

ASA *Review*



Flight from Mindanao

(Page 16)

**July-August
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ASA *Review*

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Cover:

A scene from "Signalman's Odyssey" — Michael Maslak and companions, fleeing from Japanese on Mindanao, set out for Australia in outrigger canoe.

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You can extract individual items from this journal, provided you handle each according to its own classification.

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AND the journal as a whole must be treated as a Confidential document — according to the instructions on page 51.

Edgar Allan Poe, Cryptographer

By William F. Friedman

(Unclassified)

Since the publication of articles on Poe as a cryptographer by Mr. Friedman a decade ago, new light has been cast on this subject through the discovery of a considerable amount of Poe's cryptographic writings previously unavailable. The original articles*

have been amended to include this late information and will be printed serially in the Review. The new material, which has been incorporated in footnotes, is placed in brackets to distinguish it from the original footnotes. — Editor.

It is a curious fact that popular interest in this country in the subject of cryptography received its first stimulus from Edgar Allan Poe. Should a psychological association test be made, the word "cipher" would doubtless bring from most laymen the immediate response, "Poe" or "The Gold Bug". The fame of Poe rests not a little on his activities with cipher, and much of the esteem in which this American genius is held today rests in part on the legend of "Poe the cryptographer".

Several years ago, in an extremely interesting and penetrating analysis, Joseph Wood Krutch discussed Poe's activities in cryptography, saying:

Doubtless nothing contributed to a greater extent than did Poe's connection with cryptography to the growth of the legend which pictured him as a man at once below and above ordinary human nature; but the whole subject is still unfortunately wrapped in some obscurity, and it is impossible to be sure of the facts as distinguished from his own report of them.¹

*American Literature, vol. VIII, no. 3, November 1936, and the Signal Corps Bulletin, nos. 97 and 98, July-September 1937 and October-December 1937.

¹Edgar Allan Poe: A Study in Genius (New York, 1926), p. 103. More recently, Prof. Killis Campbell (in The Mind of Poe and Other Studies, Cambridge, Mass., 1933) says: "What, finally, of the fiber of Poe's mind, of his natural endowments, and of his intellectual integrity? No one, so far as I know, has ever denied to Poe the possession of a peculiarly acute and active mind. ...That he had extraordinary powers of analysis comes out everywhere -- in his critical reviews, in his

The popular conception of, and the reaction toward, the subject of cryptography in Poe's time -- and to a certain extent today -- are the remnants of a medieval point of view, which regarded it in somewhat the following light: A cryptogram is a piece of writing to which a meaning exists but is not immediately perceptible; its intelligibility is concealed, hence mysterious or occult, and thus supernatural. Therefore anyone practicing the art is of necessity the associate of forces governing supernatural phenomena. The mental portrait the average layman has even today of the professional cryptographer is that of a long-haired, thick-bearded recluse; a cross between a venerable savant and a necromancer who must perforce commune daily with dark spirits in order to accomplish his feats of mental jiu-jitsu.

This impression was doubtless prevalent in Poe's time because authentic information concerning cryptography was extremely limited and is even today quite meager. One of the interesting anomalies in the whole field of cryptology is the paucity of sound literature on the subject. In the most extensive bibliography in print,² the number

studies in sensation, in his ratiocinative and pseudo-scientific stories, in his solving of ciphers and cryptographs" (pp. 28-29). "Question has likewise been raised in some quarters as to Poe's honesty and his intellectual integrity....But an even more serious indictment has been brought against him, to the effect that he at times made a display of learning or affected an erudition to which he had no claim" (pp. 30-31).

²André Lange and E.-A. Soudart, *Traité de Cryptographie* (Paris: Librairie Félix Alcan, 1925). The number of items in this list is approximately 100. The statement as to "the most extensive bibliography in

of treatises of real technical merit does not exceed a dozen. Such a pitiful showing for an art that has been practiced from time immemorial cannot be ascribed to a lack of interest in the subject on the part of the general public, or to a lack of usefulness as a branch of knowledge. On the contrary, cryptography is employed to a great degree every day in all countries, in diplomatic, military, naval, business, and social affairs; and as a pastime, it presents many of the elements that constitute the *raison d'être* of the best types of puzzles. Even those who have never delved into it agree that the subject intrigues and tantalizes them. Yet information concerning methods of preparing cryptograms of sound merit is very meager, and that concerning methods of solving them is abysmally lacking to all except a very small circle of professional cryptographers who remain in office only so long as they violate no governmental secrets connected with their work.

It is not strange, then, that in a field wherein popular interest is great but popular knowledge extremely limited many spurious ideas should be current. This state of affairs existed in Poe's day, and consciously or subconsciously Poe saw an opportunity to exploit it for his own purposes. To exhibit deep understanding and thorough knowledge where the stock of knowledge on the part of others is practically nil, would seem to be a pardonable source of gratification to a perfectly normal person; what could be more soothing and reassuring to the victim -- according to Krutch's view -- of a rather well-developed inferiority complex?

Poe's known cryptographical writings include the article "A Few Words on Secret Writing" which appeared in the July 1841 issue of *Graham's Magazine*; three supplementary articles appearing in the August, October, and December issues of the same magazine; his tale *The Gold Bug*; and, if it may be included under the heading of cryptographical writings, a recently discovered letter to which reference will

print" was true at the time my article was first printed (1936) and reprinted (1937, 1942) but since those years an excellent and far more extensive bibliography has appeared: Galland, "An Historical and Analytical Bibliography of the Literature of Cryptology" (Northwestern University, 1946). Despite the greater scope of the Galland bibliography, the statement relative to the small number of "treatises of real technical merit" still is valid.³

later be made. In none of them can the serious student of the subject find any evidence that Poe was more than a tyro either in the art of cryptography or in its handmaid, the science of cryptographic analysis. Long before his day, men who had made a study of these matters were far more proficient, and their names are all but forgotten.

The Berryer Cryptogram

One of the references that Poe made to cryptography occurs in connection with a review of a book entitled "Sketches of Conspicuous Living Characters of France", which appeared in the April 1841 issue of *Graham's Magazine*. It is as follows:

In the notice of Berryer it is said that, a letter being addressed by the Duchess of Berry to the legitimists of Paris, to inform them of her arrival, it was accompanied by a long note in cipher, the key of which she had forgotten to give. "The penetrating mind of Berryer," says our biographer, "soon discovered it. It was this phrase substituted for the 24 letters of the alphabet -- *Le gouvernement provisoire!*"

All this is very well as an anecdote; but we cannot understand the extraordinary penetration required in the matter. The phrase *Le gouvernement provisoire* is French, and the note in cipher was addressed to Frenchmen. The difficulty of deciphering may well be supposed much greater had the key been in a foreign tongue; yet any one who will take the trouble may address us a note, in the same manner as here proposed, and the key-phrase may be in either French, Italian, Spanish, German, Latin, or Greek (or in any of the dialects of these languages), and we pledge ourselves for the solution of the riddle. The experiment may afford our readers some amusement -- let them try it.³

The way in which Poe puts the matter reminds one very much of the manner in which a conjurer, performing a mystifying trick, extremely simple in itself, surrounds its execution with a great deal of unnecessary stage business to make it appear more com-

³J. A. Harrison (ed.), *The Complete Works of Edgar Allan Poe* (Virginia Edition) (New York, 1902), X, 135-136. Hereafter cited as "Works".

REF ID: A66159
licated and difficult than it really is. A casual inspection of the type of alphabet said to have been employed by the lady of forgetful memory will quickly convince even a novice that the arrangement of letters in the cipher alphabet has absolutely nothing to do with the case. The solution is entirely independent of the arrangement of letters and, of course, Poe knew it. He admits this, in fact, in his essay which he published three months later. We might be very much inclined to overlook this particular bit of hokum were it not for the fact that this incident led directly to his writing the essay which appeared in the July number of *Graham's*.

In the course of this essay Poe repeats, almost verbatim, the remarks made in the April number in connection with the Berryer cryptogram and adds that "this challenge has elicited but a single response, which is embraced in the following letter". He then gives the letter, which encloses two cryptograms composed by means of cipher alphabets of the nature indicated above. Poe solves them, gives the solutions, and says:

In the solution of the first of these

THE OLD-TIMER by Bob Benjamin

(Restricted)



"Some radio survey wants to know what station we're listening to."

6

ciphers we had little more than ordinary trouble. The second proved to be exceedingly difficult, and it was only by calling every faculty into play that we could read it at all.⁴

Anyone who will take the trouble to go into the matter carefully will, I am sure, be entirely at a loss to account for the difficulty Poe experienced with regard to the second example. The reader will have to take my word for it, of course, but I say that any person who, having devoted but two weeks' study to elementary cryptograms, cannot solve that particular cryptogram in two hours at the most, had better turn his attention to other pursuits where-in success will crown his efforts with less expenditure of energy. As a matter of fact the experiment was recently tried upon four persons who had just completed exactly ten days' study of cryptography. They worked independently, and each accomplished the solution in approximately thirty-five minutes.

Over half of "A Few Words on Secret Writing" is devoted to the Berryer form of cryptogram, a type which, despite its utter simplicity, is so impractical that it is employed only by novices, and then only seldom. The actual Berryer cryptogram must, indeed, be considered the concoction of amateurs or of persons whose knowledge of cryptography was extremely limited, for so far as history records, no such impractical system was ever regularly employed for serious purposes. It is true that Poe comments upon its impracticability, but as to the complexity of the type it is apparent that he thought highly of it.

He Tells of Other Feats

In this same essay Poe refers to other writings on the subject of cryptography, which, he says, appeared "in one of the weekly papers of this city (Philadelphia)". This paper has been identified as *Alexander's Weekly Messenger*.⁵ Poe wrote:

In the discussion of an analogous subject, in one of the weekly papers of this

⁴Ibid., XIV, 126.

⁵Krutch, op. cit., p. 104.

city about eighteen months ago, the writer of this article had occasion to speak of the application of a rigorous method in all forms of thought -- of its advantages -- of the extension of its use even to what is considered the operation of pure fancy -- and thus, subsequently, of the solution of cipher. He even ventured to assert that no cipher, of the character above specified, could be sent to the address of the paper, which he would not be able to resolve. This challenge excited, most unexpectedly, a very lively interest among the numerous readers of the journal. Letters were poured in upon the editor from all parts of the country; and many of the writers of these epistles were so convinced of the impenetrability of their mysteries, as to be at great pains to draw him into wagers on the subject. At the same time, they were not always scrupulous about sticking to the point. The cryptograms were, in numerous instances, altogether beyond the limits defined in the beginning. Foreign languages were employed. Words and sentences were run together without interval. Several alphabets were used in the same cipher. One gentleman, but moderately endowed with conscientiousness, inditing us a puzzle composed of pot-hooks and hangers to which the wildest typography of the office could afford nothing similar, went even so far as to jumble together no less than seven distinct alphabets, without intervals between the letters, or between the lines. Many of the cryptographs were dated in Philadelphia, and several of those which urged the subject of a bet were written by gentlemen of this city. Out of perhaps one-hundred ciphers altogether received, there was only one which we did not immediately succeed in resolving. This one we demonstrated to be an imposition -- that is to say, we fully proved it a jargon of random characters, having no meaning whatever. In respect to the epistle of the seven alphabets, we had the pleasure of completely nonplusing its inditer by a prompt and satisfactory translation.

Unfortunately the records that remain of *Alexander's Weekly Messenger* are exceed-

ingly fragmentary. Despite painstaking research by numerous Poe experts, not a single issue containing any cipher solutions that Poe may have published as a result of his asserted challenge has ever been found, and there seems to be no way at the present moment of corroborating Poe's statements.⁶ However, we may consider, from Poe's own words, that the cryptogram employing "no less than seven distinct alphabets" represented the most difficult of all those submitted to Poe, and therefore warrants special scrutiny.

Ciphers involving a plurality of different alphabets have been known in the art for a long time. The principle is very clearly

⁶The following is quoted from Krutch, op. cit.: "Now the first of these articles [in *Alexander's Weekly Messenger*] was never found by any of the editors of Poe's works and has never been reprinted; but though no complete file of the periodical in question is known to exist some numbers are extant and in one of them is an article on enigmas which does challenge the reader to submit an example of secret writing in which an arbitrary symbol is substituted for each letter of the alphabet. It is not, however, possible to check up on Poe's later statement that in response to this challenge 'letters were poured in upon the editor from all parts of the country' and were in every case successfully read in spite of the fact that many violated the conditions imposed and one employed seven distinct alphabets in the course of a single communication. Indeed, the fact that *Alexander's Weekly Messenger*, the paper in question, was exceedingly obscure and very short-lived, coupled with the fact that the second and similar challenge in the very prominent *Graham's Magazine* certainly brought much less response, makes legitimate a suspicion that Poe's statement embodies a considerable exaggeration" (pp. 103-104). "Just how much of this mysterious power was real and how much pretense it is impossible, as we have said, to determine, and it is extremely unfortunate that the results, if any, of the article in *Alexander's Weekly Messenger* cannot be traced. It is unfortunate also that the only explanation of his method which he gives, that contained in *The Gold Bug*, applies only to the simplest sort of cryptogram, and that he nowhere discusses the method employed in solving the more complicated ones" (p. 106).

[The most important amendment to my original article which I am now fortunately able to make is in respect to the comment "there seems to be no way at the present moment of corroborating Poe's statements." In September 1941, the American Antiquarian Society became the possessor of a complete file of *Alexander's Weekly Messenger* for 1840. The file has been carefully analyzed by Prof. W. K. Wimsatt, Jr. of Yale University, in a most interesting and scholarly article, *What Poe Knew About Cryptography*, which appears in the September 1943 issue of *Publications of the Modern Language Association of America* (Vol. LVIII, No. 3). Professor Wimsatt says:

With the discovery of *Alexander's* for 1840, one can now state exactly that between 15 January and 18 April fifteen articles on ciphers appeared in *Alexander's*, and that thirty-six ciphers were published or alluded to. Poe published the text and solution of eleven ciphers; the solution, but not

described in the earliest tract on cryptography that the world now possesses, that written by Alberti.⁷ Multiple alphabet ciphers vary in complexity to a much greater extent than do single alphabet cryptograms, and it is possible to employ in one dispatch a practically unlimited number of distinctly different alphabets. In general it may be said that the greater the number involved, the more difficult becomes the analysis, but the particular manner in which the separate alphabets are employed is an equally important factor in solution. It is very unfortunate that Poe's state-

the text, of sixteen. Three ciphers he stated merely that he had solved. Six he had for various reasons failed to solve: one he had lost, one he had had no time to examine, one was written in pencil and "defaced," two were "impositions," and one had fifty-one characters and hence lay outside the limitation which he had prudently set down in his initial challenge.

Further, after numerous remarks concerning Poe's cryptographic activities subsequent to the issuance of his first challenge, Wimsatt says of the various cryptograms solved by Poe during his connection with Alexander's Weekly Messenger:

It would be only a slight exaggeration to say that every cipher which Poe solved, from beginning to end, was of this simple type. In Alexander's Weekly he published the solution and text of nine ciphers which can be definitely placed in the class of simple substitution. Fourteen times he published a solution but not the cipher text and once a part of a solution but not the cipher, and three times he simply stated that he had solved a cipher. In all these cases there is no reason to suppose that he had solved anything more complicated than simple substitution, because in other cases he called attention to unusual features of ciphers which he had solved -- or had not solved. A cipher received from a certain J.R.H. he rejected because it contained fifty-one characters (i.e., was not of the simple substitution type for which he had stipulated). Another received from a certain Kulp contained the cipher group "Vsmukks", the termination of which proved the cipher to be not one of simple substitution and hence to be an "imposition". Poe went on at great length to enforce the same point by a comparison of certain of the shorter groups in this cipher. A third cipher, from "Incog.", contained the group "Khjggg"; this too could not be simple substitution and was hence "not genuine." On the other hand he did solve two ciphers which exhibited slight variations from the type of simple substitution. One of these, from a certain "J.H., of Philadelphia", contained a number of indeterminates, that is, symbols which stood for more than one letter of the plain-text alphabet. Poe complained of the difficulty and published both solution and cipher.⁷

⁷Leo Baptista Alberti, Trattati in cifra. Vat. Arch., Series Varia Politica, vol. LXXX, folios 173-181. (In the bibliography referred to in footnote 2, this treatise is dated 1480, but I can find no warrant for this. The acknowledged historical authority, Dr. Aloys Meister, in "Die Geheimschrift im Dienste der Papstlichen Kurie" (Paderborn, 1906), who prints the Latin treatise in question, assigns no date to the manuscript, stating merely that Alberti died 1472.)

ments with respect to the seven-alphabet example he solved tell us nothing about the latter factor. Internal evidence contained in his article, especially in his supplementary remarks with reference to a system known as the chiffre quarré, indicates that the seven alphabets were employed in one of the simplest possible ways, probably in rotation according to sentence lengths. If such were indeed the case the problem merely resolved itself into the solution of seven separate examples, each of the single alphabet type. But granting that the seven alphabets were used in one of the more intricate ways -- let us assume that they were employed in a cyclic manner, changing with successive letters of the text -- the solution of such a problem still represents a relatively simple case. To give Poe the greatest credit possible, however, it might be considered an achievement for an individual who simply plays with cryptography as a hobby.^{7a}

(To be continued.)

^{7a}Additional light on the "seven-alphabet cipher" has been shed by Professor Wimsatt, who says of it:

It is unfortunate that he did not print the text of the seven-alphabet cipher in Alexander's. But he did print his solution, which turns out to be a once well-known alliterative alphabetical acrostic.

An Austrian army, awfully arrayed,
Boldly, by battery, besieged Belgrade;
Cossack commanders cannonading come,
Dealing destruction's desolating doom.

And so forth. The alphabetical arrangement strongly suggests that the alphabets were used one to a line. The alliteration must have been a conspicuous clue.

Incidentally, Professor Wimsatt notes that "Poe's correspondents by choosing a well-known jingle such as this, an enigma in verse, the Lord's Prayer, a passage from the Scriptures, the opening lines of a Shakespearean play, or a few sentences about cryptography, often facilitated his solutions." One final word about the seven-alphabet cipher: Poe said that it had been written "without intervals between the letters, or between the lines." What Poe must have meant is more clear now. He meant that the cipher text consisted of a series of letters without reference to their groupings according to word lengths or to the succession of separate lines of text conformable to the usual arrangement of poetic text. But because of the especially alliterative nature of the particular example, Poe must have had very little difficulty, if any, in marking off the successive "lines" and thus isolating the successive monoalphabets. The more one cogitates on the matter, the more certain becomes the assumption that the example involved seven successive monoalphabets and was not a multiple-alphabet cipher in the commonly accepted technical sense. Furthermore, had the latter really been the case, we may be sure that Poe, if he had succeeded in solving it, would have said a great deal more about the matter -- possibly the world would have been the gainer by a beautifully written essay that might have become a model of exposition.⁷

Signalman's Odyssey

(Confidential)

The Story Thus Far:

On December 7, 1941, Michael Maslak, a PFC in the Philippine Detachment of Second Signal Service Company, was on detached service as a student in the West Point Preparatory School at Baguio in north-central Luzon. Upon the outbreak of war, he was placed on duty there operating the Camp John Hay radio station.

On Christmas Eve, during an off-duty trip to see his school roommate who was stationed outside Baguio, Maslak was in a car which met and exchanged fire with the vanguard of the Jap forces which had landed on the shores of the Lingayen Gulf. The retreating Americans succeeded in destroying the Japs' lead truck, and immediately after they had made it back to Baguio that place was evacuated.

A three-day march brought the Americans and Filipinos to a rendezvous with trucks which took them southward. Once on Bataan, Maslak made his way to Corregidor, certain that that was where he would find his own outfit. When he finally reached Second Sig, the men were doing communications operating rather than intercept, and it was not until mid-January that Maslak and three lieutenants could be spared from that job to begin their search for Jap signals.

Thrown suddenly into tactical intercept for the first time, the Second Sig men nevertheless did the Japs a lot of damage from the beginning. They provided information on enemy dispositions, gave tipoffs on new Jap landings, helped our handful of P-40's raise their score of Zeros brought down, and served Corregidor and Bataan with advance notice of bombing raids.

Late in March, when the group engaged in intercept had been expanded to include most of the Detachment, eleven of the original seventeen men were selected to go to Australia and begin building the RI organization which was to serve General MacArthur's GHQ. Besides PFC Maslak, the eleven included:

1st Lt. Howard W. Brown, operations officer of the intercept station.
T. Sgt. Eugene Messer, chief operator.
Sgt. John J. Phelan, intercept operator.
Sgt. Carl L. Card, intercept operator.
Cpl. Richard E. Nurss, intercept operator and maintenance man.
Cpl. James E. Rhen, intercept operator.
Cpl. Irving A. Stein, intercept operator.
PFC Paul A. Gill, intercept operator.
PFC Stanley Kapp, intercept operator.
PFC Jay E. Bradbury, clerk.

By Michael Maslak

Chapter 2 MINDANAO

On March 27, five of us shook hands with the men who were staying behind and boarded a launch. We were taken over to Bataan Field, one of two air-strips on Bataan. We arrived at about nine o'clock in the evening and slept under a shack until the next morning, when we were called to board a light, unarmed Waco plane. Before

climbing in, we gave some of our cigarettes to Bataan soldiers, who were very grateful, not having had a real smoke for many days. It was only ten days before Bataan fell and they were lean and despairing. A large can of fish was made into stew for 200 men for supper at the air-strip the night we arrived.

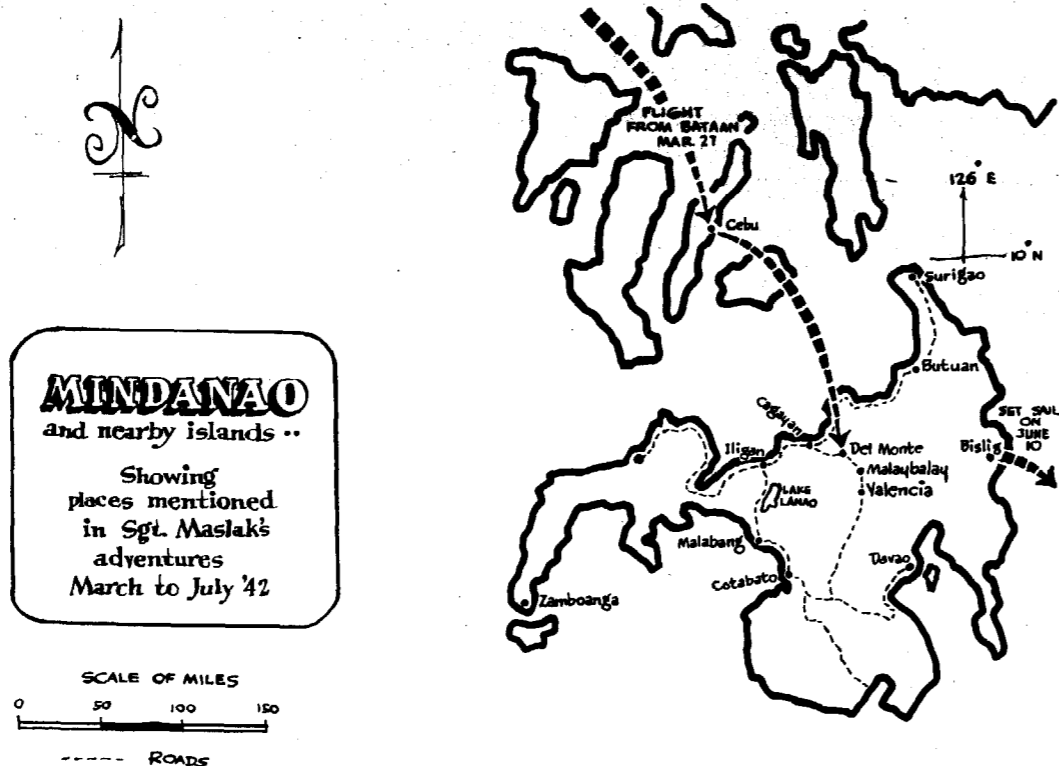
July - August 1947

During the dawn hours we were flown to Cebu, and at dusk we went on to Mindanao, which was as far as a land plane from Bataan could go. Our destination in Mindanao was Del Monte Field, in the north-central part of the island. The five of us who arrived there first were Lieutenant Brown, Bradbury, Messer, Kapp and I. By about April 1, the entire group of eleven had assembled.

We regretted very much leaving some of our number behind, but in the case of Lieutenant Gelb our feeling was doubly strong, because of his extraordinary ability in RI work. He was the best intercept

As my efforts and those of others to learn Gelb's fate have been unsuccessful, the most probable story is that he was on one of the Japanese ships which were torpedoed en route to Japan with prisoners. This seems to be the reason why many Corregidor survivors fail to turn up in the records.

We arrived at Del Monte expecting to get air transportation to Australia almost immediately. We understood that our evacuation to Australia was a matter of the utmost urgency, and we thought that getting transportation, although we knew there was enough of it to evacuate only a very small part of those on Corregidor and Ba-



man I have ever seen, and he knew the traffic so well that he was also very valuable as an analyst. He and Lieutenant Kinkade had been directly commissioned right after the war started. If they had not been officers they probably would have been included in the group evacuated; for the orders for our move to Australia provided for one officer and ten enlisted men.

taan, would be little more than a formality in our case. Lieutenant Brown had the orders for the first group and we did not see them, but those in the second group (Stein, Gill, etc.) carried their orders individually; as I recall, those orders read that the men named would "proceed to Mindanao and QM will provide transportation for Mission 'A'." The "A" referred

to persons selected for their specialties to go to Australia.

We Begin a Battle for Airplane Seats

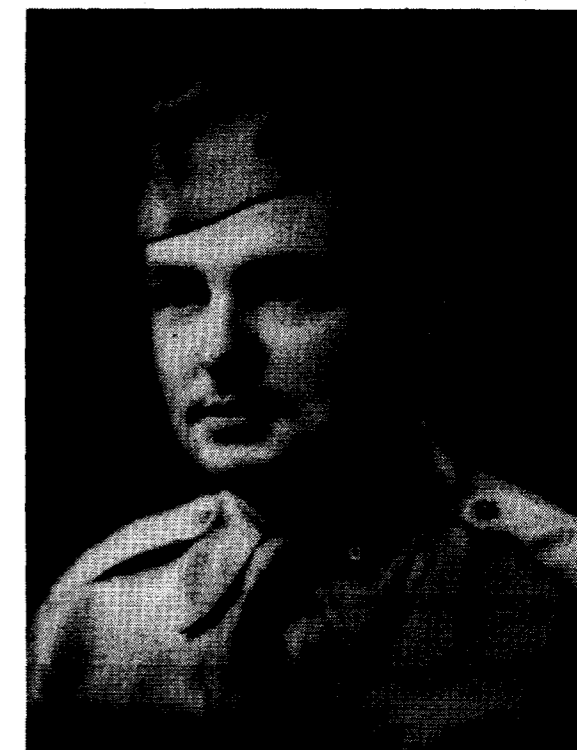
At any rate we ran into trouble immediately. There were a lot of high ranking officers, including pilots, who were also supposed to get to Australia. Despite the weight which our orders seemed to carry, the competition for plane seats was going to be stiff.

No planes came until April 13, when three B-17's and ten B-25's arrived from Australia. They brought cigarettes, candy, and medical supplies intended for the boys on Bataan. Apparently they did not know that Bataan had gone. We were crestfallen when we realized the men there no longer could be helped. As a sort of retaliation, however, these planes loaded up with bombs and played havoc with Japanese shipping at Subic Bay, Cebu, and other points.

These planes were all to take passengers back to Australia, but one of the B-17's burned on the ground in a dive-bombing attack, and its crew took up all the space in the second one. The third B-17 was the first of the twelve planes to start back. It took off early one morning a few days after its arrival on the 13th. Lieutenant Brown was unable to get any of the enlisted men onto that flight, but a seat was allotted to him. He was far outranked by the other passengers. It was important that, as key man in our intercept and traffic-analysis work, he receive the highest priority for transportation of the eleven men in our group.

Messer was the ranking enlisted man and was left in charge. Four places were allotted to us on the B-25's which were to leave that night. These seats went to Sergeant Messer, Sergeant Card, Sergeant Phelan and Corporal Nurss. Of these four, only Messer had been doing intercept work on Corregidor, and he was not as experienced as some of us who remained. Four of the six who were left -- Kapp, Gill, Bradbury, and I -- had been in on the Corregidor and Bataan RI job.

We continued to contact the Air Corps colonel in command of the field. He always told us we had top priority of all the people at the field -- perhaps fifty pilots and the other officers who were left. However, when the next plane came



Lt. Howard W. Brown

after his call to active duty at Manila in September 1940

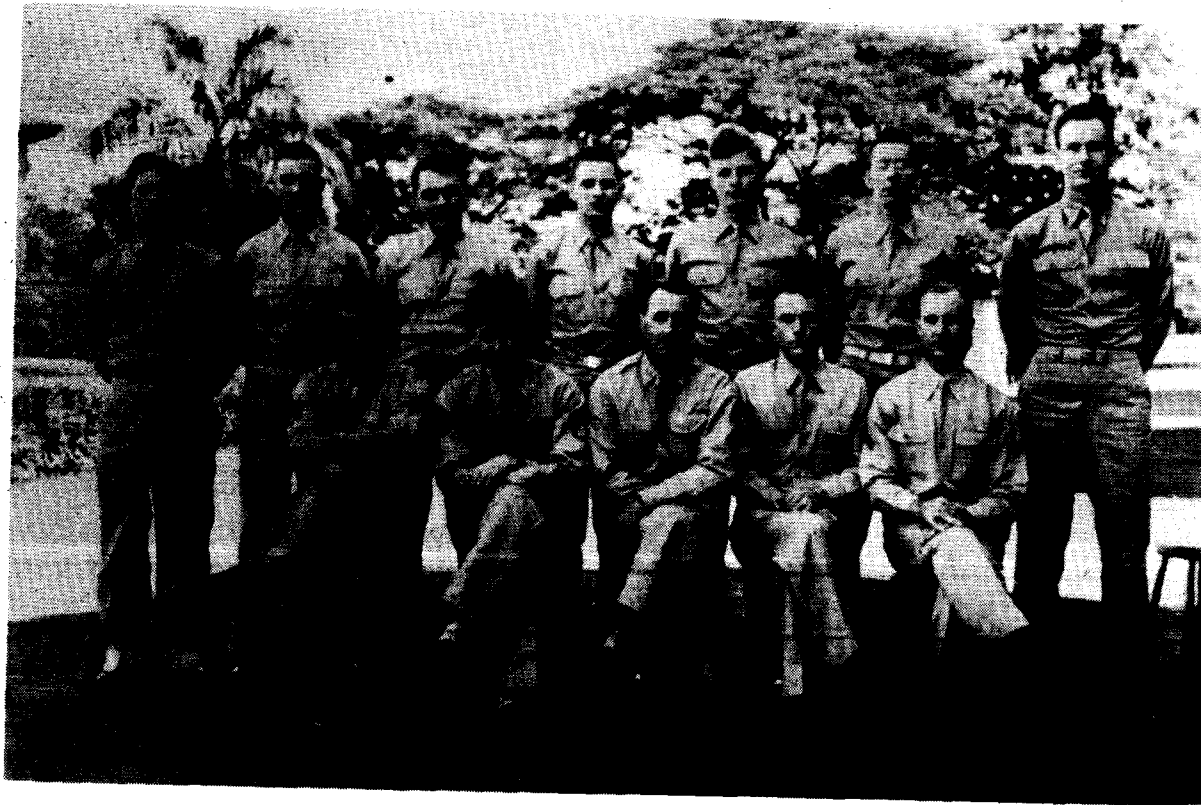
on about the 22nd, he told us that a new list of passengers had arrived from Australia and that we were not on it.

Another plane came a week later, and we were given the same explanation for not receiving seats on it. That was the last plane to leave Del Monte. Its departure as I recall was about eleven o'clock on the night of the 29th. The Air Corps colonel was one of the passengers.

Australia Asks for Us Again

Early on the 30th, urgent radio orders signed by General MacArthur arrived from Australia via Corregidor, giving our names, ranks, and serial numbers, and saying we were to proceed to Lake Lanao, where six seats would be available for us on a PBY. The message stated that thus far we had been detained on "Mission A". "A" referred to persons selected for their specialties to go to Australia.

Lake Lanao, located somewhat west of the



Fort McKinley Detachment, Second Signal Service Company
(September 1940)

Standing -- PFC Michael Maslak, PFC Daniel Trucz, PFC Joseph Sarata, PFC Daniel Gelb, PFC Berkley Kinkade, PFC William Stage, Cpl. James Rhen.

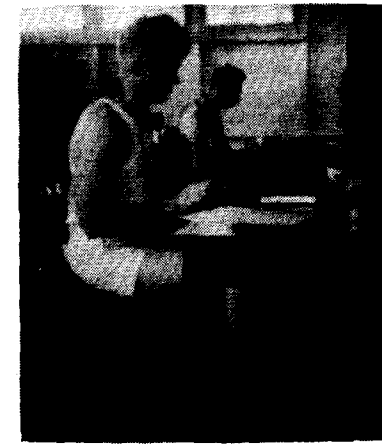
Seated -- Sgt. Eustace Messer, S. Sgt. William McCullough, Maj. Joe Sherr, M. Sgt. Braxton Small, Cpl. Wayne Hightower.

center of the island, was a day's travel by truck. The truck which took us had trouble and we did not get there until early on the evening of the 30th. Two PBV's which had come from Australia via Corregidor were anchored off an island in the lake. When we reached the shore we found the officer who was serving as dispatcher for the flights about to start. We gave him our orders and he looked at them and at us and told us we would not be going. The highest ranking among us were Stein and Rhen, both corporals. We were in a very bedraggled condition and that did not improve the impression we made. Stein argued with the officer but without success.

The two ships took off but one of them was forced down immediately on account of

being too heavily loaded. It struck a reef and the hull sprang a leak. The Japs were not far away and it appeared that the passengers on the disabled ship might be taken prisoner if they remained there awaiting repairs, so they and the rest of us were taken back to Del Monte by bus. We heard later that the ship was repaired sufficiently to take the air, and that it took off for Australia with the Japs firing at it in the air.

The Japanese were seriously threatening Del Monte Field by that time. On May 2, the second day after our trip to Lake Lanao, we started for Valencia, located north of Davao at approximately the center of the island. This was the site of the last U.S.-held air base on Mindanao. It was



PFC Berkley Kinkade

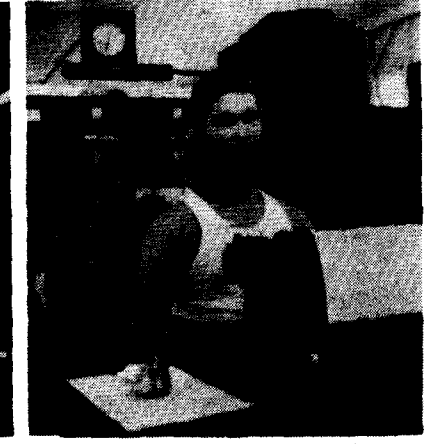
(October 1940)

On duty, Station 6 men wore Uniform X.



PFC Rocco Pagano

Fort McKinley's cooks and bakers lived in the next squad-room.



PFC Michael Maslak

(March 1941)

By now, an air-conditioned station.

then a secret base, but it did not remain so for long, for it was being bombed before we left it. Del Monte had also been subjected to air bombardment, after the Japs discovered where the U.S. bombers which raided them were coming from. The attacks there included heavy bombing, dive bombing, and strafing.

the move of the reconnaissance squadron we had come to know up north indicated that the Japs' main push would be transferred from Luzon to Mindanao, and this came about as we predicted.

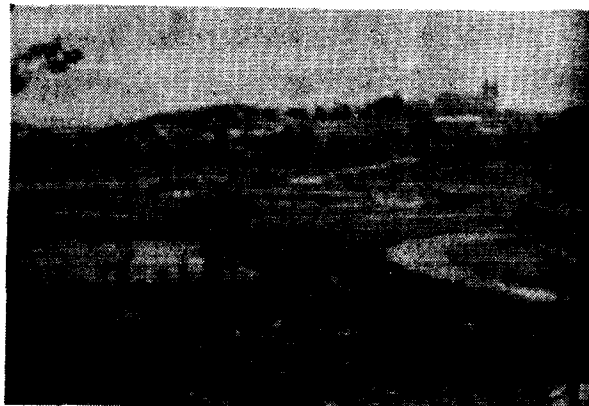
Some time after Lieutenant Brown had left, Kapp and I heard a bombing mission from Luzon start for Mindanao. The transmitter was one we were familiar with. The planes were transmitting their locations at various times, and the base was instructing them. Finally Ground told Plane in the clear to bomb Malaybalay, the U.S. base in the center of the island which was chiefly a supply installation. We informed the Air Corps of the flight when it was only a little past Cebu, and before they had got as far as Del Monte (northwest of Malaybalay) we had learned that Malaybalay was to be the target. We reported this immediately, but the severe damage we saw later when we went through Malaybalay seemed to indicate that no action had been taken as the result of this information -- or else that the Air Corps had been powerless to do anything. At any rate, we got the definite impression that Malaybalay had not known the planes were coming.

It was then that Foto Joe and his squadron showed up again. Three planes started operating in relays. They worked each other in plain language, always reporting their position. We were able to determine that their base was now Davao. This was

The RI Job in Mindanao

Our departure from Del Monte meant the end of our radio-intelligence work in the Philippines. During almost the entire month of April, we had operated three high-frequency receivers of the "ham" type which the Air Corps had given us. Four or five days after arrival from Corregidor, we set them up in a small tunnel at the air field, stringing antennas outside. Lieutenant Brown, Kapp, and I were the operators. While Lieutenant Brown was there we trained the eight others in copying kana, using an audio-oscillator code-practice set. About April 10, four Air Corps sergeants joined us for the same training.

The experience we had acquired back in the Rock enabled us to copy as much traffic as we could hear with those receivers. The same frequencies were in use, and we found Foto Joe, the Jap reconnaissance plane, and his buddies with us again before very long. In the latter part of the month,

Baguio -- Summer Capital and Playground**The Church on the Hill**

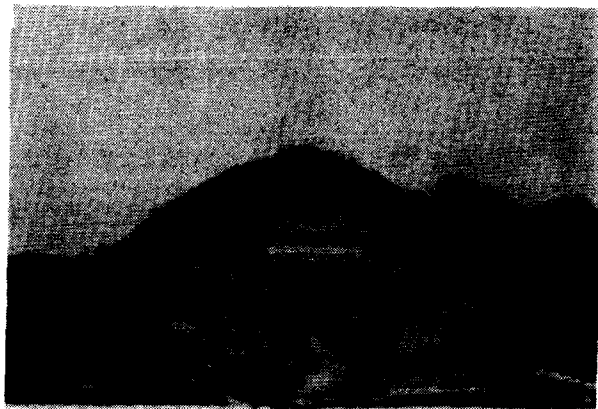
In foreground, the swimming-pool and skating-rink frequented by many Second Sig men on furlough.

about April 20. Though we heard them giving their own position and reporting our movements, barracks locations, fields, and other military sites, we never actually saw the planes. They stayed thirty- or thirty-five-thousand feet up and were very successfully camouflaged. We told the Air Corps about all the squadron's activities, but there was no anti-aircraft or air-support to do anything about it.

At Del Monte we never succeeded in finding the frequencies of the "jeeps" -- the old-fashioned Jap Navy biplanes used as dive bombers.

Still Looking for Transportation

Now to resume the story of our efforts to get to Australia. The Japs' invasion of Mindanao up to about April 27 consisted only of the seizure of bases at Zamboanga and Davao. However, on approximately that date they landed in force at Cagayan, Butuan, and Surigao in the north and at Malabang and Cotobato on the southwest coast. The Cagayan landing was so close to Del Monte that by the first of May the takeoff point for evacuation to Australia had to be moved to Valencia, between Malaybalay and Davao. (It was on the trip from Del Monte to Valencia that we passed through

**Mount Santo Tomas,**

from where Maslak saw the Japs land on December 18. Part-way up the slope, a guest-house for vacationists.

Malaybalay and saw the bombing damage there.)

Besides us, those left stranded at Lake Lanao on the 30th had included Brigadier General Seals; a Signal Corps lieutenant colonel who had been called from the Reserve (he knew Japanese and had worked with SIS); and about fifteen nurses, besides Air Corps men. The new Air Corps colonel at Del Monte severely reprimanded the dispatch officer for the way the Lake Lanao job had been handled.

We spent May 1 en route from Lake Lanao to Del Monte and the next day back at Del Monte before leaving for Valencia.

About three o'clock on the morning of the 3rd, we received orders from a Major Rotterham to leave with him for Valencia. Only about three light planes were in operation at Valencia, though it was the last air field left.

We were the first to leave Del Monte for Valencia. The others who were stranded came later. We were put to work there doing guard duty, digging foxholes, and repairing telephone lines. Each night we would wait at the field with the others, hoping a plane would come in from Australia. The Air Corps was still in communication with Darwin, the Philippine end of

the circuit being a station north of Malaybalay. Requests were going to Australia that planes be sent to evacuate us, but none ever came.

All this time the Japs were dive-bombing and strafing the Valencia field. They hit our dumps and burned up our three planes.

We Take to the Hills

Rhen was on guard at four or five a.m. on the 8th when he heard that Corregidor had surrendered. There were several ways this information could have reached us: through direct radio communication with Corregidor, through the Voice of Freedom broadcasting station there going off the air, or via Darwin -- or it could have been a rumor originating at Valencia. Anyway, it proved to be a rumor, but we didn't find that out until late that day.

Rhen told us Mindanao was about to surrender. All six of us went to Major Rotterham and told him we wanted to take off rather than become prisoners. He gave each of us a pistol, and we left. Hiking northward all day, we reached the edge of the mountains, as far as a truck could go.

Late in the day we heard from natives, some of whom knew enough English to talk to us, that the news of surrender had been false. Bradbury had bad feet from the hiking, and we decided to go back. We slept that night in a shack near the trail. En route the next day, we met a truck which had been sent to look for us. The rumor was definitely wrong, as we learned then.

By afternoon we were back at Valencia. There was still hope that a plane would come; in fact, one was expected. As the only enlisted men to be evacuated, we were put in a kitchen under guard, for our own protection. We were still armed ourselves. At about eleven o'clock that night word was received from Darwin that no plane would come. We did not know the reason, but bad flying weather was the most probable one.

When this word came, Major Rotterham, knowing our ideas of escaping, told us we were free to do whatever we wanted, as to staying there or taking off. However, we remained at Valencia that night to await developments regarding the surrender, intending to take off again if it should be

announced. In the morning -- the 10th -- we heard that the formal surrender would be at ten o'clock the next morning at Malaybalay.

Rhen and Gill left immediately. I was anxious to go, but wanted the other three to come along. They were undecided. All day we tried to persuade Bradbury to come along, but he would not, on account of his bad feet.

In the morning everyone at the field attended a meeting to receive instructions for assembling and going to Malaybalay, where all Americans in the area were to give themselves up. The speaker at this meeting, a captain, warned those who were talking of taking to the hills, mentioning the threat of malaria and the likelihood of starving or being turned in to the Japs by natives. He said that if taken prisoner as guerrillas we would be shot.

Our Second Start

After the meeting Bradbury finally decided he would not come with us. Stein, Kapp and I went to Major Rotterham. He advised us the same way the speaker had, but gave us pistols, half a dozen cans of sardines, and ten pounds of rice. Again he said to go ahead if we were sure we wanted to.

We started at seven in the evening. Rhen and Gill had said they would wait for us at the last village we had reached on our first start, or at the village just beyond that. They were gone from both, and natives told us they had pushed on ahead. We were eighteen days finding them, and it was by only the barest chance that we did. And even then we did not see Gill, who was about twenty miles away foraging for food.

We had known that the two of them would try to make the northeast coast. But we



did not get any trace of them until the day before we found their stopping-place. Our first clue was when natives told us they had seen a big fellow and a little fellow walking together, following a stream that converged with the one we were following. All this, however, happened nearly three weeks from the time we originally started out.

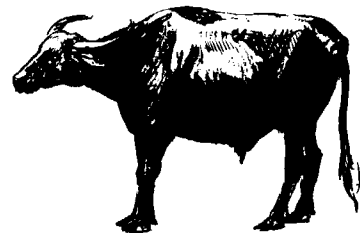
On the way to the coast Kapp, Stein, and I met several other small American groups. One of them was a group of Air Corps men with two caribou which were loaded down with enough provisions to last out the war. The three of us became five when we took up with a Field Artillery captain and an Air Corps sergeant. With pack and blanket-roll loads of supplies we pushed on ahead.

Clambering up cliffs, hugging the narrow base of a canyon where it was light for only six hours a day, for over two weeks we followed the ever-winding course of an ever-swelling river. Our supplies were fast becoming depleted. We were beginning to experience that empty sensation in the stomach. We lived on non-poisonous herbs and green things we were able to find, even to the extent of killing monkeys and kalau birds. We were having rain every day and the streams were becoming almost impossible to ford. One day we succeeded in making only about three-quarters of a mile headway, the jungle was so heavy.

Picking Up Speed

Things looked up for us one day when we met a Filipino constabulary sergeant -- a sort of backwoods policeman. He was traveling with three other natives and they had five pounds of rice. We had been on the way for two weeks and were out of food completely. He knew what was safe eating in the jungle, and our menu expanded miraculously.

We had fruitlessly tried to build a raft several times, so that we could take ad-



vantage of the waterways. With his help we were able to make three small but good ones of bamboo, and from then on we covered the territory in a hurry. He traveled with us for a few days but left us when we came to the village where his wife was staying. On learning his child was down with malaria, we gave him most of our quinine tablets.

It was at this village that we finally met up with Rhen. Our group had fared better than Rhen and Gill. Rhen was completely exhausted, his feet swollen and sore. He was resting. Gill was away on a foraging hunt so we did not get to see him at all. We lingered long enough to tell of our plans to reach Australia by boat. Before departing, we told Rhen that we would wait on the east coast of Mindanao at the village of Bislig for six days, hoping that both of them, rested sufficiently, would catch up to us.

However, things did not turn out as we expected. The five of us waited at Bislig for seven days, but they failed to show up. We were getting extremely nervous, as the chances of our getting picked up by the Japs there were increasing every day. Ships were going up and down the coast all the time, and we reasoned that before long one of them was going to land, as there was a very good anchorage there. The Japs were only a few miles to the west of us, and to make matters worse a few of the natives appeared to be anything but trustworthy.

Back in Corregidor's main tunnel when he had been doing communications operating, Kapp had worked regular shifts and had had plenty of time for poker. We were now to be more than thankful for this. He was carrying about \$300, though we hadn't been paid since the end of November. I had \$50 or \$60 and the others had varying amounts, all of them dwarfed by Kapp's bankroll. We spent every cent we had except ten pesos buying a sailing banca -- with outriggers -- and provisioning it for the voyage. The natives were glad enough to do business with us, and with that kind of money offered them it was no wonder.

We pushed off from Bislig on the 10th of June. We were navigating by the sun, a pocket compass, and a National Geographic map of the Far East. Darwin was 1700 or 1800 miles away, but it looked like a lot more than that to us.

(To be continued.)

cryptopuzzles

(Unclassified)

Magic Square

A magic square is an arrangement of numbers so placed that they add up to the same sum horizontally, vertically, and diagonally; as

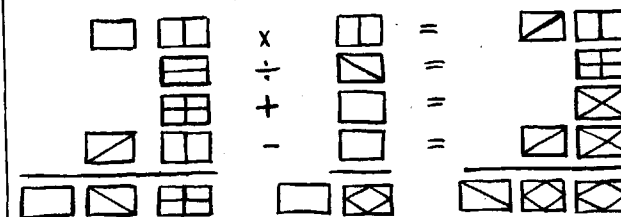
8 1 6
3 5 7
4 9 2

Problem: Form a five-by-five square, writing in the numbers from 1 to 25 inclusive so that all rows, all columns, and the two diagonals each add up to 65.

-- Norman Dillinger

Cryptarithms

Problem 1 --



Problem 2 -- Long division, with letters substituted for the digits. Look for clues such as

R - C = S
O x C = a number ending in (letter) O
R x C = a number ending in (letter) O

LSOC/RVPERYVOLPR
COEO
SOLVR
PLRY
LTEPY
OYSLV
OVCVV
OSYVO
ORCO

Problem 3 -- An old one, still good if you've never worked it before:

SEND
+ MORE
MONEY

Problem 4 -- And a new one just like it:

HOCUS
+ POCUS
PRESTO

Solutions to May-June Cryptarithms

Problem 1 -- 512/3706618/7239
(Key: IRAQ MOUNTS)

Problem 2 -- 124/12128316/97809

Willis Ryan's

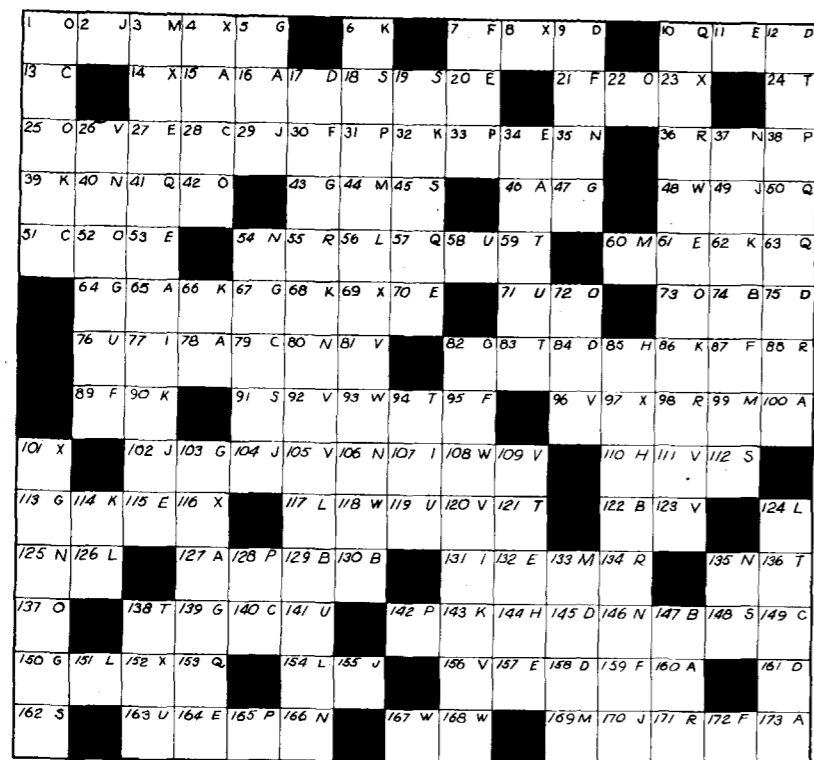
(Unclassified)

DR. CRYPPY



"Exactly what are you staring at, young man?"

(Unclassified)



Directions:

1. Guess the words defined below. The number of letters in each word is indicated by the number of dashes opposite its definition.
2. The figure which appears under each dash refers to the corresponding numbered square in the puzzle diagram. After guessing a word, write it in on the dashes; then write its letters in the squares of the diagram which bear the same numbers.
3. When all the letters have been inserted, the diagram, reading horizontally, will contain a quotation familiar to many of you. It may be possible for you, after filling in some of the squares, to fill in surrounding letters by guessing parts of the quotation. If you do, this will enable you to fill in additional letters in the column headed "Words". In this case, the word to which each letter of the diagram belongs can be found by referring to the key-letter in the square; that is, a letter which you place in a square designated "X" will be part of word "X" in the column headed "Words".
4. The letters of the diagram mean nothing read vertically.
5. The black squares are word-separators. Words may carry over from one line of the diagram to the next.
6. The initial letters of the words filled-in in the column headed "Words" spell the name of the book from which the quotation is taken.

Definitions	Words
A. Communication by electrical means.	76 15 100 65 160 78 16 127 173
B. Three years in the Army.	130 122 129 147 74
C. Happenings.	13 51 149 140 79 28
D. Restore to life.	84 75 17 161 12 158 145 9
E. Changing direction.	164 53 115 132 157 34 11 70 61 27 20
F. Separate.	95 30 7 172 89 159 87 21
G. Refracting medium.	113 47 150 103 82 67 43 5 64 139
H. Not transmitting.	110 144 85
I. One of the slender bristles which terminate the scales of the spikelet in barley, oats, and other grasses.	77 131 107
J. Italian inventor (1874-1937).	29 170 49 102 155 104 2
K. Decreases in amplitude with increasing distance from source of transmission.	86 62 32 39 114 143 6 90 68 66
L. Wreathes.	151 56 124 117 154 126

(Solution on page 32)

Definitions	Words
M. To infold in.	169 3 60 133 44 99
N. Inconsiderate.	54 40 125 80 146 37 166 106 135 35
O. Variable resistances.	25 22 52 72 1 137 42 73
P. Electrical disturbance.	142 31 128 38 33 165
Q. English traveler and philanthropist (1712-86); reputedly introduced the umbrella to English society.	63 57 41 10 50 153
R. Unit of intensity.	36 98 55 88 171 134
S. Empty-headed persons.	19 148 162 91 18 112 45
T. Type of antenna.	59 136 83 138 94 121 24
U. To beat with successive blows.	163 119 141 71 76 58
V. Confuses.	92 156 123 111 81 120 26 105 109 96
W. Power or energy delivered.	168 93 167 118 108 48
X. 1,000 alternations.	8 97 152 116 69 101 4 14 23

-- Stephen L. Wolf

The ASA Training Front

(Restricted)

Programs have been drawn up by Army Security Agency for training men in its various types of work in the civilian components of the Army -- the National Guard, the Organized Reserve, and the ROTC. ASA also is preparing signal-intelligence and communications-security courses for use in the Universal Military Training program if it is adopted. Still another training project involves ASA's participation in an Army-wide program for training officers on active duty. All of these programs are being drafted and administered by the Organization and Training Section (WDGAS-22) of the ASA Staff.

On the Campus -- Illinois, MIT, Texas A & M

AN OPPORTUNITY for ROTC training leading to commissions in the Army Security Section of the Officers Reserve Corps will be offered students at three universities beginning with the 1947 fall term. Army Security units are being set up at the University of Illinois, Massachusetts Institute of Technology, and Texas A. & M., and according to advance publicity campaigns put on at MIT and the University of Illinois by Maj. Robert E. Tachoir and Capt. Rudolf H. Folts of WDGAS-22, student interest insures success of the program.

Students will be qualified for enrollment in the Army Security course only after they have completed two years of basic ROTC or the equivalent. Subjects to be taught the first year are: organization and function of Army Security Agency, radio interception and position-finding, theory and application of traffic-analysis, basic cryptography, military cryptosystems, physical security and cryptographic security, signal- and message-center procedure. Second-year courses will include means of signal communication, cryptanalysis, military cryptosystems, transmission security and monitoring, compilation of cryptosystems, cryptomaterial distribution and accounting.

Equipment to be used includes radio intercept central TC-9, direction-finding and other radio-intercept equipment, and the standard Signal Corps equipment that is ordinarily used in ASA units. Students will spend six weeks at a summer camp between the two school years of this advanced ROTC course. ASA officers will in-

struct the courses - Lt. Col. H.F. Bearce at MIT, Captain Folts at the University of Illinois, and Maj. Laurence W. Jones at Texas A. & M.

This will be the first time that subjects of this nature will have been offered at MIT and Texas A. & M. It will not be completely new, however, to the University of Illinois, which before the war offered certain Signal Corps subjects in the ROTC, including cryptography.

-- In the National Guard

ASA HAS BEGUN participation in the National Guard's activities by setting up units in Illinois, Pennsylvania and New York. New York, which started to activate ASA National Guard units in June, was the first state to set up this program.

There will be nine ASA National Guard units in all, both of the air and ground types. Three units have been planned for New York, all in New York City. In Illinois there will be three units in Chicago, and in Pennsylvania, one unit each in Pittsburgh, Harrisburg and Philadelphia.

The nine units are made up of the following: four signal service companies (radio-intelligence), two signal service companies (radio security), one radio squadron mobile, and two radio security sections. The air-type units are in Chicago.

Although only these nine units have been set up for the present, it is contemplated

that this program will be expanded after the present fiscal year, contingent upon the amount of funds appropriated for this purpose.

-- As a Part of UMT

WHILE CONGRESS is considering the Universal Military Training legislation, ASA along with the other branches of the Army is drawing up plans for participating in the UMT program if it is adopted.

The current War Department plan provides for one year of training of all able-bodied men between the ages of eighteen and twenty, or for six months of training for those who choose to join the Regular Army or one of the civilian components of the Army for various terms of enlistment. The first six-month period for all trainees will be devoted to basic training and basic branch training at the company level. Five percent of the trainees who choose six months of training will be sent to special service schools for eleven weeks of specialist training. Of the trainees who choose a full year of training under the program, some will be given twenty-four weeks of long-term specialist training at special service schools during the second six-month period.

Under the ASA plan for participation in the UMT program, all training will be conducted at ASA School, Vint Hill Farms Station, with the emphasis on specialist training of both eleven- and twenty-four-week trainees. Prior to this, trainees will have completed basic and branch training in Signal Corps units and will be required to fulfill the same prerequisites as the present Regular Army students. Courses of instruction will include training as traffic analyst, to which sixteen percent will be assigned, and intercept operator, to which the remaining eighty-four percent will be assigned. Other courses will be added if requirements justify an increase.

Trainees will be organized into a battalion of three companies. Company A will house and administer those who will receive eleven weeks of specialist training only, and Companies B and C will administer and train those trainees who

elect to remain in training for a full year.

Recognizing that the success of the UMT program depends almost wholly on favorable public reaction, ASA training planners will attempt to keep the morale of their trainees at a high pitch. An extensive schedule of extra-curricular activities and entertainment will be provided so that the men will seldom find it necessary to leave the post during off-duty hours.

-- Among Officers on Active Duty

IN ORDER TO PROVIDE educational opportunities for ASA officers in accordance with the Gerow Board Plan for peacetime officer training, basic and advanced officers' courses were begun in June at Vint Hill. All ASA officers will be given the opportunity to take both the basic and advanced courses of instruction, the completion of which will qualify them for enrollment in the Command and General Staff College.

The courses are designed to offer to ASA officers the same opportunities for advancement that would be available to them in any other branch of the service under the Gerow system of post-war education of commissioned officers. Under the plan, instruction aimed to stimulate progress in the art of war is combined with actual duty in command and staff positions.

The basic course, as formulated by ASA, will offer a broad background in the basic techniques of signal-intelligence and communications-security work. It is open to officers newly assigned to ASA and to those who are already in the Agency but lack the military education and experience to qualify them for the advanced course.

Completion of the basic course is one prerequisite for entrance into the advanced course. Officers will also be assigned to the advanced school on the basis of a constructive-credit system, receiving a certain amount of credit for their past military background. The advanced courses, besides giving training in more highly technical aspects of signal-intelligence and communications-security, will also provide training in certain common military subjects which will prepare officers

for the Command and General Staff College.

The basic course will be given over a twenty-six-week period and the advanced will take forty-six weeks. With the exception of the first course which began in June, the basic courses hereafter will start on the second Monday of May and November of each year and the advanced course on the first Monday of April and October. Official announcement will be made in advance of each class as to the starting date, qualifications for enrollment, and the procedure for submission of applications.

Most of the basic courses will be given at Vint Hill, while half of the advanced courses will be given at Arlington Hall and the rest at Vint Hill. Approximately thirty subjects will be taught in the basic course and fifty-two in the advanced.

.. . . .

ASA is participating in another Army education program, in which officers will attend civilian colleges and universities for the purpose of finishing uncompleted courses, both graduate and undergraduate. ASA is sending two officers to school under this program beginning with the fall semester. One will attend Purdue University and the other Lehigh University. The program was designed principally for members of the Regular Army in the more technical branches of the service, and they will specialize in these fields at school.

-- and in the AS Reserve

THE OFFICER STRENGTH of the newly established Army Security Section of the Organized Reserve is estimated to be 400 at the present time and it is expected that transfers from the Signal Corps Reserve of many former ASA officers will substantially increase this number. Letters have recently been sent to 800 former ASA officers who are members of the Signal Corps Reserve, announcing the establishment of the AS Reserve. Military Intelligence reservists have also been transferring to the Army Security Reserve and they make up the majority of its present strength. There are no figures currently available as to the Enlisted Reserve strength, but these will be announced soon.

California and New York have been tenta-

tively selected for the locations of five AS Organized Reserve Corps units, five in each state. They are to be initially organized as Class C Units, which will be composed of officers only. It is planned that these units will be eventually advanced to include enlisted cadre along with the officers (Class B), and finally to Class A units, which will have full T/O strength. The first ten units will include only radio-intelligence and radio-security companies. Other types of units and other locations are under consideration for the future.

The first AS Reserve units will be established under the War Department Affiliation Program, a plan for civilian organizations to sponsor certain key service-type units of the ORC. The Agency is negotiating with a group of radio communication and manufacturing corporations in California and New York with a view to setting up radio-intelligence and -security companies to be made up of technicians in the employ of those organizations. The participating corporations would sponsor from one to three companies each. ASA and the Signal Corps are working together in establishing ASA and Signal Reserve units in RCA Communications, the Mackay Radio and Telegraph Company, Press Wireless, and the General Electric Company.

Eligibility requirements for direct appointments in the Officers Reserve Corps have been amended, and the following persons are now eligible for appointment in the ORC:

1. AUS officers now on active duty who have not reached their sixtieth birthday. Procedure for application is described in War Department Circular 97, 1947. (Appointments, in most cases, will be made in the AUS grade held at the time of appointment.)
2. Warrant officers, flight officers, and enlisted men of the first three grades; provided they are between the ages of twenty-one and twenty-eight and have completed six months of active service in the Army of the United States or one of its components between December 7, 1941, and June 30, 1947. These applications for appointment are being received through December 31, 1947. Further details are given in War Department Circular 101, 1947, Part 3, Section II.



Change of Command for ASA Europe

ARLINGTON HALL, July 18 -- Lt. Col. Earle F. Cook, Chief of ASA Europe, is due for return to Headquarters ASA on or about August 1 for a short period of temporary duty prior to reporting for the next course at the Armed Forces Institute at Norfolk, Va.

Colonel Cook has headed the ASA organization in Europe since its establishment in November 1945. A Regular Army officer, he entered the former Signal Intelligence Service in 1938 as commander of the intercept station at Fort Hancock, N. J. During the war he was chief of Cryptographic Branch and later of Cryptanalytic Branch, and became Control Officer upon the establishment of that office in 1944. He was with Military Intelligence Service in London for several months prior to his assignment to Frankfurt.

Succeeding Colonel Cook as Chief of ASA Europe will be Lt. Col. Robert T. Walker, Deputy Director of Operations under Colonel Cook. Colonel Walker came to the



Colonel Cook

Colonel Walker

Agency in March 1944 from a radio-intelligence assignment at Headquarters, Western Defense Command, and later held the positions of Chief of the Traffic Analysis and Control Branch; executive officer to the Chief, ASA; and Chief of the Personnel Section of the ASA Staff. He has been at Headquarters, ASA Europe, since November 1946.

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Lt. Col. Burnis M. Kelly and Maj. Shannon Brown from ASA Europe and Capt. Albert E. Zellefrow from the 136th Radio Security Detachment have all gravitated to Headquarters ASA with but one mishap -- a case of motorcycle contrariness that has laid Major Brown up for a while. Both Colonel Kelly and Captain Zellefrow are right in the midst of school studies and Major Brown is expected back to duty at Station 1 momentarily. Major Brown's injuries prevented his participation in a Decorations and Awards shindig at Vint Hill Farms Station on the fifteenth of July. He was to have been the recipient of a Military Valor Cross awarded by the Italian Government. Luckier than Major Brown, in matters of health at least, was Capt. Thomas Buckley, executive officer of ASA School, who was present to receive the Bronze Star. Colonel Hayes, Chief of the Agency, made the presentation and the Army Band was borrowed from Fort Myer for the occasion through the courtesy of General Ferenbaugh, Commanding General of the Military District of Washington.

Major Walter Cole, former S-3 at Vint Hill Farms and later CO of the Sixth Detachment, has been assigned as base commander at Herzo. His adjutant is Lt. Al Kosberg, whom many will remember as the

master-mind of the Troop School at the Farms.

Lt. Philip A. Revolinsky, who was recently integrated into the Regular Army as a second lieutenant of Cavalry, is scheduled for the next class at the Armored School. He has been one of the mainstays of Arlington Hall's security detachment.

Capt. John A. Combs, recently assigned to the Intercept Control Branch, is a recent overseas returnee who soldiered back in the old days with Maj. Jack Faulds.

Capt. Walter Nygard takes his school-books under his arm again and answers the bell in September at Purdue University for post-graduate study in electronics. He should be a Master come next September.

Other recent changes in the personnel picture, all effected through an Agency even superior to the Adjutant General's Office, have occurred at both Arlington Hall and Vint Hill: Major James Moak and Capt. Wallace Izzo at AHS and Major James Nixdorff at VHFS becoming proud fathers and proven sires within the past month, and that's all from here at this time.

-- Maj. J. F. Ritter

Good News for Non-Morse Men

ARLINGTON HALL, July 10 -- Increases in Agency tables-of-organization have been made to provide for the addition of non-Morse intercept sections at Monitor Stations 5 and 7, and for increases in the strength of the already existing non-Morse sections, at Stations 1, 2, 4, 6 and 9.

The Agency also has revised its organization tables in conformity with a new Army-wide policy on food service, calling for higher grades for mess-hall staffs. Mess-sergeants become "mess stewards" and are raised from staff sergeant to technical sergeant, corresponding increases being made in the grades of the men working under them.

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Six ASA organizations which until now have been encumbered with four-digit names have been redesignated by the Adjutant General's Office. The 3377th and 3378th Signal Service Detachments, assigned to ASA Pacific, become the 50th and 51st Signal Service Detachments respectively, and the

3379th Signal Service Detachment, assigned to ASA Europe, is renamed the 52nd. The 3106th Signal Service Platoon, which is working with the 60th Signal Service Company at Fort Lewis, Wash., is now the 3rd Signal Service Platoon. Two "paper" outfits assigned to Vint Hill Farms Station, the 4030th and 3126th Signal Service Companies, are redesignated the 507th and 508th respectively.

Vint Hill: Garden Spot for Athletes

VINT HILL FARMS, June 19 - The Vint Hill baseball team is now sitting in the second place spot of the Military District of Washington baseball league. Needless to say, their booming bats are trained on the top spot, and if their present brand of ball is continued they should climb to that next rung and remain there to the end of the season. The team is playing two and three games weekly, playing both a league and independent schedule.

Right about here we insert a plug for Capt. Bill Vinson, who is in charge of the team. Captain Vinson has coped with a lot of headaches in excellent fashion, and has put a good team on the field. He had a couple of years of semi-pro experience, has played army ball for the last ten years, and is still producing winners.

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Special Services announces, via the official grapevine, that they are about to open, of all things, a bowling emporium. The weather may be hot now, but when the GI keglers take to the alleys, the mercury is expected to soar, or at least jump. There will be three alleys and they are due to open during the latter part of June.

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While on the subject of recreational facilities, we have a couple of other things to brag about. Due to open as soon as workmen put on the finishing touches, are two of the finest composition tennis-courts in old Virginia ... and directly behind the tennis-courts will be a three-wall handball court. No excuse now for lack of exercise for you professional detail-eva-ders.

On the same subject -- tennis -- Vint Hill has two representatives in the Military District of Washington tennis tour-

nement -- Capt. Adrian Everett and Capt. James Lucore. Captain Lucore is a former Pennsylvania amateur star and has competed several times in the Pennsylvania state tourney.

A post softball league is being organized, with games due to start in the very near future. It will be made up of five EM teams and two teams of high brass, or at least brass. There should be a lot of unit rivalry and spirit in these games.

Here is one bit of recreational activity that is an old favorite: we refer to the Light Fantastic. Dances will be held every other week. Girls are being invited from Arlington Farms and nearby towns, and are, naturally, the finest...hmmmm.

A Special Services band is now in the process of organization and will provide the jumping jive for the dances. They will, of course, be available for other functions. There's no word from the maestro, Sergeant Sevigny, at this date but you can bet your last zoot suit, which you no longer need, that they will debut with a bang.

There's nothing official, but a lot of talk is being heard about the construction of a swimming pool here at the Farms. The word is that it might be swung if interested swimmers would volunteer a bit of their time and physical effort. Anyone interested in working on a pool project?

- M. Sgt. Carl J. Bierbaum

From the Barn:

VINT HILL FARMS, June 19 -- The turnover of enlisted men has been rapid the past couple of months. We're all Regular Army now of course, and there are quite a number of new faces around.

The Detachment has lost 1st Sgt. Robert C. Strong, who applied for retirement. First Sergeant Boris is now the top-kick, and is a big drink of water, too.

First Detachment recently acquired new mess-tables -- no longer with the typical benches attached to the tables on either side, but with individual stools. Reminds

one of the old times on the farm. Mess-trays, rather than plates, are being used, and many think they are better.

Since the last Review, Station 1 has lost two officers of old standing. Maj. James B. Nixdorff and Lt. Clifford R. Marland have both left the station. Reports have it they are attending O225 school; at present both are still on the post but with a different organization.

M. Sgt. Kolski again proves how small ham-radio makes the world. A couple of days ago he was working his amateur station when he picked up ex-Lt. Col. Homer V. Thompson, long-time Operations Officer here. Sgt. Kolski called and landed the colonel, and they had a nice little chat for the next hour and a half.

We advise all visitors to the station to wear cleats on their heels. We recently acquired a floor-waxing machine and the floors have been worked on so much it is taking your life and limbs into your own hands to walk the floors.

- M. Sgt. Q.J. Rechtenwald

New Phenomenon at Station 7

FAIRBANKS, June 26 -- The boys at Station 7 were glad to see in the May-June issue of the Review that Doctor Cryppy is going to bat for them to find a solution to the atmospheric problem. We have been wondering when someone was going to do some worrying about that besides us. We've been doing all we can ourselves -- even to building bomb-shelters and digging foxholes. Those old crashes of static send us running for cover plenty often, too. It's a question which is going to get us first, the sigs or the atmospherics.

Along with this worry we have huge ice-worms, and we have to be continually watching the antenna poles for fear they'll nibble the ends off and cause us no end of embarrassment.

All of these features of Fairbanks are in addition to our mosquitoes, but numer-

ous articles have been written in appreciation of these creatures and we won't go into the matter now.

We have a fine installation here, and although it sometimes seems a shame to expose it to the atmospheric bombardment, we are really going after reams of That Stuff. The gang includes four men who served here during the war: Sergeants Albert Batchelder, Lloyd Bunstine, James Jones and Kenneth Watson.

-- T. Sgt. Lloyd G. W. Bunstine

Wedding in Frankfurt

FRANKFURT, May 5 - Historic and charming St. Peter and Paul's Church in Kronberg Village was the setting for the wedding of Tec. 3 Vera L. Barteo, daughter of Mr. and Mrs. Arthur Barteo of Tilden, Nebraska, and 1st Lt. Joseph D. Convertino, son of Mr. and Mrs. Vito Convertino, of Utica, New York. The ceremony was performed by Monsignor Leslie V. Barnes of the European Command.

The bride wore a gown of white Parisian lace made with a small round collar, long sleeves, and a bouffant, draped skirt terminating in a sweeping train. Her veil, trimmed with lace, was caught in her upswept hair and fell loosely to the hem of her skirt, and she carried a bouquet of calla-lilies and fern. She was given in marriage by Lt. Col. Earle F. Cook, Chief of Army Security Agency, Europe, commanding officer of the organization to which both the bride and the groom were assigned.

The maid of honor, 2nd Lt. Marilyn Hansen, wore a gown of pale peach velure and a headdress of light blue with matching elbow-length gloves. Her dress had a high straight bustle. Her skirt, straight in front and full in the back, ended in a short train.

Lt. John Valersky of Utica, New York, was best man, and the ushers were Capt. Raymond F. Cornborough and Lt. Stanley F. Sparks. All are associates of the bride and groom in ASA Europe.

A reception was held immediately after the ceremony at Kronberg Castle, the Frankfurt Officers Club. The wedding party received guests before the open fireplace in the Empress Friedrich's private dining-room, and the bride and groom cut their three-tiered wedding cake with a saber belonging to one of the princes of the von Hessen family.

The couple's honeymoon was spent at Kronberg Castle and on a motor trip to the Riviera and the southern coast of France. On their return they took up residence in Frankfurt, where Lieutenant Convertino is stationed.

The bride, a member of the Women's Army Corps since 1944, served with Army Security Agency at Arlington Hall Station and in Germany.

Lieutenant Convertino was in Europe with



The reception

That's a mean blade, Lieutenant!

the Ninth Air Force during the war, serving in England, France and Germany. He was returned to the United States and was assigned early in 1946 to Arlington Hall Station, where he met his bride. He was later

transferred to Germany for duty with Army Security Agency, Europe.

Technicians? Tacticians!

Life is not all in accordance with the Technical Manual among the bright technicians, both lads and lassies, of ASA Europe. Lately the Field Manual has been raising its GI-barbered head.

Charged with the responsibility for polishing the rough diamonds is a staff of officers and non-coms headed by Maj. James A. McClung, a drillmaster's ideal who will never be forgotten by hundreds of survivors of the Fort Monmouth OCS course, circa 1943.

The spit-and-polish performance of the ASA detachment in a retreat parade and ceremonies in the Frankfurt Sportsplatz on May 5 won a written commendation from Lt. Gen. C.R. Huebner, chief of staff of the European Command.

In the 136th, Publicists

MITCHEL FIELD, N.Y. - The Headquarters Analysis Section of the 136th Radio Security Detachment coordinates and compiles all the reports that are forwarded from our component Radio Security Sections. These reports, or "SORD's", consist of the weekly results of one section's monitoring of any specific AAF or AACCS unit(s). With this material, a quarterly SORD is published, which summarizes the outstanding procedure and security discrepancies of these Army Air Force nets. This work may sound dull, but we found it anything but that, once we got started.

When we first arrived at this headquarters, after leaving our old alma mater, Vint Hill, we, like most of you, didn't know exactly what we would be in for. However, we didn't care too much, since we were once again back in the United States. Our first look at our future buddies revealed that there were only eight in the entire outfit. This meant single bunks for everyone, besides having about ten feet of living space on each side. Af-

ter the first shock of feeling alive again, we were started on our duties.

Writing a book was, for most of us, an entirely new experience. Our first attempts, naturally weren't too wonderful, but we had done it, so we were quite proud of ourselves. After a time, however, more and more boys were sent down from the "farm" and gradually the quality of the reports started to increase. We started to assemble artists, typists, mimeograph operators, and still more writers. Before much time had elapsed we had a smoothly-operating section with the work finely subdivided to provide the maximum efficiency.

-- Cpl. Irving M. Braverman

-- and Benedicts

Headquarters, 136th Radio Security Detachment, has had a serenade of wedding bells for the last two months. Orange blossoms from the nuptial ceremonies of two of our men have covered the ground in this vicinity like a carpet. The two men forsaking their bachelorhood were Sgt. George Buck and PFC Jewel Hackworth.

... ..

Our staff is growing smaller each day, due to the transfer and discharge of many of our men. Our latest loss to the civilian population was Cpl. Leonard G. Forbes, our classification specialist. Three new officers have joined our organization, but as yet no enlisted men have been forthcoming.

Even with the shortage of men, work is still going on here much as usual. In addition to our regular duties, much of our time is being spent in the beautification of our company area. The men awaiting shipment are spending their duty hours building ornamental fences, sowing grass seed, and otherwise doing what is possible to make ours a more enjoyable place in which to live.

Another recent loss to our company was Capt. Albert E. Zellefrow, our commanding officer. We were very sorry to lose him, but we are happy to hear he has gone to take further training at Arlington Hall (something that he seemed very pleased about). Our new CO is Capt. Russell L. French, formerly of Headquarters, ASA, who

we are sure will fill the shoes of Captain Zellefrow quite well.

-- Sgt. J. E. Maxon

New RA Commissions

THE MAY INCREMENT of ASA officers tendered Regular Army commissions in the Second Regular Army Integration Program will bring the total number of RA officers in the Agency to forty-seven. The integration program has been responsible for the commissioning of thirty-seven ASA officers in the Regular Army, and ten had RA commissions before the integration.

Following are the names of officers in the Agency at the present time who have been integrated into the Regular Army since the end of the war, with their present assignment, RA grade and branch:

NAME	RA GRADE AND BRANCH
<u>May 1947 Increment</u>	
Maj. Ralph G. Belon (ASA Pacific)	1st Lt. SigC
Lt. Col. Robert L. Crouch Jr. (TRRS)	1st Lt. Inf
Maj. Alexander R. Helms (VHFS)	Maj. SigC
Maj. William H. Innes (ASA Europe)	1st Lt. SigC
Capt. Claude W. White (9th Det.)	1st Lt. SigC
Maj. Ralph W. Bergman (Hq ASA)	1st Lt. SigC
1st Lt. Michael J. Burke (Hq ASA)	2nd Lt. SigC
Capt. Guy G. Cannity (Hq ASA)	1st Lt. CmlC
1st Lt. Frederick A. Geb (Hq ASA)	1st Lt. SigC
Lt. Col. Charles H. Hiser (Hq ASA)	1st Lt. SigC
Capt. John P. Jervey (Hq ASA)	1st Lt. SigC
Maj. James G. Moak (Hq ASA)	1st Lt. SigC
Capt. John P. McGovern (Hq ASA)	Capt. SigC
Maj. James F. Ritter (Hq ASA)	Maj. AGD
Capt. William G. Senior (Hq ASA)	1st Lt. Ord
Maj. Jack M. Faulds (Hq AHS)	Capt. SigC
1st Lt. Philip A. Revolinsky (Hq AHS)	2nd Lt. Cav.
Maj. Laurence W. Jones (ROTC)*	1st Lt. SigC
<u>January 1947 Increment</u>	
Lt. Col. Morton A. Rubin (Hq ASA)	Capt. SigC
Maj. Paul S. Balas (Hq ASA)	1st Lt. SigC
Maj. Robert F. Pope (4th Det.)	1st Lt. SigC
Maj. Finis G. Johnson (VHFS)	Capt. SigC
Maj. James B. Nixdorff (Hq ASA)	1st Lt. SigC
Capt. Albert E. Zellefrow (Hq ASA)	1st Lt. SigC
Capt. Rudolf H. Folts (ROTC)*	1st Lt. SigC
Capt. Emanuel P. Peters (Hq 136th RSD)	1st Lt. SigC
Capt. Walter C. Stubbs (Hq ASA)	1st Lt. SigC
<u>July-August 1946 Increment</u>	
Lt. Col. Joseph W. Johnston (ASA Pacific)	Capt. SigC
Lt. Col. John A. Geddes (Hq ASA)	1st Lt. SigC
Lt. Col. Robert T. Walker (ASA Europe)	1st Lt. SigC
Lt. Col. Russell H. Horton (ASA Pacific)	Capt. SigC
Lt. Col. Howard E. Nestlerode (ASA Europe)	1st Lt. SigC
Capt. Willard D. Tiffany (126th S.S.Co.)	1st Lt. SigC
Capt. Russell L. French (Hq 136th RSD)	1st Lt. AC
Capt. Robert W. Stowbridge (Hq ASA)	1st Lt. AC
Capt. Wilfred Washcoe (ASA MIDPAC)	1st Lt. SigC
1st Lt. James Pelland (Hq ASA)	2nd Lt. SigC

* Assigned as ROTC instructors in Army Security subjects at civilian universities.

The following officers now serving with ASA, all West Point graduates, had Regular

Army commissions prior to the integration program: Col. Harold G. Hayes, Chief, ASA; Col. George A. Bicher, Deputy Chief, ASA; Col. Samuel P. Collins, Chief, ASA Pacific; Lt. Col. Earle F. Cook, Chief, ASA Europe; Capt. Walter O. Nygard, Hq. ASA; Maj. Dennis Barton, instructor in Army Security units of the New York National Guard; Lt. Col. Wallace M. Lauterbach, now a student at the University of Illinois under the program of officer attendance at civilian universities; 1st Lt. Garland C. Black, Jr., ASA Europe; 1st Lt. William C. Banning, ASA Europe.

Additions to the RA appointment list will appear in September or October, and will be the final integration of officers under the Second Regular Army Integration Program.

Two Rock News

TWO ROCK RANCH, May 13 - Spring brought little excitement to the gang at Two Rock except to add additional duties to an ever-decreasing group of EM. The last contingent of Selective Service men left on April 17.

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Some excitement has been generated by the organization of a softball league with all sections trying to beg, borrow or steal enough men to put a winning combination together. So far clubs have been formed by the following sections: Operations, Radio Maintenance, Motor Pool, Guard, Headquarters, and the officers.

... ..

An already good mess has been improved lately with the arrival of three more qualified cooks from Fort Lawton, Washington. T. Sgt. Crain has assumed his new position of mess steward and S. Sgt. Fair has been designated as his assistant.

... ..

Our Motor Pool men were commended highly by a maintenance inspector from the Presidio of San Francisco for the excellent work that they have done on first- and second-echelon maintenance. That was considered quite an honor because our vehicles are on the move the greater part of the time.

-- WOJG Robert L. Fulton
-- Lt. Ernest F. Griffith

The Great Game of Signal-Intelligence

(Unclassified)

(The cryptanalysts of Eutopia have solved one of Plutonia's main diplomatic codes. Information from messages in this code occasionally finds its way into Eutopia's own diplomatic traffic. Plutonia, which reads all of Eutopia's codes, eventually recognizes situations in which Eutopia's cryptographed remarks about Plutonian diplomatic affairs could only have come from reading this one Plutonian code. Plutonia continues using the compromised code but only for messages which it wants the Eutopian Foreign Office to see. Eutopia falls for this, but because of her inept diplomacy her reactions to the planted information are unorthodox and therefore rarely what the sophisticated Plutonians expect. As the plants appear to be a failure, Plutonia suspects that Eutopia is wise to the scheme through reading other Plutonian codes [which is not the case]. Plutonia changes all her codes to a general system with which Eutopia's analysts happen to be very familiar....)

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The British Take the Cake

(Unclassified)

FOR AN ORGANIZATION of diplomats falling all over their own feet as the unwitting dupes of another nation's cryptanalysts, the German Foreign Office of 1917 has had few if any rivals in the world's published history.

By means of some adroit maneuvering, the British succeeded in publishing the text of the message destined to become historically renowned as the Zimmermann Telegram, and they did it without betraying, either to the world at large or to the Germans in particular, the fact that it was obtained by cryptanalysis. Furthermore, the British cryptanalysts who decrypted the Zimmermann message were treated to a highly amusing sideshow as they sat back and watched the Germans exchange later messages blaming each other for carelessness in allowing the plain-text of the Zimmermann Telegram to be obtained by treachery or espionage.

It was the Zimmermann Telegram which revealed a gigantic German diplomatic plot against the United States and which, upon being released to the press, did much to push America's wavering public opinion in the direction of a declaration of war. The telegram itself will be the subject of a later article in this journal; the present story concerns only the sequel to the telegram: the manner in which Foreign Minister von Zimmermann and his ministers abroad were taken in by the British scheme to make the whole business look like a clever piece of spy work on the part of the Americans.

When the British Admiralty's cryptanalytic service read the Zimmermann Telegram, the Prime Minister knew he had in his hands a charge of dynamite which, properly placed and correctly timed, would blast what remained of America's stubborn anti-war sentiment. But how to publish the telegram

without compromising a cryptanalytic solution which was continuously yielding highly valuable intelligence — that was the problem.

It was obvious that for maximum effect the announcement of the German plot should be made in the United States. This would also have the effect of diverting the Germans' attention toward America when they looked about themselves for the leak in their diplomatic correspondence. The British, of course, hoped that the Germans would be stupid enough to overlook or cast aside the possibility of cryptanalytic solution of a German-designed cryptographic system.

-- Eat It

By the end of February the British had their cards ready to play. Through Ambassador Page in London they communicated the text of the Zimmermann message to President Wilson, who at first doubted its authenticity but was quickly satisfied by having one of Page's assistants go over the solution with the British cryptanalysts.

The President's announcement to the country made no direct mention of the source of the message, but, whether by design or by accident, the impression came about that it was the work of American intelligence.

The British press fell in line, taking the British intelligence services to task for letting the Americans get the better of them. This was part of the plan laid by Admiral Hall, the Admiralty's Director of Intelligence, who is credited in one account with having called in a representative of the London Daily Mail, letting him in on the secret, and requesting that he write a sensational story which would start the barrage of criticism.

Thus the British succeeded in establishing the idea that the Zimmermann message was obtained by the Americans, and by means other than cryptanalysis. And to complete the deception, British agents in America started a story that the plain-text copy had been obtained in Mexico City, the ultimate destination of the Zimmermann message (it was relayed via the German Embassy in Washington).

-- and Have It Too

The British, anxious to know whether their ruse had worked, soon had the pleasure of seeing the following plain-texts come out of the encrypted correspondence

between Zimmermann and von Eckhardt in Mexico City:

TO: MEXICO NO. 20 21st MARCH 1917
MOST SECRET. DECIPHER PERSONALLY.

PLEASE CABLE IN SAME CIPHER WHO DECIPHERED CABLE DISPATCHES 1 AND 2, HOW THE ORIGINALS AND DECODES WERE KEPT, AND, IN PARTICULAR, WHETHER BOTH COPIES WERE KEPT IN THE SAME PLACE.

.

TO: MEXICO NO. 22 27th MARCH 1917
VARIOUS INDICATIONS SUGGEST THAT THE TREACHERY WAS COMMITTED IN MEXICO. THE GREATEST CAUTION IS INDICATED. BURN ALL COMPROMISING MATERIAL.

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TO: BERLIN NO. 14 30th MARCH 1917
REPLY TO TELEGRAM NO.22. GREATER CAUTION THAN IS ALWAYS EXERCISED HERE WOULD BE IMPOSSIBLE. THE TEXTS OF TELEGRAMS WHICH HAVE ARRIVED ARE READ TO ME AT NIGHT IN MY DWELLING HOUSE BY MAGNUS, IN A LOW VOICE. MY SERVANT, WHO DOES NOT UNDERSTAND GERMAN, SLEEPS IN AN ANNEX. APART FROM THIS, THE TEXT IS NEVER ANYWHERE EXCEPT IN MAGNUS' HAND OR IN THE STEEL SAFE, THE METHOD OF OPENING WHICH IS KNOWN ONLY TO HIM AND MYSELF.

ACCORDING TO KINKEL, IN WASHINGTON EVEN SECRET TELEGRAMS WERE KNOWN TO THE WHOLE CHANCERY. TWO COPIES WERE REGULARLY MADE FOR THE EMBASSY RECORDS. HERE THERE CAN BE NO QUESTION OF CARBON COPIES OR WASTE PAPER.

The British analysts concluded that the cryptographic system which gave them the Zimmermann Telegram would continue in use. They were not disappointed.

Around and Around We Go

—(Confidential)—

There was once an apocryphal cryptanalyst who worked for years to solve a mysterious message and, when he was finally able to read it, found it was in a cipher he had invented himself. The next thing to cryptanalyzing your own stuff is intercepting it — and for an example we have an inci-

dent which occurred in Language Branch of ASA in the fall of 1945. Sorting over traffic intercepted on Japanese domestic radio circuits, a group of translators came across an English plain-language message from Osaka to Tokyo that read something like this:

REQUEST INFORMATION ON THE APPLICATION OF PARAGRAPH 9 OF CENSORSHIP INSTRUCTION CIRCULAR TO THE OPERATIONS OF THIS OFFICE

LT ANDREW RICE

Throughout the war and up until a few weeks before this incident, the translating section where the message popped up had included an officer by the name of -- Lt. Andrew Rice.

-- E. C. Fishel

Russia's Imperial Black Chamber

(Unclassified)

The military disaster of Tannenburg, and many subsequent events of World War I, acquired for the Russians a reputation for cryptographic ineptness. Although the shortcomings of the Russian Army in this field may have been great, they did not extend to the Imperial Russian Foreign Office, which history has known to have had a highly successful cryptographic bureau. Some of the colorful details of the work of that bureau are told by W.K. Korostowetz in "Lenin in the House of the Fathers" (Verlag fur Kulturpolitik, Berlin W. 50, 1928), pp. 48-52:

... ..

DESPITE the meager means supplied, there was not a telegram of a friendly or hostile power which our Black Chamber did not read, and conversely our most secret telegrams were safe from decipherment by other powers.

I emphasize this because, although the Austrian Black Chamber was considered the best, during the war it could not decrypt our messages in which mention was made of the fact that the Austrian plans for mobilization had been stolen at Easter by Russians with the aid of our military attache in Vienna (Colonel Swankewitsch), had been brought to Petersburg and photographed

during the holidays, and then calmly replaced in the secret archive of the Austrian Staff. Thanks to this circumstance, the Russian Army under command of Brussilow and Iwanow inflicted a crushing defeat upon the attacking Austrian Army, and had it not been for local misfortunes, the Austrian Army, which had lost a large part of its artillery and over 300,000 prisoners, would have been surrounded and forced to capitulate.

It is worth noting that due to the hate and jealousy that prevailed in the department of Minister Suchomlinow, Swankewitsch received no promotion but only a decoration out of turn and was then transferred to the unimportant post of regimental commander in Jamburg. But the Austrian Black Chamber did not read our statements to Paris and did not take steps to prevent the catastrophe although it did decipher easily many of our telegrams enciphered by other systems.

In this connection I must relate the following fact: When the military strength of the Allies was strained to the utmost, it fell to the lot of Russia -- although all its plans were directed to attacking and crushing the Austrian Army -- to submit to the will of the Allied command and undertake an unprepared attack on Germany in the East Prussian area in order to hold off a German attack on Paris, toward which the Germans were advancing at a furious pace. To the repeated declaration by Russia that such a measure would throw all its carefully made plans into confusion, one telegram after another came from Paris requesting the advance against Germany and regarding Austria as a negligible quantity, as one telegram said. After a long struggle Russia gave in, and there followed the invasion of East Prussia; and then with the retreat came the loss of our best cavalry and infantry regiments.

Verbal Fencing Protects a Solution

The hastily worked-out plan was handed us in the Foreign Office for transmission in secret cipher to our military agent, Count Ignatjew, in Paris, but to our consternation Paleologue (the French ambassador to Russia) decided to telegraph it to Paris too in his cipher. Since we easily read French telegrams, it was clear that the German and Austrian Black Chambers would do so too, and it required no little

exertion and diplomatic effort to talk the Frenchman out of sending it in his cipher without giving away the reason for our request. To do this would on the one hand offend the French, on the other, if they changed their cipher, it would cost us a lot of effort to break the new key.

In this field I have seen, even though only incidentally, a number of interesting things. A political and diplomatic secret is such only in the beginning. Gradually, when several people share it or when the plans have been converted into actions, it ceases to be a secret. While we and the Austrians used very complicated ciphers with double encipherment and daily change of key -- sometimes even for every message, -- the French used a very simple cipher without double encipherment and limited themselves to speedy change of cipher and alphabet. However complicated a cipher may be, a fair number of messages in the same cipher is enough for the enemy's Black Chamber (which furthermore often gets the text through its own secret agent) to uncover the nature of the cipher and its secret by comparing the messages.

This is a regular science, at which people spend their whole lives, dedicating their knowledge, information and strength to this subject so important to their country. We had talented people in this field, of whom a certain Vaeterlein deserves special mention. He not only read all telegrams of countries whose language he knew, but had become such a virtuoso that he deciphered telegrams whose language he did not understand, e.g., Japanese or Chinese, and turned them over to others after he had recovered the original text.

Breakfast-Table Cryptanalysis

Vaeterlein devoted himself wholly to this work. I was told that once when he was sent as courier to London he sat gloomily during breakfast in the Embassy, until suddenly a change came over him. He beamed, began to joke and be merry, and when one of the officials of the Embassy asked him what was up, he confessed he had been preoccupied with an incomprehensible word that stood in some English telegram he had deciphered and that in the conversation someone had mentioned the name of a small English castle where the king had gone for the hunt; this name was precisely

the word in the telegram which had been bothering him.

Despite all the political interest connected with our work, this was very exhausting. All secret material was concentrated in our hands so that we not only had to compose all the notes and do the current work involved, but also had to do the encipherment, keep the secret archives, make copies and also decipher all secret reports from our ambassadors and consuls. Thus during the crises from 1912 to 1917 (when Europe never was free from crises) I had to work as many as sixteen hours a day for months at a time, especially on holidays, for on holidays we received all the telegrams hastily dispatched by the embassies on Saturday so as to get their holiday free. The success of such work naturally depended on the friendly, comradely atmosphere which prevailed in the chancery, where everyone worked like a big family, from sense of duty, not from compulsion, not for material gain, which was wholly lacking or minimal, as I have already stated.

Playing Tricks on the German Navy

Let us return to Vaeterlein. Right at the peak of the fighting he was given an intercepted radiogram in the cipher of the German Fleet, and he discovered a detailed order with all lines of approach for a thrust in the Gulf of Riga and the Finnish Gulf, where a demonstration was to be made against the Russian Fleet. This work of Vaeterlein enabled our fleet not merely to take protective measures, but also to send out a squadron of mine-layers which laid mines in the rear of the German Fleet, while one of the leading boats even entered the Gulf of Danzig and wrote a greeting on a cliff there. The diversion by the German Fleet failed. On the return voyage several ships hit mines, one trawler and some mine-layers sank, and, if I am not mistaken, the cruiser Magdeburg.

However, the strangest thing about it is that the Minister of War turned down flat the suggestion of our Ministry that Vaeterlein be awarded a military decoration; it could not penetrate the military mind that an official of the Foreign Office who sat quietly in his office could possibly merit a military decoration without having directly exposed himself to danger at the front.

Humorous incidents also arose in con-

nection with the efforts of the Black Chambers to outwit one another. Thus, when it became known that this or that less secret system was known to the enemy, fake statements or instructions were sent in that system, naturally after previous notice to the embassy in a really secret system, that such a canard was coming.

Among other things, the Germans had solved one of our most secret ciphers by starting with the assumption that every message ended with the equivalent of "period", and comparing a great many enciphered telegrams. When Italy was not yet in the ranks of the Allies but was already on the eve of joining, as remarks in the newspapers indicated, our official, Serafinow, was sitting in the Italian Consulate in Constantinople as supernumerary employee. He was handed the enciphered telegrams of Count Pallavicini, Austrian Minister to the Sublime Porte, in which he reported to his foreign minister, Count Berchtold, in Vienna.

To speed things up, Serafinow wrote "unciphered": Borisow (substituting this name for Berchtold) is wiring Pawlow (substituted for Pallavicini), then in our cipher the recovered text of the Austrian telegrams, and sent this over the signature of the Italian consul to the Ministry of Foreign Affairs at Rome. This office handed it to our embassy in Rome for transmission to Petersburg.

In intercepted Austrian telegrams deciphered by our Black Chamber, we suddenly found to our astonishment one reading:

BERCHTOLD INQUIRES URGENTLY OF PALLAVICINI HOW IT IS TO BE EXPLAINED THAT A CERTAIN BORISOW IS TELEGRAPHING A CERTAIN PAWLOW INSTRUCTIONS ANALOGOUS TO THOSE WHICH HE WAS GIVING PALLAVICINI?

The riddle was solved easily: we were deciphering the Austrian messages and they were reading in our deciphered telegrams their own texts.

-- Translated by R. W. Pettengill

To Second Sig Old-Timers:

(Confidential)

Photographs in Signalman's Odyssey (pages 9-16) are from the personal collections of Capt. William McCullough of Vint Hill, Howard W. Brown and Michael Maslak, the writer of the serial. These collections produced numerous pictures of value to ASA historical records as well as to the Review. Persons possessing pictures of the Philippine and other pre-war detachments can do the Agency a considerable service by loaning their collections to Headquarters for reproduction. Safe handling and return of the photographs is guaranteed.

Photographs may be sent as official Agency mail to the Editor, ASA Review, WDGAS-23, Army Security Agency, Washington 25, D.C. Each picture should carry an identification.

Radioman's Puzzle Solution

Since a sky wave leaving the transmitting antenna has to travel upward with respect to the earth's surface, it would simply continue out into space if its path were not bent sufficiently to bring it back to earth. --The Radio Amateur's Handbook.

(Unclassified)



"I said I wanted a receiver."

ASA Review

-- BOOKS in REVIEW --

How to Start a War:

Pearl Harbor, by George Morgenstern. Devin-Adair Company, New York, 1946. 425pp.; \$3.00. Available in WDGAS-95 Library.

(Unclassified)

ONE OF THE MOST TRUSTWORTHY statements made in connection with this book does not appear in the text but in a verbal pat-on-the-back on the jacket. In this, Charles A. Beard, the historian and good-standing member of the "I Hate Roosevelt" Club, states that: "The catastrophe at Pearl Harbor on December 7, 1941 -- its significance and issue -- is now and will undoubtedly continue to be an ineradicable center of intellectual and moral interest." This is unquestionably true. It is equally true that such intellectual and moral interest will hardly be satisfied by the biased, incredibly distorted picture of the events given by George Morgenstern.

His book is a rehash of the contents of various published documents, largely the reports of the Pearl Harbor investigations -- as the author chooses to interpret them. He first takes his readers on a kind of sight-seeing tour of our pre-war diplomatic and military establishments, beginning with our relationship with the Allies and the Axis, then getting down specifically to our relationship with the Japanese Empire during the years 1940 and 1941. To his sight-seeing readers, he acts as cicerone, pointing out the individual iniquities en route somewhat in the manner of the guided tours through Chinatown's opium dens.

After this introduction, the author goes, in some detail, into the intercepted messages from the Japanese Government to its diplomatic establishments in the United States and elsewhere; messages which admittedly disclosed the true intent of the Japanese. The process whereby these messages were read -- the reconstruction of the Japanese cipher machine -- is dismissed light-

ly as "a stroke of good fortune" on the part of the American intelligence services. The author is not unwilling to boost the reader into "properly" interpreting all the messages quoted in the text. If you can't figure them out yourself, he will tell you what they mean.

The part of the book devoted to the actual attack at Pearl Harbor is comparatively objective, that is, free from interpretation, as the author is out to convict people in Washington, not in Hawaii. The summation, following the detective-story outline which the author states he is using, is headed "Who was guilty?" You will now hear from the attorney for the defense.

Did We Trap Those Nips!

Morgenstern takes some four hundred pages trying to prove two points which mutually exclude each other. The first is that the late President Roosevelt, with diabolical malevolence, egged the unsuspecting Japanese on to their sneak attack at Pearl Harbor; the second, that the President and his military advisers were fumbling and incompetent and didn't know enough to come in out of the rain.

Now, it is very hard to prove the same man an evil genius and simultaneously an utter idiot. It is hard to maintain that Roosevelt, his Cabinet and his top Army and Navy men knew that the Japs were going to attack when and where they did, and to maintain also, as Morgenstern does, that "Washington was not looking for any attack on Hawaii."

In a book of this kind, dealing with intelligence activities and specifically go-

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ing into detail on signal-intelligence activities, some study of the background and motives of the author will be of interest. George Morgenstern, according to the publisher's note, is on the editorial staff of the Chicago Tribune. This is the same Tribune that published the Army's secret mobilization plan two days before war, and jeopardized the security of the United States Navy by publishing in 1942 an account of how the ambush of the Japanese fleet at Midway was accomplished by successful cryptanalysis of Japanese naval messages. Like the Bourbons they learned nothing new from the war and forgot nothing of their old malice.

The book, following the Tribune line generally, simply ignores the danger to the United States that existed in 1941; danger from the implacable determination of the rulers of Germany and Japan, either singly or jointly, to bring the world under their domination and destroy any group or nation that stood in their way. It takes nothing from the danger that existed at that time to say, as the author does, that victory in the war did not solve our problems of security. It is indeed hard to see what sort of outcome of the war would have suited the author and his backers.

Some Questionable Hypotheses

A long parade of misstatements, half-truths and contradictions marks the course of this "powerful work based on primary and irreducible facts" (as categorized by Professor Beard). One of the statements, put forth as absolute fact, would have the reader believe among other things that the Japanese knew in 1941 that the United States could read their diplomatic ciphers and there was no element of security in our withholding from the public and from our enemies during the war, the fact that the U.S. had solved these ciphers. This despite the fact that the testimony at the Pearl Harbor investigation showed that the Japanese Government used the cipher machine all through the war (and indeed, even after surrender) for their most secret diplomatic traffic.

Other misstatements, put out in the same spirit, are equally misleading as to fact and intent. The author states that the Pacific fleet was either deliberately or

carelessly weakened by having a carrier task-force sent to ferry land-based fighter aircraft to Wake and Midway a few days before the attack. He claimed this job could have been done by freighters. I don't know whether Mr. Morgenstern knows how to fly a plane off the deck of a freighter, but if he does he is holding out on us. Similarly, a statement is made that the Office of Naval Intelligence misled Hawaii by sending out a bulletin that radio-intelligence and traffic-analysis people believed that the Japanese aircraft carriers were in home waters when actually they were in the North Pacific en route to Hawaii. These reports came from information furnished by the naval radio-intelligence unit at Hawaii itself and were known to our Pacific Fleet before ONI got them. That they were in error was a great tragedy, but it was not an attempt to mislead anyone.

In addition to the great contradiction of the book, as outlined above, there are a number of lesser contradictions scattered through its pages. For example, Morgenstern, insinuating that there was a plot in the War and Navy Departments to keep Hawaii from being warned of impending war on the morning of December 7, after the final Japanese diplomatic messages had been translated, hints that several officers of the Army and Navy in on the alleged plot were later favored for high rank and responsibility while others, like Col. Rufus Bratton, who attempted to have a warning message sent, were deliberately passed over. Yet the author also states that Admiral Harold Stark, then Chief of Naval Operations, and an "arch-conspirator" if there ever was one, was, as the author puts it, "thrown to the wolves" by Secretary of the Navy Forrestal by being designated as unfit to hold any position involving a need for superior judgment. You cannot have a well-run conspiracy if you reward some conspirators and punish others.

Another slight discrepancy which the author did not permit to disturb him, revolves around our commitments to the defense of the Netherlands East Indies and British Malaya. Despite the fact that the U.S. officers who held the staff talks with the British and Dutch military authorities made plain to both that they had no authority whatever to commit this country to any course of action in the event of a Japanese

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attack and that only Congress could declare war, and that they so testified before the Congressional Committee, Morgenstern assumes that the relatively low-ranking negotiators had bound the United States, by a hard-and-fast agreement, to attack Japan if the latter attacked the British and Dutch and did not attack us. Yet, while accusing the Army and Navy of negotiating us into war via the staff talks, he also accuses Admiral Stark (who knew the extent of the staff talks) of not knowing what course the United States would follow in the event of Japanese aggression, and of telling Admiral Kimmel in Hawaii that he (Stark) lacked that knowledge. Now a man cannot know and not know about a set of plans at one and the same time. The truth is that the staff talks were tentative and inconclusive, and neither Admiral Stark nor any one else knew what policy this nation would follow in response to any given Jap action. This was a grave weakness, but it was no sinister plot.

The 'Winds Code' Mystery

One other point must be taken up, as it constitutes a large part of the testimony of the Joint Congressional Committee investigation as well as of previous investigations, and incidentally of this book. This was the "winds-code execute" controversy, which will probably never be entirely resolved to everyone's satisfaction. The Japanese had set up a spoken-word code system to be used if normal communications were cut off by war or breach of diplomatic relations. These words were weather-forecast phrases, to be inserted into the Domei News broadcast in a very special way and distinguished from ordinary weather-forecasts by use of an indicator word. There were three phrases which meant either war or strained relations between Japan and, respectively, the United States, Great Britain and Russia. Some witnesses contended that an execute message had been received in this system in a Morse transmission intercepted by a Navy monitoring station at Cheltenham, Md., on December 4, 1941, and that the information so gained had not been acted on. Other witnesses claimed that no true winds-code message was ever received. Morgenstern, of course, chooses to accept the theory that such a message was received, and indeed elevates this unproved statement

to a basic truth in his allegation that a great conspiracy existed.

All that can be said of this is that the original code phrase was to be used in spoken Japanese, the alleged intercept was in Morse; all the Army, Navy and FCC intercept stations were listening for such a message, only one interception was reported; the winds code was to be used only when ordinary communication failed, whereas ordinary commercial cable and radio were in full use until the day of the attack. When questioned after the surrender, Japanese Foreign Office spokesmen denied having sent an "execute" message on December 4. Even the minority report of the Congressional Committee, a report very critical of the Administration and the services, makes no mention of the supposed execute message. But Morgenstern does.

This is enough to give this reviewer's ideas on the merits of Morgenstern's book. To condemn his malicious misinterpretations, however, is not to condone the admitted errors on the part of the U.S. Government and armed services in 1941.

The various Pearl Harbor investigations showed that responsible U.S. leaders, both civilian and military, knew in late 1941 that war with Japan was a strong probability. The Japanese had managed to get themselves into an impossible predicament. They had fought in China for four years with inconclusive results and were in desperate need of food and raw materials when the United States, seeing them seize



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French Indo-China, applied the brakes through embargoes of war material, which we had been supplying them in generous amounts. The Japanese were faced with the necessity of calling off their war of conquest or of striking at once while their fess were preoccupied in Europe. The only other alternative was to withdraw from Asia; this they never seriously contemplated.

All this was known to the American Government -- but only as a series of seemingly disconnected facts and events. The State Department knew of Japanese political intent. The Army and Navy, at Washington and Hawaii, knew of Japanese troop-transport loading in Indo-China for an expedition, and the British, who worked in loose liaison with us, knew that the Japanese troop convoy was heading for Siam or Malaya. ONI thought there was great danger to the fleet at Pearl Harbor because it was the only American weapon that could threaten a Japanese advance south. Each knew where danger lay in his own field, but no one was charged with piecing it all to-

gether and coming up with an overall estimate.

The State Department carried on negotiations with the Japanese, sometimes keeping the armed services informed, more frequently leaving them to learn of our own government's moves through decoded Japanese messages. In turn, the State Department did not know or did not properly evaluate our military position in the Pacific. Neither Army, Navy nor State Department leaders knew the other services' capabilities and limitations. Each had a long tradition of independent action; the great need was for coordination.

There was a villain at Pearl Harbor. It was not General Short, nor Admiral Kimmel, nor any of the other military and civilian leaders, with all their admitted shortcomings. It was a system, the outmoded system that permitted information to be tightly compartmented, that kept one hand from knowing what the other hand did. It was dangerous then, it might be fatal now.

- Lt. Robert H. Bar

Looking Back on the Front:

Front-Line Intelligence, by Lt. Col. Stedman Chandler and Col. Robert W. Robb. The Infantry Journal Press, Washington, 1946. 183 pp.

(restricted)

"PUSH the pertinent poop promptly," urge Colonels Chandler and Robb, thus summarizing the message and setting the tone of their book in the same sentence.

The book is based on the writers' observations of up-front intelligence work in World War II. It is a plea for simple, direct, to-the-point intelligence, and it is written in a simple, direct, to-the-point colloquial style which includes some highly unoriginal language but which gets across its message all the better through its use of the intelligence workman's everyday vocabulary. Without the slightest hint of embarrassment or apology, the authors sprinkle their text heavily with such

well-worn gems as personnel (meaning human beings), G.I.'s (ditto), characters (likewise), level (plane, height, echelon), shop (office, section), coordinate (work out, arrange, obtain concurrence), tool (method, device). If this kind of talk doesn't bore you stiff, you will find behind the language some highly interesting ideas on the way intelligence work should be conducted.

To one whose wartime intelligence operations were carried on in one each chair, swivel, w/arms, this book is a wonderful revelation ("picture!") of how the other half worked. In presenting the writers' ideas of a model intelligence machinery

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for Division and lower units, it shows what went on during the war in intelligence operations so far forward that we War Department operatives had no contact with them -- in those areas where a second lieutenant's shirt-pockets were the Intelligence Section's "in" and "out" boxes; where knowledge of the enemy was gotten by scouting and patrolling in his own front yard, rather than by bringing in his radio signals from five-thousand miles away; where accurate work meant saving yourself and your company from being personally mauled, instead of enabling some Pentagonian to move the correct pins around on a world situation-map.

To Chandler and Robb, pushing the poop includes not just routinely preparing and submitting reports, but also making double-checks on all information; phrasing what you have to say in clear, straightforward English; making personally sure that your information gets to all interested persons, rather than resting on your laurels once a report has been started through channels. From the responsive chord which these ideas struck in this reader, it would appear that at least there were some problems common to both the up-front and away-back scenes of operations.

Some ASA Shoptalk --

Communications-intelligence is naturally not a major activity in companies and battalions, but there are a few references to it which make interesting sidelights for the ASA reader. To wit:

A German regimental radio-station in France had been under surveillance by one of our radio-intercept sections, and the code being used had been broken. Immediately prior to an operation, orders were transmitted by radio to battalion commanders in a new code. The battalion commanders replied that they had not yet been furnished copies of the new code and could not understand the message. The radio operator at Regiment then recoded the message in the code used previously, which we had broken. This resulted not only in our learning the enemy's plans, but also enabled us to break and understand the enemy's new code.

Another excerpt will be of historical interest to readers whose wartime duties touched on Japanese order-of-battle:

...O/B received information in the latter part of 1944 that the 2nd Armored Division of the Japanese Army was on Luzon. A simple piece of information, but once verified, it had a decided effect upon invasion planning. The landing force was specially trained and equipped for combat against armor, and adequate tank destroyer units were included in the task force to meet the anticipated situation.

In the chapter on "Your Security Responsibility" communications security comes in for some detailed treatment:

Communications must be reliable and secure from enemy intelligence if military operations are to be successful... Physical security is vital in connection with codes and ciphers. During the Saipan operation one of our battalion command-posts was overrun by the enemy. Considerable cryptographic material was captured by the enemy. Several days later the command-post was recaptured and all cryptographic material was found intact except one cipher. This missing cipher was then reported compromised in a letter which went through channels and reached the War Department about three weeks after the enemy had overrun the command-post. It was later learned from pris-



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oners-of-war that the Japs had captured this cipher and actually used it to break our messages during this three-week period....Transmission security consists of two fundamental precautions: withholding from the enemy information which might be made valuable to him through a study of our traffic by all methods other than cryptanalysis, and preventing the enemy from making use of our communications system for purposes of deception or to obtain operational assistance.

Here are two examples of violations of these fundamental precautions, based on experiences in the North African campaign:

An attack on Halfaya pass was planned by the British. Before moving their bases, the British opened radio nets at advanced points. With this clue to act upon, German and Italian intercept

platoons were able to establish the disposition of the British troops before they arrived at the front....

A division moving up in North Africa failed to observe absolute radio silence and permitted its radio stations to send premature test messages in their new positions. Captured Italian intelligence reports later revealed that the enemy had intercepted the test transmissions and deduced that a new division was coming up.

The authors obviously have a high regard for radio silence. They might have added that enemy traffic-analysis will profit from the very imposing of radio silence if it is not part of a carefully worked-out larger plan. We will forgive the colonels this one oversight in a book full of salient analyses of how intelligence work should be done.

-- E. C. Fishel

A Lesson in Espionage:

The Soviet Spies, the story of Russian espionage in North America, by Richard Hirsch. Duell, Sloan and Pearce, New York, 1947; 92 pp. plus index; \$1.00. Available in WDGAS-95 Library.

The Report of the Royal Commission appointed to investigate the facts relating to and the circumstances surrounding the communication, by public officials and other persons in positions of trust, of secret and confidential information to agents of a foreign power. Edmond Cloutier, Printer to the King's Most Excellent Majesty, Ottawa, 1946; 733 pp.; \$1.00. Available in WDGAS-95 Library.

(Unclassified)

THE NEWSPAPER HEADLINES revealing the existence of a Soviet-directed espionage ring in Canada attracted a great deal of attention when the story broke early in 1946. The present books afford anyone who is interested a consolidated account of the Canadian case and an eye-opening view of the ever-present threat of espionage -- in Canada or anywhere else. The Report is a voluminous collection of evidence constituting the results of the official inves-

tigation which led to the trials of Canadians implicated in the espionage, and the other book is a summary, in popular form, of the Commission's findings prepared by Mr. Hirsch, an American, who is described as "formerly lieutenant-colonel in the Military Intelligence Division of the War Department General Staff".

The Report is concerned solely with the assignment of the Royal Commission, the

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testimony taken, the official evaluation of that evidence, and the recommendations of the Commission for legal proceedings against the suspects through the courts. Hirsch summarizes the findings of the Commission and gives a number of interesting stories which do not appear in the Report -- accounts of the apprehension of suspects and action taken after the Commission had completed its work.

At both the beginning and end of Hirsch's book is a plea for competent, professional counter-espionage on the part of the United States. He points to the unwisdom of loud, poorly-managed witch-hunts, warning that counter-espionage must not be "confused with anti-Soviet sentiment....A general persecution of Communist sympathizers only results in queuing up candidates for subversion in front of Soviet offices."

The Story

The Canadian Government learned of the existence of the spy ring when Igor Gouzenko, a Red Army officer who was the Russian Military Attache's code-clerk in the Soviet Embassy at Ottawa, turned himself over to the Ottawa City Police -- after being rebuffed when he tried to give his evidence to the Ottawa Journal and then to the Ministry of Justice.

Gouzenko (who is the author of a series of articles on the case appearing in *Cosmopolitan Magazine*) was born in Russia in 1919 and received special training for his duties as a cipher-clerk for Russian Military Intelligence. Before coming to Canada with his wife and child to assume his duties he was cleared by a board in Moscow composed of representatives of various Russian intelligence agencies to be mentioned later.

Once in Canada, Gouzenko was so impressed with the life in a "capitalistic state" (against whose blandishments he had been carefully indoctrinated before he was granted permission to leave the USSR) that he chose to remain there when word of his imminent recall was received. He made a long statement (quoted in both books) of his reactions to life in a democracy and his reasons for believing that the active espionage he saw being conducted against a friend and ally was morally wrong.

The details of Gouzenko's secreting copies of the messages given him to encipher by Colonel Zabolin, the Russian Military Attache in Ottawa, rather than burning them as his instructions required, and the events leading to his escape with his family and handing the evidence over to the Royal Canadian Mounted Police, are a thrilling story which has appeared in the press and has been recapitulated well by Mr. Hirsch. By way of footnote, it may be reported that a Canadian friend informed this reviewer that Gouzenko, under an assumed name, has been suitably rewarded. He is said to have received a farm, an income of \$300 a month, and a guard of Mounted Police for himself and his family.

It was the fact that the atomic bomb was involved which attracted widespread publicity to the case, but the messages which Gouzenko provided, reproduced in the Report, show that the Russians were interested in and obtained a great deal of other information including details about radar, the proximity fuse, new explosives, submarine detector devices, copies of Top Secret messages from the Canadian Embassy in Moscow, and the standard order-of-battle information always a part of military espionage. The success of their operations may be judged from the Royal Commission's estimate that "the Soviets failed to obtain details on the structure of the atomic bomb....only because there was no one in Canada who could tell them."

The authenticity of the documents



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brought in by Gouzenko is carefully established in the Report. Handwriting experts identified the writing of Colonel Zabolin on some of the papers from comparison with attested samples of his writing. The actual paper and record books, which had peculiar markings, were identified as part of an order for supplies to the Russian Embassy from an Ottawa stationer. Finally, various members of the spy-ring (Canadians) testified that the events indicated in the documents had taken place. These confessions were made to the Royal Commissioners and leave no room for doubt or for claims of a frameup.

The Report shows, and Hirsch emphasizes, that Colonel Zabolin's group was but one of several espionage networks. The others include the NKVD (known by the code-name "the Neighbors" within Zabolin's group), the Russian naval service, and the commercial and diplomatic services. The evidence available to the Royal Commission, it should be emphasized, only concerns the military espionage directed by Colonel Zabolin.

Gouzenko stated that each of the above agencies had its own code-clerk and special cryptographic system, kept in complete separation from the others. The existence of Colonel Zabolin's ring was supposed to be unknown even to Ambassador Zarubin, the head of the very establishment where the operations were controlled; and Zabolin was reprimanded by his chief in Moscow for revealing to the Ambassador that one of his (Zabolin's) sources of information was a Canadian. Some of the messages produced by Gouzenko reveal the authorities in Moscow attempting to eliminate the duplication of espionage activities and bring an end to the working at cross-purposes of these rivals.

The evidence collected by the Commission led to legal action against a number of Canadian citizens, most of whom were in positions of high trust. Results of the court action (as of the time when the Report was published) were:

- (1) Eleven persons, five of whom had appeals pending, were convicted of "charges connected with the giving of unauthorized information." The eleven

included Fred Rose, Communist member of Canadian Parliament; an Army captain, a Department of External Affairs (foreign office) code-clerk, a registrar in the office of the United Kingdom's High Commissioner, and Dr. Allan Nunn May, "who handed over information on the production of the atomic bomb and a sample of Uranium 235."

(2) Two persons were still the subject of such charges.

(3) Two persons named in the Report had disappeared.

(4) Six persons were acquitted of such charges. (It is more sinister than ironic that among these suspects was an R.C.A.F. intelligence officer whose duties were supervising security education, advising the Director of Intelligence on security policy, and serving as secretary of the security sub-committee of the Canadian Joint Intelligence.)

The Report specifically states that many of the persons brought to the Commission's attention by the documents produced by Gouzenko were innocent of any knowledge of the designs of the Soviet military attaches.

How Much Did the Russians Get?

The importance of the information obtained by the Soviet group under Zabolin was given close study by the Commission. As a prelude to our summary of its evaluation of this information, it is of interest to cite a Russian statement made in Moscow after discovery of the espionage had been announced in Ottawa:

"Soviet organizations have become aware that in the latter periods of the war certain members of the staff of the Soviet Military Attache in Canada received from Canadian nationals with whom they were acquainted, certain information of a secret character which did not, however, present great interest for the Soviet organizations. It has transpired that this information referred to technical data of which Soviet organizations had no need in view of more advanced technical attainment in the U.S.S.R., the infor-

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mation in question could be found in published works on radio location, etc., and also in the well-known brochure of the American, J.D. Smyth, 'Atomic Energy'."

The Royal Commission pointed out that it was in no position to judge the "more advanced technical attainment in the U.S.S.R.," but it reported that:

"...A very great deal of secret information from a number of Departments and Agencies of Government was regularly finding its way to the Russians."

"...Our investigation has satisfied us that none of the secret information and data which the evidence shows was handed over could, at the time it was handed over, be found in any published works."

"...The information sought was considered of the greatest importance by the Russian espionage leaders, and that alone might be a fair test on the question of value."

Some information obtained in Canada which seemed of little importance might be very valuable when pooled with other data from the United Kingdom and the United States.

Some of the information handed over "is so secret still that it can be referred to only obliquely and with the greatest care."

"The full extent of the information handed over is impossible to say...The bulk of the technical information sought by the espionage leaders related to research developments which would play an important part in the post-war defenses of Canada, the United Kingdom, and the United States."

The extent of the information obtained by the Russians may be summarized from the Report as follows:

Atomic Energy -- "...What he (May) is known to have given, as shown by the documents and by his own written statement, ...would be of considerable help to the Russians in their research work."

May's statement indicated that the information he provided was more than had appeared in print up to the publication of the Report. He turned over samples of Uranium 235 enriched and Uranium 233 which were considered so important that Motinov (Chief Assistant Military Attache) flew to Moscow with them.

Radar -- Many late improvements are still classified Top Secret. "Information of the greatest importance...was communicated to the Russians by agents."

Anti-submarine devices (Asdic) -- Here also, a large part of the information is still Top Secret. "...Much, and very possibly all, of the information available in Canada on this subject has been compromised."

Explosives and Propellants -- Names of formulas and "much of the secret information were given to the Russians ...This information was of great value."

The V.T. Fuse (known as the fuse that "knocked the Japanese Air Forces out of the air") -- One of the agents providing information to the Russians had the wiring diagram of this fuse, still classified Secret.

Economic information -- Secret and Top Secret data turned over to the Russians appear "to have been such as would be designed to facilitate detailed estimates of Canada's post-war economic and military potential"



(Unclassified)

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and some of these data could also be useful in sabotage.

Political information -- Also Secret and Top Secret in many cases, this related to the policies of the United States and United Kingdom as well as Canada. It was obtained from agents in the cipher division of the Canadian Department of External Affairs and in the Registry of the Office of the United Kingdom High Commissioner at Ottawa.

The Commission closed its evaluation with the statement, "The most important thing is the agreement of certain Canadian Communists to work under foreign orders in a conspiracy directed against their own country."

In addition to countering the Russians' effort to belittle the value of the information in question, the Commission pointed to several other peculiarities in the Soviet Government's behavior. One was its action in recalling Colonel Zabolin while at the same time making protestations which minimized the results of espionage activities of his office. Another was Colonel Zabolin's action in leaving Ottawa without notifying the Canadian Government and in sailing from New York in a Soviet vessel which left at night without notifying the harbor-master. Still another was the Soviet Government's accusation that Canada was guilty of an unfriendly act in refusing to hand over Gouzenko (and his family) for trial by the Russians for "stealing embassy funds"(!), and of anti-Soviet propaganda in making the case public.

The Question of Civil Liberties

The Royal Commission, which was obviously not a court of law and had been given sweeping powers by Parliament, nevertheless felt it necessary to explain its use of evidence which would not ordinarily be admitted in court. The Commission's statements on this point were in anticipation of later charges in the press that its proceedings violated civil liberties. Pointing out that the evidence considered by the Commission and that used in the criminal proceedings were not the same,

the Report gives precedents for requiring testimony from the suspects who were called before the Commission and cites certain peculiar situations in this case. It states:

"In deciding on the evidence to be followed we had to consider whether or not we should receive either of the classes of evidence technically designated as hearsay and secondary, a matter solely within our discretion under the terms of (the Order in Council which established the Commission and its inquiry). There were many cogent reasons why we should receive and consider any evidence that could be made available, whether direct, hearsay, or secondary.

"The situation which we have been called upon to investigate was an extraordinary one in many ways. The organization headed by Zabolin was actually working in the Russian Embassy, taking full advantage of the diplomatic privileges enjoyed by the diplomatic members, which it was obviously considered, made assurance from detection doubly sure, and gave a guarantee of additional secrecy. The members of the Embassy staff engaged in the spying activities were undoubtedly committing breaches of the Criminal Law of Canada, and if not immune, could be prosecuted for these breaches. They were engaged in criminal conspiracy with Canadian citizens and we were charged with the responsibility of ascertaining their identity. It was apparent that members of the staff of the Embassy could not be brought before us.

"Other questions of the scope and effect of the immunity rose. For example, while the Official Secrets Act contains provisions for obtaining from telegraph and cable companies, originals and transcripts of telegrams, and that would in an ordinary case be done at once, in this case it would be inadvisable to do it, although many of the documents produced by Gouzenko were originals or transcripts of telegrams, and it was clear that many more had been exchanged. Had these been obtained from the companies a great deal more information would undoubtedly have

-- BOOKS in REVIEW --

come to light, provided of course the ciphered messages could be deciphered."

The Russian Modus Operandi

The Russians, according to Gouzenko, were continually amazed at the extent to which information was made available to them through liaison channels. The Canadian officer responsible for this liaison informed the Royal Commission that he had been surprised at the nature of the requests he received, as they never concerned matters he could not divulge. It was clear to him, after revelation of the espionage, that this must have been because the Russians had other means of getting such information. The Russian military attaches, in turn, were extremely reluctant to make any return for the courtesy shown them and went to some length to avoid meeting possible requests.

One of the methods used to furnish information to the Russians may be cited. One of the Canadian agents had full access to the library of the Canadian National Research Council, which contained the technical papers and studies of that organization, all classified. The spy obtained a copy of the accession-list of the library and gave it to Zabolin. Zabolin checked off items he wanted and the spy borrowed them from the library and left them at the Russian Embassy for overnight microfilming. It has been possible to determine exactly what information the Russians did receive in this way by checking the items borrowed by their agent.

Perhaps the most fascinating feature of the report of the Royal Commission is the light which the persons it interviewed were able to cast on Soviet methods of recruiting and organizing their spy nets, and particularly the confessed motivation of the spies. The basic fact was shown to be the requirement of membership in the Communist Party or sympathy with any of its affiliated organizations. Persons well-known to be Communists were not wanted as agents.

A dossier is always kept on each member of the Communist Party showing what other organizations he belongs to and whether he has access to information of potential interest. "Liberals" are contacted through

Marxist "discussion groups" and similar meetings, and are specifically developed to the point of supplying information, at first on a small scale, later at greater length. While the first items are usually "accepted" as a token of friendship for Russia and it is implied that they are not overly important or that the Russians are not especially anxious to receive them, the agent is soon receiving direct assignments and financial "assistance". (In very few of the Canadian cases was money refused.) The spies are organized in nets in which only one man knows the other members and has contact with the spy-master for passing reports. Cover-names for all members are extensively used in the contacts between members of the net and in the voluminous reports on operations which are sent back to Moscow. In fact, no steps are taken without the approval of the "Director" in Moscow.

The Russians have taken a leaf from the Germans' book in the matter of exploiting Russian and Ukrainian people in foreign countries. The role of the "Volks Deutsches" in forming fifth-columns is well known. According to Gouzenko, the Russian Embassy was compiling a registry of all persons of Ukrainian and White Russian descent in Canada, for use in determining which persons have relatives living in the U.S.S.R., the purpose being to obtain their services for espionage by the threat of reprisals against their relatives in Russia.

Our Intelligence Exchange in Moscow

Maj. Gen. John R. Deane's book "The Strange Alliance" ("the story of our efforts at wartime cooperation with Russia"; reviewed in the May-June issue of ASA Review) provides a couple of interesting footnotes to the two publications on the Canadian spy case. Footnote One is Deane's listings of items of American equipment supplied to the Russians -- details of which their Canadian spies were busily duplicating. Number Two is his recital of our exchange of military intelligence with the Russians, which seems to this reviewer to have been as one-sided as most of our other wartime dealings with the Soviet Union, as described by Deane.

Deane tells (p.238f.) how Colonel Moses

W. Pettigrew, chief of the Japanese order-of-battle section in the Military Intelligence Division of the War Department, was sent to Moscow to carry on the intelligence exchange. The Russians' cooperation was wanted because it was felt that their proximity to Manchuria would enable them to have information on the Kwantung Army, which was comparatively independent of and isolated from the rest of the Japanese forces and which constituted a nearly-blank spot on the otherwise complete order-of-battle picture which we had built up from "information gained from orders and other documents found on Japanese casualties" and from "the interception of Japanese radio communications." After waiting two months for a visa to enter Russia and two more months to get to see the Soviet intelligence experts, and after showing the Russians some very well-arranged and well-documented information to convince them of what they stood to gain from the proposed liaison, Pettigrew succeeded in setting up an exchange which

eventually grew into a daily teletype conference with Washington. This was intended to "make sure that every bit of Japanese intelligence received by us was turned over promptly to the Red Army."

"In turn," says General Deane, "the Russians provided first-hand information of Japanese troop movements and dispositions in Manchuria which they obtained by actual contact and by the infiltration of intelligence agents."

Deane was authorized to arrange cooperation between the OSS and NKVD during the war and did so. This took the form of supplying the heads of the NKVD with full details of the organization and operations of the OSS. Deane gave the Russians documentary proof that the Germans were reading certain Russian codes, and supplied studies made by the Research and Analysis Branch of the OSS as well as intelligence gained by operations in the field.

-- Thomas A. Miller

Scanning the Shelves:

All of the books reviewed in the following thumbnail summaries have been added to the WDGAS-95 Library.

(Unclassified)

The World and Its Problems

MORRELL, SYDNEY. Spheres of Influence. Duell, Sloan and Pearce, 1946. D825

"A report on the current world struggle for power, with special emphasis on areas where the interests of the Big Three have already clashed, Iran, Greece, Yugoslavia, and Italy..."

EHRENBURG, ILYA. European Crossroad. Knopf, 1947. D443

A Soviet journalist in the Balkans; translated from the Russian by Anya Markov.

KEESING, FELIX. South Seas in the Modern World. John Day, 1945. DU29

The author is professor of anthropology at Stanford University, and has a first-hand acquaintance with the Pacific Islands. Excellent bibliography.

MILLSPAUGH, A. C. Americans in Persia. Brookings Institute, 1946. DS315

A complete and scholarly survey of conditions in Persia presenting for the American citizen the question as to whether in applied thinking and practical action we can master our problems in Persia.

MacFADDEN, CLIFFORD H. Atlas of World Affairs. Crowell, 1946. G1038

"As the title suggests, this is a book of maps accompanied by an explanatory text and supplementary drawings, most of which are pictographs..."

TWITCHELL, K. S. Saudi Arabia: with an account of the development of its natural resources. Princeton University, 1947. DS204

Presents the characteristic features of Saudi Arabia, its social and political development, and its position in world economy. Contains a glossary of places, with pronunciation.

MACKAY, R. A. Newfoundland. Oxford University Press, 1946. F1122

A detailed description and analysis of Newfoundland's economy, and review of her strategic position in the North Atlantic.

For Scientists and Lay Scientists

PARKE, NATHAN GRIER. Guide to the Literature of Mathematics and Physics, including related works on engineering and science. McGraw-Hill, 1947. Z6651

A well-integrated bibliography including the principles of reading and study, self-directed education, literature search, and periodicals. Indexed according to author and subject, with a section under "Subject Headings" which combines a definition of each subject with list of related books.

JOHNSON, MELVIN M. Automatic Weapons of the World. Morrow & Company, 1945. U889

Development of automatic weapons outlined and illustrated to include those in use by modern mechanized troops, air forces, and other special service troops. Includes functional problems and design features. Written and revised during World War II.

CLIFFORD, WILLIAM K. The Common Sense of the Exact Sciences. Knopf, 1946. Q158

An attempt to explain modern scientific and mathematical thought to the layman.

Understanding Russia

SOMERVILLE, JOHN. Soviet Philosophy. Philosophical Library, 1946. DK267

"What is the philosophy basic to the Soviet regime? This book tries to give an answer to that question."

DALLIN, DAVID. The Real Soviet Russia. Yale University Press, 1947. DK267

Written from the viewpoint that the political system in Russia must undergo a distinct change before there can be an international peace.

SIMMONS, ERNEST J. USSR; A Concise Handbook. Cornell University Press, 1946. DK40

Background information on contemporary Russian civilization.

DEANE, JOHN R. The Strange Alliance. Viking, 1947. D810

"The story of our efforts at wartime cooperation with Russia."

Tales About the War

OVERSEAS PRESS CLUB OF AMERICA. Deadline Delayed. E. P. Dutton, 1947. PN4871

Stories by reporters which for some reason have been left untold until the present time due to military censorship, political censorship, lack of news space, etc. Brief biography of the reporter at head of each article.

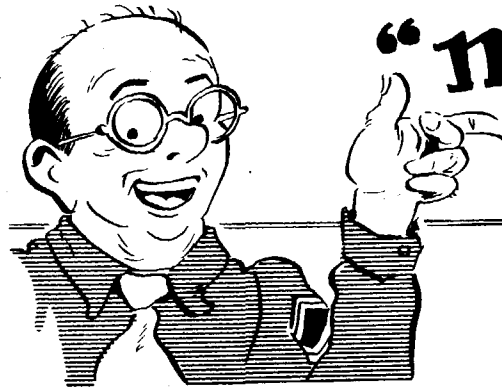
MILLER, FRANCIS T. History of World War II. Winston, 1945. D743

"This is the first history of World War II to present a complete panorama of the greatest struggle in human history, with authentic text, official photographs, maps, records, and documents in a single volume."

GEORGE, WILLIS DeVERE. Surreptitious Entry. Appleton-Century, 1946. D810.S7

"A government agent who has obtained proofs of guilt of such criminals as narcotics smugglers, kidnapers, and enemy agents, describes here some of his methods used on big cases."

-- Ruth Bradway



**"Now here's how our
outfit won the war"**

Reminiscences of a

Not-So-Rugged Individualist

(Unclassified)

ALMOST ALL the decorations and awards for World War II have been given out, and it's beginning to look very much as if I won't receive any. Though I try not to show it, I feel a bit hurt. I was so sure that the Army would show its recognition and appreciation of the fact that I was its most individual, different, unique enlisted man. But so far, not a word -- much less a medal -- from it. Sometimes I almost think the Army doesn't want individualism in its enlisted men. Oh, I know that's a terrible thing to say; but how can I help thoughts like that when a career like the following one goes unrewarded?

After a couple of years as a 4F, I was joined by the Army in February 1943. There was a brief legal ceremony at Fort Myer, a honeymoon at Camp Lee, and then I was sent to Arlington Hall because I had worked there as a civilian. The first time I participated in the Wednesday afternoon drill-period, Captain Bove detected certain flaws in my performance and relegated me to the daily drill class for beginners, made up of guys who hadn't had basic training (and who looked it) and nicknamed "the awkward squad". We were drilled by Lieutenant Vol Janin.

To an anemic little fighter like me, it seemed incredibly cold at A.H. during February and March; but I managed to survive by the device of wearing two suits of winter underwear. Around the end of March

the weather seemed (to Lieutenant Vol Janin) mild enough for the awkward squad to drill without overcoats; so he told us, "Beginning tomorrow, the uniform for this drill class will be field-jackets."

I humored him for a couple of days; but the third day was much too chilly for such nonsense. Though I tried to remain unobtrusive in the back row, it didn't take Vol Janin long to spot -- among all those men in field-jackets -- a little guy in a big overcoat. He ordered me out to the front of the squad and demanded, "Where's your field-jacket?" I replied, "Right here under my overcoat, sir."

Vol Janin is believed to be the youngest officer ever to have a stroke of apoplexy.

One of my chief claims to honors for individualism is that during my two years overseas (in England, actually, but "overseas" sounds more impressive) I time and again frustrated the Army's assembly-line system of giving shots. There was never once a smooth-running line -- not with me in it. The long line of men with bared arms would shuffle steadily forward while the great needles rose and fell with mechanical regularity; then, when it came my turn to receive the serum, the line would jolt to a stop, because I was wearing so much clothing -- especially underwear and sweaters -- that I couldn't quite get it all peeled off my arm in time, even though

Filling Up the T/O

(Restricted)

TO THE TUNE of 100 men a week, ASA's "maverick" recruiting program is paying off.

It was in March that the Agency began its own talent search, thus becoming the only service of the Army to depend on its own recruiting efforts rather than the Army-wide recruiting program. Now, with recruiting offices operating in Boston, New York, Philadelphia, Pittsburgh, Dallas, Chicago, Louisville, New Orleans, and San Francisco, the Agency's weekly intake of new men has reached a round hundred. The program is aimed at procuring qualified enlisted men for three-year periods to fill critical jobs now open in the Agency. It will continue until ASA attains its authorized enlisted strength, which is expected to be reached by the end of 1947.

In the first two months of the drive, New York produced 430 men and Philadelphia 130, with the other cities trailing.

Twenty-six different military occupational specialties are being filled, training in the more highly specialized ones being given at the ASA School, Vint Hill Farms Station. Special emphasis is being placed on filling MOS 799, intercept operator; MOS 801, cryptographic repairman; and MOS

808, cryptanalysis technician -- the three specialties for which there is the greatest need. A sizable number of new recruits have already begun training at Vint Hill.

The recruiting drive is aimed at getting men with above-average AGCT scores. An attempt is made by the recruiting interviewer to judge the enlistee's overall ability, and after he reaches Vint Hill he is then assigned to the specialty for which his ability, background and past military experience best fit him. About forty percent of the new ASA recruits have had previous military service.

In addition to the yield from the direct recruiting program, ASA strength will be augmented by transfers under a provision which allows enlisted men assigned to units in the continental United States to volunteer for training and assignment with this Agency. All three-year Regular Army men who have more than two years to serve may volunteer for training in one of the following specialties: voice interceptor; traffic analyst (radio); intercept operator, fixed-station; cryptographic repairman; cryptographic code-compiler; cryptanalysis technician. Nearly all men will be sent to overseas units upon completion of training at Vint Hill.

I had been frantically undressing ever since the line started moving.

Once when we were waiting in the barracks for our monthly physical, the order came around that we were to strip completely, so that the medical officer could give us a full examination and screen out lepers, etc. We stripped and then waited for him to work his way through the other barracks to ours.

I grew cold waiting so nakedly; so I put a towel on the chilly floor and stood on it; then I took a blanket off my bunk and wrapped myself in it. My bunk was right next to the barracks-entrance; so when the medical officer finally arrived, I had hardly a second's warning. But a second was all I needed: with a graceful, sweeping gesture I whirled the blanket off me in a breathtakingly swift strip-tease, unveiling what the medical officer later

termed "if not the most perfect body I have ever seen, at least the skinniest".

As I look back over my military career with its ups and downs, its hairbreadth escapes from danger or work, the camaraderie of it all, the infirm friendships formed, the eager chats around the campfire or latrine bowl, I think I can best summarize that career by saying that I have tried to be -- not a hero, not a brilliant strategist, but simply a good soldier.

-- Morton F. Seidelman

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READERS ARE INVITED to send in contributions for this department. The only requirement is that your reminiscences pertain to wartime experiences. They may be short or long; classified or unclassified; genuine and convincing, or like Mr. Seidelman's. -- Editor.

WITH ASA HAMS...~~(Restricted)~~**Two Rock Amateurs Come Into the Fold**

TWO ROCK RANCH STATION - Two Rock men interested in amateur radio were given a shot in the arm when the go-ahead signal was given by the commanding officer for the installation of a ham station on the post. As soon as the necessary paper-work is completed and approved by higher headquarters, Two Rock's voice, it is anticipated, will be heard daily on ten-meter phone.

Tec. 4 Donald G. Kruml, W2SQS, formerly of Fort Monmouth, has been putting the

. . . .

finishing touches on a new ten-meter phone transmitter. The tube lineup consists of a 6V6 crystal oscillator operating on forty meters, a 6V6 first-doubler, a 6V6 second-doubler and an 807 final working straight through on ten meters. The modulator consists of four 807's in push-pull parallel operating Class A.

It is planned to install a folded dipole when going on the air and then graduate to

. . . .

W4LOI Hits the Road

W4LOI, the Arlington Hall Radio Club's amateur station, came up with some two-hundred and fifty contacts as its total take in the annual Field Day of the American Radio Relay League.

The Field Day is a free-for-all affair in which U.S. and Canadian hams vie among themselves in operating portable equipment. During the twenty-six hours of the contest the participating stations try to make contact with as many other stations as possible, in as many dis-

tricts of the two countries as their equipment will reach. Logs are sent to the ARRL for compilation of individual station scores.

The BC-610 transmitter used by W4LOI in the contest was equipped with a variable frequency oscillator to enable rapid shifts of frequency with consequent greater number of contacts. Using the forty-meter band for most of its operation, W4LOI was on the air during the entire contest period.



Well gig me Daddy if it isn't our old CPX friend, SCR-399, borrowed on an iron-clad memorandum-receipt from the Intercept Equipment Branch. The scenery -- a spot off Lee Boulevard just beyond Arlington Forest.



Mitford Mathews opens up a new frequency while Capt. M. A. Small kibitzes. The man in the truck is John Beckman and the one who has just been startled by a stray kilocycle is Lt. Col. Charles Hiser.

a three- or four-element rotary beam.

Frequencies to be used are 28516, 28876, 28936 and 29004 kilocycles. The amateur gang at Two Rock will be on the lookout for contacts with other stations in the organization and it is hoped that they can have many interesting QSO's.

W6YII's Antenna Worries

DALY CITY, Calif. - M. Sgt. Ralph P. Rushing (W6YII) is no further along with his Lazy-H antenna. After repeated attempts to shock-excite it to locate the shorting stub, he has come to the conclusion that he has built the first shock-proof Lazy-H in the history of amateur radio.

The good sergeant has just about decided that he'll never work a "G" or "D" with his fifty watts, so he is devoting all of his spare time to building up a quarter-kilowatt job for twenty- and forty-meter CW. By the time this goes to press you hams over in Europe way should be hearing his CQ's at all hours of the night.

-2nd Lt. Robert T. Ellis

A Quarter-Kilowatt at the Hall

ARLINGTON HALL - W4LOI, the Arlington Hall Radio Club station, is on the air with a 250-watt RCA transmitter on twenty-meter phone and CW. This is the first of four rigs the club plans for its permanent facilities; the others are to be a pair of one-kilowatt German transmitters and a U.S.-made outfit using two BC-610's. The German sets are ready to use as soon as cabling for 220-volt three-phase power can be supplied.

Departure of Maj. George M. Sayre, W5ZU, the club's first president, who was discharged in April, called for an election of officers. E.T. Rowland, W4LFY x W3FMH, was chosen president; Frank Mitchell, W5IIB, the club trustee, was renamed chief operator, and M.M. Mathews, W4LFU x W9CKD, was retained as secretary-treasurer.

The club has received a gratifying response to letters it sent to ASA units

overseas. As a result, W4LOI hopes to arrange regular schedules with the 111th, 116th, and 126th Signal Service Companies as well as the 18th Radio Security Section and other interested units, as soon as the necessary transmitting equipment is operating.

The Arlington Hall Radio Club plans to operate all the amateur bands below thirty megacycles. Depending on local activity, experimental work may be carried out on the two- and six-meter bands.

It is the goal of the club to assist radio enthusiasts not already amateurs to obtain their licenses by offering code practice and guidance in theory. Also, if there is a demand for it, the club will sponsor study groups for those interested in obtaining the various commercial licenses. The club aims to serve as a meeting-place for all persons on the post who are interested in radio communication.

- M. M. Mathews

New Voice in ASA Pacific

JOHNSON AIR BASE, Honshu -- An addition to ham stations operated by ASA Pacific men is J2RSM, recently licensed to Sgt. George Sherman, intercept operator in the 1st Radio Squadron, Mobile. Sherman's rig is on the air in the twenty-meter phone and CW band.

A Question for Our Readers:

Do you get enough copies of the Review?

The number received by your unit represents our guess as to how many it will take to go around. Since we can't know your local situation in every case, it's possible that we're not sending you enough to permit effective distribution. And what we call effective distribution is getting the Review to every person entitled to read it.

So if your unit -- whether at Arlington Hall or elsewhere -- was sent too few (or too many) copies of this issue, will you please let us know? Register your beef with the Editor himself, care of WDGAS-23, Army Security Agency, The Pentagon, Washington 25, D.C.

The Biliteral Cipher of Sir Francis Bacon

(Unclassified)

AS THE DESCRIPTION of the Masonic (or Pig-Pen) Cipher in the last issue showed, cryptographic writing can be done in symbols other than letters and figures. Characters such as musical notes on a scale, special type, spacings, words of varying lengths, or other media might be used alone or in combination to form a substitution arrangement for letters to be concealed.

In the sixteenth century, Sir Francis Bacon originated a cipher which used two contrasting elements such as capital letters and small letters, heavy shading and light shading, etc. Five elements in a single group (as three capital letters, one small letter and one capital letter in series) represented one particular letter. With a prepared alphabet table showing the various permutations of two contrasting elements, it would be possible for two parties to correspond with some deception. For instance, could not bon-bons and chocolate drops be so arranged in a box of candy to spell out a message?

Below is an alphabet arranged so that the letters a and b are the two contrasting elements. In fact, it is the classic Baconian alphabet. Notice that I and J have the same symbols; also U and V. This is due to the fact that the type used in those times used the letters of these pairs interchangeably.

A	aaaaa	N	abbaa
B	aaaab	O	abbab
C	aaaba	P	abbba
D	aaabb	Q	abbbb
E	aabaa	R	baaaa
F	aabab	S	baaab
G	aabba	T	baaba
H	aabbb	UV	baabb
IJ	abaaa	W	babaa
K	abaab	X	babab
L	ababa	Y	babba
M	ababb	Z	babbb

STRIKE NOW would be enciphered as:

baaab baaba baaaa abaaa abaab
aabaa abbaa abbab babaa

For practice, decipher the following:

**HOLD OFF UNTIL YOU HEAR
FROM ME AGAIN. WE
MAY COMPROMISE.**

Any encipherment by this method using such contrasts as letters a and b, or capital and small letters, would be immediately apparent. The solution should follow without great difficulty.

Here is a message enciphered with the Baconian alphabet as given above. To solve it, first determine the contrasting elements:

25792 40228 72840 64886
61376 24179 16622 04048
90807 62720 38552 83349
38871 72848 72846 84722
84724 09306 80698 67804
87318 42917 26302 12468
43877 66306 49980 30870
98627 00101 07101 32848
90201 08180 24698 18873
12266 89000 70838 32112

.. . . .

Solutions to the Caesar Cipher cryptograms in the May-June issue:

Problem 1 --

GREATER CAUTION MUST BE
EXERCISED X

Problem 2 --

REQUEST SEC SIG BAT REPORT
NOT LATER THAN 0900 FIRST
APRIL

-- Norman Dillinger

The Confidential classification of ASA Review means --

- It cannot be taken off your military post.
- It must be locked up when the room where it is kept is unoccupied.
- Its whereabouts must be known at all times by the heads of units to which copies are issued.
- Its contents come within the meaning of the Espionage Act and may no more be discussed among unauthorized persons than may the details of your own job.

ASA *Review*

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Field Installations

Headquarters, ASA Europe.....Maj. Daniel Vol Janin
Headquarters, ASA Europe, Hq. Det. Herzo Base.....2nd Lt. John E. Martin
2nd Radio Squadron Mobile.....2nd Lt. James L. Stilley
114th Signal Service Company.....2nd Lt. Robert R. Donner
116th Signal Service Company.....1st Lt. Guy C. Severance
6th Det., Second Signal Service Battalion.....Capt. Walter J. Brown
Headquarters, ASA Pacific.....Capt. Emil F. Ohm
1st Radio Squadron Mobile.....Capt. Wharton McGreer
111th Signal Service Company.....Capt. James Openshaw
126th Signal Service Company.....Capt. Willard Tiffany
1st Operating Platoon, 126th Signal Service Company.....1st Lt. R. B. Mosser
Vint Hill Farms Station.....M. Sgt. Carl J. Bierbaum
Two Rock Ranch Station.....WOJG Robert L. Fulton
Monitor Station 7.....T. Sgt. Lloyd G. W. Bunstine
Headquarters, 136th Radio Security Detachment.....Capt. Emanuel P. Peters
2nd Radio Security Section.....1st Lt. Perry A. Lamb
Detachment 2nd Radio Security Section.....Capt. Clarence L. Barnhart
3rd Radio Security Section.....Capt. James L. Warbington
6th Radio Security Section.....Capt. Berthier S. McClure
15th Radio Security Section.....Capt. Edward F. Greenough
17th Radio Security Section.....1st Lt. John W. Hoover
18th Radio Security Section.....Capt. Oakley L. Stockton
60th Signal Service Company.....1st Lt. Jack W. White



I'm just a youngster, but I like to get around.

And I don't like it inside the file-cabinets you have here.

I'm not supposed to stay in the file-cabinets. During working hours I'm supposed to be left around on tables and desks so that people can spend their coffee breaks and their other odd minutes with me.

I won't take up very much of anybody's time — just an hour or so in two months.

I want to meet some of those glamorous CAF's and Wacs I see around here.

So please, Doc,

LET ME GET AROUND!