

## MEMO ROUTING SLIP

NEVER USE FOR APPROVALS, DISAPPROVALS,  
CONFERENCE, OR SIMILAR ACTIONS

1 NAME OR TITLE	INITIALS	CIRCULATE
ORGANIZATION AND LOCATION	DATE	COORDINATION
2		FILE
		INFORMATION
3		NECESSARY ACTION
		NOTE AND RETURN
4		SEE ME
		SIGNATURE

## REMARKS

Memo for record. 30 Sept 52  
 General C called me in to discuss this after he had talked with Col. Wyman. His decision: not to invite Stone; this decision based upon personality considerations and not security considerations — unless I felt that we couldn't get along without Stone on the Advisory Board. I told him I did not feel that we absolutely needed Stone

FROM NAME OR TITLE

Declassified and approved for release by NSA  
on 04-01-2014 pursuant to E.O. 13526

ORIGIN

DATE

TELEPHONE

and agreed with Jan. C that  
we might have personality  
clashes on the Board if Stone  
were a member. I also said  
we could take a reading after  
a year or so, to see how  
WSEG liked Stone.

J.

CONFIDENTIAL

REF ID: A69915  
NEVER USE FOR APPROVALS, DISAPPROVALS,  
CONCURRENCES, OR SIMILAR ACTIONS

MEMO ROUTING SLIP

1 NAME OR TITLE General Canine	INITIALS	CIRCULATE
ORGANIZATION AND LOCATION THRU: Admiral Wenger	DATE	COORDINATION
2 <i>Concur</i>		FILE
<i>James Stewart</i>		INFORMATION
3 <i>W.F.F.</i>		NECESSARY ACTION
<i>Setup a hearing</i>		NOTE AND RETURN
		SEE ME
		SIGNATURE

20 SEP 1952

REMARKS

1. One of the candidates for membership on AFSA Scientific Advisory Board is Prof. Marshall H. Stone, Chairman, Department of Mathematics, University of Chicago. He is Consultant to WSEG.

2. AFSA-16 once indicated that there were clearance problems in his case and recommended against clearing him for COMINT. Since then we have learned that the clearance problems have been clarified so far as WSEG is concerned but AFSA-16 wants a waiver from you in Stone's case if he is to receive a comint clearance.

3. I think Prof. Stone could make important contributions to the new Board's work, especially on an individual basis as consultant.

4. Recommend you grant a waiver unless AFSA-16 can convince you it is not warranted or advisable.

FROM NAME OR TITLE

*W.F.F.*  
WILLIAM F. FREILMAN  
CONSULTANT

DATE

26 Sept 52

ORGANIZATION AND LOCATION

TELEPHONE

60493

CONFIDENTIAL

HEADQUARTERS  
ARMY SECURITY AGENCY  
WASHINGTON 25, D. C.

17 January 1946

Professor Marshall Stone  
c/o Chief Justice H. F. Stone  
2340 Wyoming Avenue  
Washington 8, D. C.

Dear Professor Stone:

Thank you for your letter of January 13, and I will be looking forward to seeing you on Tuesday, January 22, and not January 21 as indicated in your letter. However, if you really meant January 21, which would be Monday, that would be satisfactory also, but I would appreciate having word from you early on Monday morning.

My address and home telephone number, as well as my office telephone number, you will find below.

The best mode of getting to Arlington Hall Station by bus from your father's house on Wyoming Avenue would be to go down to K Street and take a Virginia bus marked "Buckingham", and get off at Pershing Drive where it crosses Glebe Road. I attach hereto a diagram which will help you from there on. When you arrive at the front gate, have the guard call me so that I can have you pass on to the grounds. You will remember the way to get to the Headquarters Building, I am sure. My room is 116.

It would be nice to have you telephone me at my home some time Sunday afternoon or earlier in case you get to Washington on that day.

Looking forward to seeing you, I am

Sincerely yours,

1 Incl:  
Diagram

WILLIAM F. FRIEDMAN  
Director of  
Communications Research

Home address: 3932 Military Road  
Home telephone: EMerson 3915  
Office telephone: GLebe 4300, ext. 215.

M. H. STONE

PRESIDENT

30 HILLSIDE AVENUE

CAMBRIDGE, MASS.

January 13, 1946.

Mr. William F. Friedman  
 Director of Communications Research  
 Headquarters, Army Security Agency  
 Washington 25, D.C.

Dear Mr. Friedman :-

I am delighted to learn that you can see me. My plans have now crystallized, and I would like to arrange to see you on Tuesday, January 21, at your convenience. It would give me great pleasure to lunch with you at the Hall, if you so desire. Some of the things I have in mind have an official bearing and might be more comfortably discussed there.

Would you be good enough to let me know % H. F. Stone, 2340 Wyoming Avenue NW, Washington 8, D.C. [tel. Decatur 0210], where I shall stay during my visit, when you can see me? If I am to come out to the Hall, I would also appreciate directions as to the best mode of getting there by bus. I would also like your office telephone number so that any last-minute hitches can be ironed out by telephone if necessary.

With many thanks,

Sincerely yours,

Marshall Stone

~~Suspense~~  
15 Jan 46

WDGSS-14

8 January 1946

File

Dr. Marshall H. Stone,  
President, American Mathematical Society,  
30 Hillside Avenue,  
Cambridge, Massachusetts.

Dear Doctor Stone:

I was very pleased to receive your note of 3 January 1946, and I will be very happy to see you when you come to Washington. I expect to be here between the 18th and 24th, or during the first few days of February, but it would be nice if you could give me one or two days' notice.

I have no idea at the moment as to the nature of the things which you wish to discuss, whether personal or official, but in either case, we can meet either at Arlington Hall Station or at my home. I should appreciate it very much if you will be my guest either for luncheon or dinner.

Reciprocating your cordial greetings for the New Year,  
I am

Sincerely yours,

WILLIAM F. FRIEDMAN  
Director of  
Communications Research

M. H. STONE  
PRESIDENT30 HILLSIDE AVENUE  
CAMBRIDGE, MASS.

Jan. 3, 1946

Dear Mr. Friedman:-

Could you see me for an hour or so if I should come to Washington between the 18<sup>th</sup> and 24<sup>th</sup> of the month or during the first few days of February? There are various things I would like to talk with you about, if you are expecting to be in town and available then. My plans depend to a considerable extent on <sup>my</sup> being able to make various appointments, including one with you, and are therefore not yet very precise.

With best greetings for the New Year,

Sincerely yours,

Marshall H. Stone

File

CSGAS-14

22 October 1947

**SUBJECT:** Utilization of Services of Dr. Stone**TO:** Chief, Army Security Agency

1. I have discussed this matter with the Chiefs of the operating divisions. I find that Mr. Rowlett feels that all such cases of possible employment of eminent men as consultants should be examined on their individual merits, taking cognizance of current cryptanalytic problems. I further find that he is inclined to favor the idea of employing Dr. Stone on the basis proposed for a minimum period of three months. On the other hand, I find Dr. Kullback and Dr. Sinkov even less sanguine than you were initially about the results or advantages to be expected from part-time employment of Dr. Stone, either on a contractual basis for consulting services or on a PWAE basis. They feel that better results would accrue to the ASA and the Government as a whole if we could take the money that it is probably going to cost to engage in this venture with Dr. Stone and use it instead to employ one or two competent young scientists on a regular, full-time basis. To a large extent I share the latter point of view but, if you will recall my first reaction to this question, I urged serious consideration be given to trying Dr. Stone out as a consultant, for I do not close my mind to the possibility that a man of Stone's mental stature might in a short time and with a fresh approach develop something new, useful, or even startling in the field. Some people have entertained the idea that a man who has made his mark professionally in some field of knowledge or who shows brilliance therein is ipso facto qualified to do excellent work in the field of cryptanalysis. Some of our experience contradicts this idea, but here is a good chance to try the experiment under favorable conditions and to observe what happens. Such an experiment should then afford a useful basis for future considerations or decisions in similar circumstances. There are other candidates for similar consultantships and our experiment will be useful not only in affording a guide but also in establishing a precedent.

2. a. Dr. Kullback suggests that in view of Dr. Stone's present work at the University of Chicago, where we understand



CSGAS-14 312.1

22 October 1947

Subject: Utilization of Services of Dr. Stone (continued)

he is not only head of the Department of Mathematics but also is in direct charge of research and development of electronic calculating machinery, it might be useful to channel Dr. Stone's efforts along lines of research into the possibility of designing and building modern calculating machinery specifically adapted to the solution of cryptanalytic problems. Or, it may be possible to modify the present types of electrical and electronic computing machines, which operate on a fixed arithmetic basis, to make them serve as cryptanalytic machines, which usually must operate on a variable or algebraic basis. For this, Dr. Stone must not only acquire a good working knowledge of cryptanalytic theory and techniques, but he must also learn in detail what we and the British have accomplished with adaptations of existing machines or with recent developments in specially-designed cryptanalytic machines.

b. It developed from my talk with Mr. Rowlett that Dr. Stone did some concentrated work for approximately three weeks on the "Fish" and German Enigma problems immediately after returning from India in 1945 and showed considerable aptitude at grasping the cryptanalytic and mathematical aspects of both. Mr. Rowlett therefore suggests that Dr. Stone be brought here to work for a minimum of three months specifically and exclusively on the Longfellow problems. Possibly this would be an excellent point of departure and afford a good test of Dr. Stone's ability to contribute, at the same time give an indication of what can be expected from others under similar circumstances. After three months both parties could review the situation and ascertain whether or not it is worthwhile to continue the relationship.

3. I have discussed possible financial arrangements with Messrs. Sullivan and Crafford. It appears easier from an administrative point of view to employ Dr. Stone as a research analyst on a PWAE basis. In order to do that it will be necessary to obtain authorization for an increase in our number of positions in the critical grades, but this may not be too difficult in this case. It is suggested that a P-8 grade would be warranted. On the other hand, and as an alternative, a contract for consultant services at the rate of \$25.00 per diem, the maximum rate, can be placed and this requires approval of the Secretary of the Army. In my opinion the PWAE basis is preferable. To arrange for either method of employment will probably take a little time, so that while waiting it might be useful to send Dr. Stone some material for

CSGAS-14 312.1

22 October 1947

Subject: Utilization of Services of Dr. Stone (continued)

study. I suggest that if he does not already have it, he be sent the extension course material and asked to look it over carefully.

4. You will recall that at the end of his war-time employment in G-2 Dr. Stone filed a final report on his experience and observations. We have never been able to see that report. We also gained the impression that it contained comments and probably criticisms on our organization, methods, etc. It might be advisable to make a renewed attempt to get that report inasmuch as a review of it might give clues to lines upon which Dr. Stone could be given special assignments of work.

5. It is recommended that:

a. A letter substantially as per the attached be sent Dr. Stone without delay, inasmuch as his last communication suggests he "could begin by coming to Washington for a short training period sometime in November."

b. A renewed attempt be made to locate a copy of Dr. Stone's final report to which reference is made in Par. 4.

c. Steps be initiated at once to employ Dr. Stone on a PWAE basis as a research analyst, P-8.

1 Incl  
Letter to Dr. Stone

WILLIAM F. FRIEDMAN  
Chief, Communications Research  
Ext 215

22 October 1947

Dr. Marshall H. Stone  
Department of Mathematics  
University of Chicago  
Chicago, Illinois

Dear Dr. Stone:

Receipt of your letter of 5 October 1947 is acknowledged, and I note that you would like to begin our proposed relationship by coming to Washington for a short training period sometime in November.

This would be agreeable to me, and I would be glad if I were able to say to you at once that what you propose is satisfactory, but as you are doubtless well aware it takes a little time to make the necessary arrangements for reimbursement of travel expenses, payment for services, and so on. So we will need a little more time to complete those details.

In the meantime, may I make a suggestion?

In your letter of 29 May and in your conversation with me on 7 June, you were quite frank in stating not only your awareness of the disadvantages of part-time arrangements in work of such difficulty as that we are considering but also your realization that you will have to undergo a considerable period of study before you will be in a position to make a real contribution. Now I believe that a good part of your preliminary study to acquaint yourself with basic ideas in the field could be accomplished by means of a review of some of our extension course literature. You may already have this material, but if not, I will be glad to send it to you. There is no need for you to solve any of the exercises unless you wish to, and in the latter case you could send your papers in for review or not, as you see fit. The knowledge you might gain in this easy way would not only give you a bird's-eye view of the general field of cryptanalysis but also afford a sound base for further study. There is another advantage in such preliminary review: we have found that it is not usually advisable to take cryptanalysis pills in large doses. It takes a little time for the ideas in this field to sink in and make a lasting mark. You could carry on your normal duties at the University

and browse at your leisure in the extension course material until the financial arrangements for your employment have been completed. I anticipate no difficulties on that score.

I assume that you would like to know what we have in mind for you to undertake when you come to Washington. We think you might well tackle one specific problem which would certainly be of deep interest to you and which is akin to the problems you studied for approximately three weeks when you were last at Arlington and is of current importance. We would like to have you come prepared to stay here to work on that problem for a minimum of three months' continuous effort, for it is of such nature that it will take some preliminary study to build a firm foundation for actual research. Our hope is that by such concentrated attention you will be able to make a valuable contribution to our stock of knowledge on this problem. After that, there will no doubt be other problems of equal interest and importance, from among which we can select one for further study by you. The latter might be one having many points of contact with the sort of problems you no doubt meet in your work in development of high-speed calculating or computing machines at the University, but, of course, the problems will have applicability specifically to our field of interest.

If what I have outlined above appeals to you and if you are in a position to take three months' leave of absence for your first assignment, please advise me and I will initiate action leading toward the establishment of the financial arrangements. Also, I will have the extension course material sent to you without delay in case you do not already have it. No doubt you realize that material of a higher security classification cannot be sent you either at this time or even in the future, especially if it deals with current problems. You will readily appreciate the wisdom of our policy in this regard, which does not permit such material to be taken off the premises.

Very truly yours,

HAROLD G. HAYES  
Colonel, Signal Corps  
Chief, Army Security Agency

STANDARD FORM NO. 64

## Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. Friedman

DATE: 20 Oct 1947

FROM : Boes

SUBJECT: Extension Course grades of Prof. A.A. Albert,  
University of Chicago, Ill.

Last known address: RFD #5, Oshkosh, Wisconsin

Subcourse no.	Rating
30-1 (Elem. Mil. Crypt.)	98.6
30-20 (Adv. Mil. Crypt.)	99.2
30-21 (Mil. Crypt I)	99.5
30-22 (" " II)	97.7
<del>40-20</del> (" " III)	94.0
40-21 (" " IV)	completed only 4 lessons - approx. average = 9.5

J

22 May 1947

Mr. Marshal Stone  
313 Eckhard Hall  
University of Chicago  
Chicago 37, Illinois

Dear Mr. Stone:

Colonel Carter W. Clarke has informed me of your desire to be of assistance to the Army Security Agency. Your offer is appreciated and I would like you to go more into detail as to the type of contribution which you had in mind. I would like to have from you, if you can find the time before your departure for South America, a brief statement of your ideas with regard to participation in our efforts. It will give me something to think about and perhaps we can here work out some of the details to discuss with you on your return from your trip.

Very truly yours,

HAROLD G. HAYES  
Colonel Signal Corps  
Chief, Army Security Agency

DRAFT

Mr. Marshal Stone  
313 Eckhart Hall  
University of Chicago  
Chicago 37, Illinois

Dear Mr. Stone:

Colonel Carter W. Clarke has informed me of your desire to be of assistance to the Army Security Agency. Your offer is appreciated and I

would like you to go more into detail as to the type of contribution you <sup>which</sup> had in mind. I would like to have from you, if you can find could make. ~~A complete statement outlining your background and experience the time before your departure for South America, a brief first hand will help me to give the matter thorough consideration. As your statement of your ~~interest~~ with regard to participation in our knew Congress is in a retrenching mood, the effects of which have been efforts. It will give me something to think about and and will continue to be felt here. New appointments and promotions in the perhaps we can hire work out some of the details to discuss higher brackets are frozen for this and the next fiscal year. As a consequence with you on your return from South America.~~ the taking on of additional personnel, except for replacement in normal attrition, which naturally would come from within the organization following the organization's promotional policy, presents a highly unusual problem. This Agency has never been permitted to hire consultants on an expense basis and hence has always worked within the Civil Service rules and regulations governing graded and ungraded employees.

You may be assured that I will give the matter my personal consideration as soon as I have all the information available on which to base a decision.

Very truly yours,

HAROLD G. HAYES  
Colonel Signal Corps

*Mr. Stone*  
*23 May 47*  
*46*  
*Fid*  
*ml*

Stone

26 September 1945

Dr. Marshall Stone  
Harvard University  
Department of Mathematics  
Cambridge, Massachusetts

Dear Dr. Stone:

When I returned from my European trip, I found that you had dropped in to say goodbye during my absence. I want to indicate how sorry I am to have missed you. I had looked forward to having a good long talk with you some time to gain the benefit of your observations of our work, etc. Now it is too late to do that sort of thing and this will have to go by the board unless you come down to Washington sometime soon or unless I happen to make a trip to Boston. The latter is not beyond the realm of possibility in the near future because my daughter is completing her senior year at Radcliffe, and we might like to go up to visit her some time during the current term. If I do make the trip, I would consider it a privilege to drop in to pay my respects.

With cordial greetings, I am,

Sincerely yours,

William F. Friedman  
Director of  
Communications Research