressed, and I'm in a bit of a fright as to the ire of those in the audience who had hoped to learn something about what our graduates have been doing or have learned. I hope, however, that they will not hold it against me or against any of the other speakers this morning if we sidestep and walk gingerly around the subject. As I said before, I only wish we could tell you some details, because the story is really quite impressive; but we can't. You will have to take our word for it that the officers who graduate today from the Advanced Course of the Army Security Agency Officers School have indeed qualified themselves for the certificates which they are about to receive. By diligence and hard work, many hours of study, considerable perspiration and, I imagine, some profanity, they acquired the necessary knowledge to fit them to carry out certain important duties for which we hope the Army Security Agency Officers School has properly prepared them.

It is now my pleasure to introduce to you the next speaker, Colonel Harold G. Hayes, Chief of the Army Security Agency, who will tell you something of the background of the Army Security Agency Officers School. He hardly needs any introduction, but for the benefit of some of our visitors, I feel it desirable to indicate a bit about his own background.

Colonel Hayes was born in Pittsburgh, Pennsylvania in 1907. In 1929 he graduated from the United States Military Academy and was commissioned in the Signal Corps. His assignment to duty in our field of activities began in 1933, when he became a student in the Signal Intelligence School. Ever since that time his service in this field has been uninterrupted. In fact, it is interesting to note that he has the longest period of assignment to this type of duty of any officer of the Regular Army. In 1942, in London, Colonel Hayes was assigned to the Planning Staff for the North African invasion and remained assigned as a member of the Staff of Allied Force Headquarters until February, 1944, when he returned to duty in Washington, D. C. He was appointed Chief, Army Security Agency on 1 April 1946. He has been awarded the Legion of Merit with Oak Leaf Cluster, and has been designated as an Honorary Officer, Order of the British Empire. His distinguished career in the military service is matched only by his equally distinguished extra-curricular career on the golf course, he being the champion golfer of the Army Security Agency, including all continental and overseas stations thereof. It gives me great pleasure to present Colonel Hayes.

## SPEECH GIVEN BY COLONEL HAYES

The Signal Intelligence School was established by Mr. Friedman in 1931 and remained his responsibility for four years. Mr. Friedman was at that time Civilian-in-Charge of the Signal Intelligence Service, the training offered in the School was completely integrated and well-coordinated with operations.

The instruction given in the early days of the School, though it consisted principally of cryptanalysis, was as comprehensive as it needed to be, considering the relatively simple operational procedures at that time.

As originally planned, the course was to last for one year and one student was to take the course each year. But the first class, consisting of 1st Lt. Mark Rhoads, recommended that a second year be added in order to provide more thorough training than could be accomplished in a single year. This plan was adopted, and, beginning in September 1932 there were two members of the student body, a junior member and a senior member. The junior member was 1st Lt. W. Preston Corderman, who later (from 1943 to 1946) became Chief of the Signal Security Agency. In September 1934 Lt. Corderman relieved Mr. Friedman as instructor of the Signal Intelligence School, and thereafter it became the practice to give one of the students who had completed the two-year course a tour of duty as Officer-in-Charge and chief instructor of the School. Lt. Corderman had as his student Lt. Harrod G. Miller, Signal Corps, who is now a Colonel and President of the Signal Corps Board at Fort Monmouth.

The arrangement by which one student would enter each year to study along with a second-year student was abolished in 1936 in favor of a plan which would permit two students to begin the course together. This would make it possible to cover more problems in the course since the pick and shovel work could be shared and two minds were better than one in making the educated guesses upon which success depends.

In August 1936 Captain Miller, as Officer-in-Charge of the Signal Intelligence School, began the instruction of the first pair of students to study the course concurrently. One of these officers was 1st Lt. (later Colonel) George A. Bicher, who became Chief of the Signal Intelligence Service in the European Theater of Operations, and later still the Deputy Chief of the Army Security Agency. He is with us today. The other student was 1st Lt. Charles Brundy Brown, Signal Corps, who is now a colonel on duty with the Joint Chiefs of Staff organization in the Pentagon.

Between August 1938 and June 1940 the student body of the Signal Intelligence School was composed of 1st Lt. Joe C. Sherr and myself. Captain Bicher was our instructor. Lt. Sherr served as a major under General MacArthur in the Philippines. He was evacuated from Bataan and, as a colonel served as Chief of the Signal Intelligence Service in the Southwest Pacific Area. In 1943 Colonel Sherr was killed while en route to the United States in a transport plane. We were the last students to complete the two-year course of the Signal Intelligence School. The two students who followed us were Captain (now Colonel) Harold Deud, who later became Chief of the Allied Translator and Interpreter Service in the Pacific Area, and 1st Lt. (now Colonel) Earle F. Cook, who later became Chief, ASA Europe. I was the instructor. We began working in August 1940, but the course had to be discontinued within a few months because of the pressure of work and the need to make use of the students in operations.

Two Coast guard students, Lt. Jones and Lt. Rhodes, also took the full two-year course, Jones in 1934-36, and Rhodes in 1938-40.

In the ten years of its existence the School had provided a thorough course of instruction in cryptanalysis and related subjects to nine Regular Army officers. It is interesting to note that of these nine graduates, eight of them performed duties during the war which required signal intelligence training. This is a unique record, I believe, in the Army, which has an unfortunate reputation for training officers for certain specialized work and then never using them in that specialty.

A great many officers were trained by the Signal Security Agency during the war years, but the scope and purpose of this instruction was essentially different. It was specialist training which prepared officers in a single field of the Agency's activities.

Shortly after the end of the war the need to reopen the Signal Intelligence School was recognized. Three major changes in concept were apparent.

First, the school needed to have official recognition. The prewar school, mainly because of its size, was lacking in this respect and hence an officer received no credit on his official record for having completed the course. This did an injustice to the officer concerned as well as to the importance of signal intelligence to the Army. Because the ASA is neither a separate branch nor technical service, we were faced with a difficult problem in having our school recognized as being on the same status as any basic arm or service school. The best we could get was to have our school recognized as the equivalent, insofar as establishing eligibility for attending higher schools such as the Command and Staff School at Leavenworth. It is now however accepted by any of the arms or services as substitute for their own basic courses.

Second, the scope of the course needed to be vastly increased to include not only all phases of signal intelligence, but signal security as well. The prewar course was aimed principally at giving training in cryptanalysis. Our new objective was to train staff and operations officers who would be capable of commanding large ASA units, directing their operations, and serving as special staff officers in the headquarters of large commands. And, paradoxically, while the scope of the course was to be increased, the time was to be reduced to one year instead of two, as it was felt that a proper balance between training and operational requirements would not permit two years' time to be devoted to school.

Finally, the capacity of the school needed to be vastly increased. We needed to turn out at least thirty officers per course to have any hope of meeting even peace time personnel demands.

And so in July 1947 our school got under way with twelve students. I'm glad to see that the same number are finishing who started.

It was admittedly an experiment, it was new, and we hoped to learn and profit from the experience of this first course in making needed improvements. Now this is not an apology, because I don't feel that any apologies are called for. I do hope, however, that you who are graduates of our first course, who may have seen many particulars in which our course was not up to standard, who may at times have been discouraged or disappointed, I hope that you will give us the benefit of your experience and advice in setting up a better course and better instruction. We shall have a period of four months in which

to prepare for the next course which starts in September and in the meantime those of you graduates who remain on duty in this area can expect to be called on for your help.

I would like at this time to extend my sincere appreciation and commendation to all members of the school faculty, to all our instructors, and to the others who gave so much of their time and energy to make this course a success. For many it was another case of that often used phrase in the Army "in addition to your other duties." It is our hope and our plan that in the future we shall have a permanent and full-time faculty with no other responsibility than to make this school second to none, but for this first course we had no other choice than to make the best of what we had.

And last, but certainly not least, let me extend my appreciation to the graduating class without whose energetic interest and active cooperation our school could never have succeeded. My congratulations to you all and may you have the opportunity to serve your country well and faithfully in the specialty for which you have been trained.

NOTES FURNISHED GENERAL CHAMBERLIN FOR USE IN  
HIS EXTEMPORANEOUS ADDRESS

On 8 May 1945 at Rheims, France, the terms of a military surrender were signed by the Germans which brought to an end the war in Europe, -- a war which we were told by certain persons in these United States that we could not possibly win. Three months and seven days later, on 14 August 1945, we brought to an end the War in the Pacific, -- another feat we were told would be impossible of accomplishment.

It was not by chance that these victories were possible. World War II was fought with guns and ships and planes, with machines and supplies, and men, and also with propoganda and diplomacy. But not with these alone. The weapon which we used with the most telling effect was intelligence. We had more and better intelligence than our enemies had.

Well, we won the War and active or shooting hostilities ceased, but a cold hostility had replaced them and grows more and more bitter against us. We are threatened today, as we have never been threatened before in peacetime with a very real danger to our security as a nation. We are called upon again to make sacrifices, to invest in government bonds, to give our time to military preparations. In the present battle for security we are as a nation pouring gold and food into Europe. We may have to be ready to back up these investments with men and guns if necessary. Our commitments are worldwide.

Pearl Harbor and our experience in World War II taught us some things about security and the all-important role of intelligence which we have applied and which we are applying today. It is pretty well established, for instance, that "as our positive power to provide national security, that is, military strength, is decreased, the efficiency of our intelligence services must be correspondingly increased in order to insure sufficient advance warning of hostile intent and capabilities to allow mobilization of our national resources." Accordingly, while demobilization and reorganization of the armed forces was taking place, we were planning the revitalizing of the intelligence services of the United States. We are still in the process of perfecting those services so as to prevent another Pearl Harbor.

To this end the Chief of Staff on 3 March 1947 sent to the higher commanders and principal staff officers of the Army a memorandum concerning the intelligence functions and responsibilities of the Army. In this memorandum it was directed that each addressee should "impress all appropriate elements within his sphere of responsibility with the importance of an efficient intelligence service within the Army, and by appropriate instructions and continued field inspection require execution of the general plan" which was cited therein. The General Intelligence Plan promulgated by the Chief of Staff in this directive of 3 March 1947 embodied the following courses of action: (See Tab "A")

As a member, and a most important member of the intelligence team, the Army Security Agency is charged with the responsibility for the perfecting of that portion of our overall intelligence program which is concerned with signal intelligence and communications security.

For the benefit of some of our guests at this exercise, I will outline in very broad terms the general mission of the Army Security Agency. It is a two-fold mission and I'm not sure which half is the more important, so I don't want any of those present to draw any inferences from the order in which I give them today.



There is, on the one hand, the mission of producing, in time of war, intelligence from a study of the enemy's communications. The technical name we give it is signal intelligence or communication intelligence, and my own experience enables me to tell you that such intelligence is extremely useful and valuable. But, as I have indicated, that is only one-half of the two-fold mission of the Army Security Agency. The other half is the protection of our own communications at all times, so as to prevent the enemy from being successful in his attempts to obtain intelligence from our messages. The technical name we give this phase of the mission is communication security.

One thing I'm sure the graduates here have learned in their studies and have come to appreciate is how and why these two phases of the general mission of the Agency complement and support each other. And the fact that they are so interrelated tells why the Chief of Staff of the Army and his various assistant chiefs look to the Army Security Agency for technical advice on matters in both fields. Some day, perhaps in the not-too-distant future - who knows? - some of today's graduates may find themselves carrying the burden of responsibility for giving proper technical advice. That is why I deem the training they have received in the Army Security Agency School to be of such high importance.

To carry out the mission which has been assigned to it and to meet in a satisfactory manner the increased responsibilities that have been placed upon it, the Army Security Agency must have officers with training and experience - officers who will give their best to and make a career of their ASA assignments.

You gentlemen of the graduating class of the Officers School Division have attended classes eight hours a day for a period of 46 weeks. You have been getting acquainted with the activities of the Agency so that you will be prepared to assume a share of the responsibilities of the Agency. I want to welcome you to our intelligence team, on which you will have an opportunity to contribute in no small measure to the winning of our battle for national security.

(Add any additional personal remarks as deemed appropriate.)

WAR DEPARTMENT  
OFFICE OF THE CHIEF OF STAFF  
WASHINGTON

3 March 1947

Subject: Intelligence Functions and Responsibilities

TO: CINCDEF  
CINCPAC  
CG USSTAF  
CG USMA  
CG MTO  
CG AGFPRAC  
CG CARIBBEAN DEFENSE COMMAND  
CG ARMY AIR FORCES  
CG ARMY GROUND FORCES  
CG ARMIES Z.I. AND M.D.W.  
CG COMMAND AND STAFF COLLEGE  
CHIEFS OF ADMINISTRATIVE AND TECHNICAL SERVICES

1. Resulting from our experiences in two wars and from our painful surprise at Pearl Harbor, it has been acknowledged on the highest levels that Intelligence services of the Government must be rehabilitated and brought to high efficiency. Such acknowledgment has previously been voiced on the general principle that as our positive power to provide national security, i.e., military strength, is decreased, the efficiency of our Intelligence services must be correspondingly increased in order to insure sufficient advance warning of hostile intent and capabilities to allow mobilization of our national resources.

2. Preoccupation with problems of demobilization and reorganization has absorbed greatly the time and thought of the higher commanders and principal staff officers during recent months. It is desired now to draw the attention of these officers to the importance of placing Intelligence on the priority level which is required in national interests.

3. Progress in the improvement of the efficiency of the Intelligence services has been attained since the postwar reorganization of the War Department through the application of various recommendations of Boards of officers and investigating committees. There are, however, certain fundamental difficulties which tend to retard full recognition of the importance of Intelligence in our national defense structure. These are:

a. A lack of full understanding and appreciation on all levels, from the War Department to the lowest troop echelon, of the scope and vital importance of Intelligence to national security.

b. Assignment of inexperienced personnel to Intelligence duties, lack of stress of Intelligence training in all echelons; frequent turnover of trained personnel on Intelligence duties, thus sacrificing benefits of experience and continuity; and inadequate incentive to attract and continue on Intelligence duty the highest type of military personnel.

c. Curtailment of Intelligence personnel available for collection, evaluation, and dissemination of Intelligence.

4. A long-term plan has recently been approved which, if applied progressively by commanders and staffs of all echelons, should result in the elevation of the Intelligence Service to the level of priority it demands in our scheme of national preparedness. This plan is:

- a. Continuing review of the curricula and field inspection of instruction in all Army schools by appropriate commanders and by the Director of Organization and Training and the Director of Intelligence in cooperation, to insure that the courses in Intelligence training emphasize the importance of Intelligence and are adequate and consistent with the mission of the schools.
- b. Continuing review of programs and field inspection of training by appropriate commanders and by the Director of Organization and Training and the Director of Intelligence in cooperation, to insure that Intelligence training in the service is adequate and appropriate to the mission of the units concerned.
- c. Initiation and monitoring by the Director of Intelligence, WDCS, of continuing review by the Joint Intelligence Committee (with Joint Chiefs of Staff approval) of instruction in the schools under control of the Joint Chiefs of Staff to insure that Intelligence is adequately stressed, and that the Intelligence courses are adequate and consistent with the mission of the schools.
- d. Continuing emphasis by the Secretary of War and the Chief of Staff in testimony before the Congress and in conferences with military commanders of the vital importance of Intelligence in our national preparedness.
- e. Establish the principle at the earliest practicable date that a requirement for assignment to Intelligence positions will be the prior completion of a service school Intelligence course, or equivalent war experience, appropriate to the position; the detailed plan to be originated by the Director of Intelligence along the following general lines:
- |  |                               |
|--|-------------------------------|
| Unit positions below division and numbered Air Force level:  | Special Service Schools       |
| Positions including and above the division and numbered Air Force level, excepting the War Department General Staff and Military Attaches: | General Service Schools       |
| Senior positions above division and numbered Air Force levels and including War Department and Military Attaches:                          | Strategic Intelligence School |
- f. Continued monitoring of assignment of officers to Intelligence positions by appropriate commanders and by the Director, Personnel and Administration, and the Director of Intelligence to obtain greater stability of Intelligence organization and increased length of duty tour.
- g. Continued review by the Director of Organization and Training and the Director of Intelligence of tables of organization and allotments to insure that Intelligence positions are accorded same prestige of rank as are operations, war planning and supply positions.
- h. Continuing review by appropriate commanders and by the Director of Organization and Training and the Director of Intelligence to avoid assignment to Intelligence officers of duties which prevent proper performance of their intelligence functions.

i. Continued careful selection by appropriate commanders and by the Director, Personnel and Administration, on advice of the Director of Intelligence, of officers to fill top level Intelligence positions including military attaches.

j. Continued decentralization of selected functions by appropriate commanders and by the Director of Intelligence within the Army structure where efficiency will not be sacrificed.

k. Continued efforts by the Director of Intelligence through the National Intelligence Authority to pass functions not of primary interest to the War Department either laterally to other departments of the Government or to the Central Intelligence Group where efficiency will be gained.

l. Allocate personnel to Intelligence, recognizing the principle that as our positive power for security declines our reliance on Intelligence to determine the strength and direction of threats to our security increases.

5. It is requested that each addressee impress all appropriate elements within his sphere of responsibility with the importance of an efficient Intelligence service within the Army, and by appropriate instructions and continued field inspection require execution of the general plan cited herein.

BY DIRECTION OF THE CHIEF OF STAFF:

/s/ H. I. Hodes  
H. I. HODES  
Brigadier General, GSC  
Asst. Deputy Chief of Staff