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F. W. Hilles

# The Origin and Development of 3-US

# A Brief History Prepared Shortly After World War II

#### Introduction

As its name implies, 3-US was the American section in Hut 3; it was primarily concerned with providing liaison between the intelligence agencies at Bletchley Park and G-2 Washington. But it was much more than that.

The unit responsible to G-2 Washington for the handling of Ultra<sup>2</sup> in the European Theater was the Military Intelligence Division of the War Department, London (MID, WD, London). But since all intelligence derived from Ultra necessarily passed through Hut 3, the controlling part of MID, WD, London, naturally found its home in the Hut.

Much that went on in 3-US was not properly the business of Hut 3. Such questions, for example, as which individuals at American commands should be entitled to have access to Ultra, or what action should be taken on violations of security regulations at American commands—questions which on the British side were handled at Broadway Buildings—were normally handled in 3-US. As far as possible in the pages which follow, such matters receive slight, if any, mention. An attempt is made to divorce the wider functions of MID, WD, London, from the purely Hut 3 commitment of 3-US.

In general, the main function of 3-US was to see that Ultra was properly disseminated to the various American headquarters authorized to receive it. In this connection the chief task of the section was to select and edit CX/MSS<sup>3</sup> for transmission to G-2 Washington.

The "Huts" at Bletchley Park were buildings where various cryptologic functions were performed. Hut 3, for example, was responsible mainly for the reporting—or "end product"—function, of Ultra and other communications intelligence information.

<sup>2</sup> Ultra was the common U.K.-U.S. coverterm for high-level Comint, or Special Intelligence.

<sup>3</sup> The main series of Special Intelligence (or Ultra) providing information on the German Army and Air Force was the CX/FJ/JQ/MSS series of decrypts from German Army and Air Force Enigma traffic. The series was labeled CX/FJ until May 1940, CX/JQ from May 1940 to June 1941, and then it became CX/MSS.

As the various purely American headquarters under Supreme Headquarters, Allied Expeditionary Force (SHAEF) were set up, 3-US was charged with the responsibility of supplying properly trained intelligence officers to each U.S. Army and Tactical Air Command as well as to Army Groups and Air Forces. Inevitably this made 3-US the intermediary between American headquarters and Hut 3, and 3-US regularly long-stopped other sections in reviewing the routing of signals to commands.

In addition to serving as liaison between the British and Americans, 3-US was responsible for disseminating to all Allied headquarters information of military value gleaned from diplomatic sources. In this way 3-US, like the other sections of the Hut, played a part in drafting, for field commands, signals based on Ultra.

Detailed descriptions of the service to Washington and the handling of diplomatic traffic for the field will be found in the sections that follow. But first an inspection of the origin and growth of 3-US is in order.

# Biography

Genesis (April - September 1943)

The pre-natal history of 3-US must receive a disproportionate amount of space in this account. Without a knowledge of the conferences and correspondence between G-2 Washington and GC & CS<sup>4</sup> during the six months prior to October 1943, 3-US as a section would be puzzling. Why the section came into being and what it was eventually to be is made clear from examining the records of this period.

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<sup>&</sup>lt;sup>4</sup>Government Code and Cypher School, the official title of the British Comint organization at Bletchley Park.

3-US grew out of the original G-2 mission to GC & CS, which was composed of Col. Alfred McCormack and Lt. Col. Telford Taylor, representing G-2, and Mr. William F. Friedman, technical assistant and representative of Arlington Hall (Army's Signal Security Agency). This trio arrived in England on 25 April 1943. At that time difficult and protracted negotiations were under way between G-2 and GC & CS with respect to the part, if any, which G-2 and Arlington Hall should play in the production and exploitation of CX/MSS and similar material. GC & CS originally, for security and other reasons, wished to maintain the Bletchley Park monopoly; thereas, G-2 and Arlington Hall wished to set up a separate establishment to produce and exploit CX/MSS in Washington, presumably as part of Arlington Hall and G-2. The first task of the G-2 mission, therefore, was to discover whether there was any necessity for a separate American CX/MSS center, or whether more satisfactory results could be achieved by combining with the GC & CS personnel at Bletchley

At the same time that the G-2 mission was studying this question at Bletchley, negotiations were going on in Washington between Commander Travis and Col. Carter Clarke, culminating in a written agreement dated 17 May. In general, the agreement provided for complete interchange between Britain and the United States of all information concerning signals intelligence. The U.S. assumed as its main responsibility the reading of Japanese, the British the reading of German and Italian military and air codes and ciphers. Concerning the as yet unborn 3-US, the agreement specified:

- (1) U.S. liaison officers will be appointed at GC & CS to examine messages and summaries and select those desired for transmittal to Washington for G-2 or the Theater Commanders. All decoded material will be made available to those officers. Decodes giving information regarding Order of Battle will be handled as at present, i.e., through U.S. liaison officers in War Office and Air Ministry, respectively.
- (2) Decodes or summaries to be passed to Washington through existing British channels.
- (3) Special Intelligence from this source will be passed to Commanders-in-Chief in the field through the special British units provided for this purpose. The officer in command of these units will have direct access to the Commander-in-Chief and advise as necessary on the security aspect of handling and using this intelligence. Where an American officer is Commander-in-Chief, an American officer, properly trained and indoctrinated at Bletchley Park, will be attached to the unit to advise and act as liaison officer to overcome difficulties that may arise in regard to differences in language.

Early in June the G-2 mission was dissolved. Col. McCormack and Mr. Friedman returned to America, leaving Lt. Col. Taylor as G-2's representative on Ultra matters in this theater. Ultra matters included not only the productions of Bletchley Park but of related agencies, notably Berkeley Street and Ryder Street.

Throughout June and July nothing was done to implement the G-2/GC & CS agreement. Col. Taylor confined himself almost exclusively to diplomatic traffic, and while awaiting the arrival of assistants devoted little or no time to Hut 3 and its products. Late in July, however, he shifted the center of his activities to Bletchley Park, and for about a month he underwent schooling in the mysteries of the Park in general and Hut 3 in particular. Meanwhile, he continued to work on Ultra other than CX/MSS, and throughout August transmitted by cable to Washington a few of the more important items in ISK aand ISOS and related series." After being thus engaged for almost a month he felt ready to begin a regular service. On 23 August he was joined by Major McKee; on 27 August the first CX/MSS was signalled to Washington, this initial message revealing that Army Group B under Rommel was taking over command of the German forces in upper Italy.

No sooner had the service started than trouble arose. As has been noted the agreement made in May had, rather curiously, provided that intelligence relating to order of battle would continue to be transmitted to G-2 by the War Office and Air Ministry. In fact, however, the ministries transmitted little order-of-battle intelligence derived from special intelligence, and that which was sent was in a form quite inadequate for the needs of the German Order of Battle Section in G-2. Furthermore, no arrangements had been made to handle the large volume of traffic to Washington; there were serious delays in transmittal and perceptible irritation on both sides. Various officers at the War Office took a rather cool view of the whole proceedings.

At the end of August, just as the service was starting, it became known that General Strong, the Assistant Chief of Staff (A.C. of S.), G-2, War Department, was on his way to visit England and Bletchley Park. Col. Taylor was informed that, pending further discussion with General Strong, he was to send no more material to Washington. Col. Taylor pointed out that this would cast a small cloud on General Strong's arrival and urgently requested that he continue the service so that the General would not appear to be confronted with a fait accompli when he arrived. This was agreed to, and a few more items were transmitted until several days after General Strong's arrival. Nothing further was sent until the end of the month.

The matter came to a head at a conference early in September, attended by General Menzies, General Strong, Commander Travis, Mr. De Grey, Group

<sup>&</sup>lt;sup>5</sup>ISK—decrypts of *Abwehr* (German Secret Service) Enigma traffic.

ISOS—decrypts of Abwebr traffic enciphered by hand.

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The Manor House at Bletchley Park

Captain Jones and Col. Taylor. At this meeting it was agreed that Col. Taylor should select and transmit CX/MSS material to Washington, but that his selection should be conservative and not include "low order" order-of-battle information. The appropriate ministry was to be informed of every item sent. It was further agreed that ISK and ISOS material of a purely political nature was to be transmitted by Major Calfee from Ryder Street, and similar material of a military nature was to be sent by Col. Taylor from Bletchley Park.

The accord reached was short-lived. Soon after the meeting General Strong reversed the previous decision and agreed with General Menzies that no CX/MSS should be sent from Bletchley Park.

There followed numerous consultations. While these were being held General Strong returned to Washington, conferred with Col. Clarke, decided that he had made a mistake, and on 15 September directed Col. Taylor to try to reinstate the previous arrangements.

The position taken by the Americans may be summed up in two points which were stressed at the time: (1) Intelligence of more than momentary significance, which is important enough to send to commands abroad, is also important enough to send to responsible staff officers in Washington; further, what is important enough for ministries from the long-range standpoint is equally important for the intelligence organization in the Military Intelligence Service (MIS) of the War Department in Washington. (2) The selection of the material to be passed to Washington must be done not at ministries by British personnel but at Bletchley Park by Americans who are familiar with the requirements of G-2.

A week or so elapsed during which frequent parleys were held. Eventually the matter was favorably concluded at a conference attended by General Menzies, General Davidson, Group Captain Jones and Col. Taylor. In brief, the agreement, dated 25 September, made Col. Taylor responsible for the selection of what was to be passed to Washington; he was also to keep the War Office and the Air Ministry informed of items passed. The appropriate ministry was responsible for any notes or comments other than the purely factual ones which were made on the texts selected for transmission. Two days later the service was resumed, and 3-US, as yet unnamed, may be said to have entered the world.

Infancy (September 1943-January 1944)

At the outset, as might be expected, the volume of traffic transmitted was low. It was the desire of the

ministries that Col. Taylor's selections be conservative, since communications facilities for handling large volumes of traffic had not yet been developed. Also, the small staff at Bletchley Park, a staff of two, had much to learn, and on the receiving end much had to be done to assemble and train personnel to process the incoming material. Gradually, as the staff in Washington gained experience, the principles for selection of material broadened. But it was soon evident that Cols. Taylor and McKee needed reinforcements. The first of these, Captain Slusser, arrived in November, and toward the end of December numerous others began to assemble.

This phase was, for the most part, one of experimentation and planning for the future. Problem areas had to be explored and resolved, including (1) the form which the Washington cables were to take, (2) the route by which the material was to be sent, and (3) the establishment of techniques by which the nature of the material could be easily distinguished. By the end of the year, however, these problems had been resolved and the machinery was functioning smoothly.

Meanwhile, in Europe and America intensive searches were conducted to locate qualified personnel. Plans for servicing American commands, plans for absorbing Americans in the Watch, and plans for improving the flow of material to Washington were the problems of the moment.

And by January, when a large number of inexperienced Americans were first groping down the dark corridors of Hut 3, Col. Taylor's section was considered sizable enough and different enough to receive its name. 3-US first appeared on the distribution list of Hut 3 periodicals in January, when the section entered upon a new phase.

# Adolescence (January-June 1944)

At the beginning of 1944 the interests of 3-US were three-fold:

- (1) the service to Washington had to be continued and developed.
- (2) American officers who were to take their place alongside the British in the Watch as air or military advisors had to be trained, and
- (3) a large number of others who were to be assigned to those American headquarters which were to receive regular service from Hut 3 had to be indoctrinated. Seldom have so many absorbed so much in so little time.

Little need be said of the first matter. The staff of 3-US responsible for feeding G-2 quickly grew from three to seven persons, although only five worked in operations, since both Cols. Taylor and McKee devoted almost all their time to establishing liaison with the various potential customers in the field. The only noteworthy change in the service to Washington was a steady extension, notably in items pertaining to the German Air Force and in non-Hut 3 material like Police and Abwehr.

Equally, little need be said here of the training of advisors. The individuals had been picked by G-2, and they were admirably trained by the veterans of Hut 3. Their sole connection with 3-US was administrative, although they unconsciously played a role in the development of the section by providing close liaison with other elements.

But others who frequented Hut 3 prior to receiving a field assignment presented a different problem. Again, the training they received was entirely due to the cooperation of specialists in Hut 3, but the program worked out for them, and the assignments they eventually received were the concern of 3-US.

As early as October 1943 Col. Taylor was involved in the questions relating to the service to be afforded American commands. In mid-December negotiations were under way to secure some sort of Ultra service to the then American Theater Commander, General Devers, and his chief intelligence officer, General Sibert. In mid-January Col. Taylor took part in discussions to begin service to COSSAC<sup>6</sup> and its subordinate commands. In particular he was instrumental in the decision to service First U.S. Army Group (FUSAG, later 12th Army Group).

FUSAG was still in a state of activation and was not ready for the normal Hut 3 service, but beginning late in January and continuing for almost three months the Group received, once a day, a summary of Ultra messages which threw light on the situation in France and the Low Countries. That summary was a commitment of 3-US. In addition to this, 3-US was called upon to perform various minor tasks of a research nature with a view to assisting the not-yet operational intelligence section of FUSAG.

Meanwhile, those receiving training as prospective recipients at a command were learning the conventions, methods, and capabilities of Hut 3; they also were touring operational commands in the Mediterranean to see how Ultra was handled in the field. Their assignment, outlined in the agreement of 17 May 1943, was to insure that each purely American command had an officer who was thoroughly familiar with Hut 3, with British military phraseology, and with the necessity for secure handling of the material. Their very real contribution to the growth of 3-US was in bringing home to the section the tactical value of Ultra.

Chief of Staff to the Supreme Allied Commander.

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During these months the section was suffering from growing pains, and was painfully learning how much there was to know. Thanks to the initiative of Col. Taylor and the policy of Hut-3, 3-US participated in various communal activities. It was represented on the Western Front Committee; it was represented on the Black Sea and Aegean Study Groups. The section regularly contributed a member at weekly meetings of SHAEF preparatory to the June invasion. It also furnished officers who occasionally journeyed to London to brief the G-2 of FUSAG.

Finally, toward the end of this period 3-US undertook to service commands with military information derived from diplomatic traffic. Col. Taylor had noticed that such information, then disseminated by the ministries, was reaching the field sporadically and belatedly. He proposed that this be remedied by a regular service, and that, by virtue of Arlington Hall's contribution in this field and his section's liaison with Berkeley Street, the new service be undertaken by 3-US. In this way began the Bay series, described in detail later in this history. The series was still young when Overlord<sup>8</sup> was launched, and by this time 3-US may be said to have come of age.

# Young Manhood (June 1944-January 1945)

The previous phase had been one of rapid growth, of preparation for the future. The months immediately following D-Day were marked by slight readjustments, but the character of the section had been formed.

The new phase opened with an attempt to somewhat formalize the section. Col. Taylor and his deputy Col. McKee had responsibilities which extended far beyond the fences of Bletchley Park. Within 3-US a Duty Officer was appointed. In addition, there were two officers producing the Bay series, two officers processing military information for G-2, another two similarly employed on the air side, and two charming and competent secretaries who, besides maintaining morale, did the stenographic work, the typing and a host of routine tasks.

At the beginning of this phase, service to Washington was considerably improved by shipping bag items by air rather than by water. Beginning 12 June those items not considered cable-worthy were sent by plane thrice weekly, which resulted not only in a speedier but a more regular delivery of material to G-2.

At the same time another attempt to speed up service was made. During most of its existence 3-US worked on a day shift only, from 0900 to 1800. Immediately after

Overlord, partly because of the great increase in traffic, partly because the situation was thought crucial, but chiefly in an effort to get cables to G-2 sooner, the section operated on the evening shift as well. The experiment was short-lived. After a few weeks it was abandoned, since it was found that the more urgent material did not reach the section until after midnight, and, because of a difference between Washington and London time, such messages could reach General Bissell (A.C. of S., G-2) early in the day if processed at Bletchley Park in the morning.

The new phase in the section's history was further marked by the fact that there was no one then training to become a recipient in the field. By mid-June the section had turned out fourteen "specialists" who were assigned to field units.

At this time the section also began supplementing services to U.S. Strategic Air Forces headquarters (USSTAF, 8th and 15th Air Forces), preparing summaries which provided a background of ground information, now required because of their new, tactical role. After a short time the summaries became unnecessary since the commands soon acquired the ability to digest the regular Hut 3 service.

Originally, the messages prepared for Washington were submitted to Lt. Cmdr. Dudley-Smith's Section, which reviewed them and prepared them for the codists. The arrangement had been made partly, it may be, for monitoring, but also for guidance. For months before Overlord the system had seemed unnecessary. Finally, at the beginning of July, 3-US itself prepared its messages for transmission.

A further step in maturing was taken in September, when it was ruled that all CX/MSS was to be sent to Washington by bag, the cable service continuing for those items which were timely. (The details will be found in the next section.)

Little more need be said of this phase. The tie between 3-US and the field was strengthened by frequent visits to the commands by Cols. Taylor and McKee, by brief visits to the field of Hut 3 personnel, and by the periodic return to Bletchley Park of recipients. The manpower problem was always present; either the section seemed overstaffed or undermanned. (Such matters are also discussed later.) But, in general, it may be said that the section functioned along the lines laid out, and not until mid-January were there signs of any significant change.

# Maturity (February-May 1945)

Something of a revolution in the life of the section was the change which was actually made in the middle of February but which was being planned during the second

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Supreme Headquarters, Allied Expeditionary Force.

Allied cross-Channel invasion of northwest Europe, June 1944.



The grounds at Bletchley Park on which the huts are located

half of January. An account of the new departure will be found in the following section. In brief, the work of the section was halved overnight when Washington began receiving signals direct from the Watch. Thereafter the function of 3-US was, as far as its commitment to G-2, one of reviewing what the Watch had sent, and of supplementing it. At once it became obvious that the staff could be greatly lessened.

A few months later a further step in reducing the section was taken. As it turned out, the new step never had a chance of developing. In theory the plan was good, whether it would have worked out in practice is of course not known. The plan was to do away entirely with officers whose sole function had been servicing Washington. In their stead an air and a military advisor were to spend a week in the section on a rotating system. It was thought this would more closely tie the section in with other sections and would give G-2 the benefit of the greater

knowledge and experience of the advisors. What happened was that, owing to illness of advisors and a delay in the orders of the then redundant personnel, only a half-hearted attempt was made to implement the scheme. Before it could be tested the Wahrmacht came to terms, and 3-US, along with other sections in the Hut, turned to fresh fields and new pastures.

# The Washington Commitment

#### Principles of Selection

First and last the primary commitment of 3-US was to select and edit military and air items from CX/MSS for transmission to Washington. But G-2 had, during the protracted discussions of September 1943, requested and secured permission to receive "all desired intelligence." Precisely what was to be selected was left to the staff of 3-US. Now and then a polite or indignant signal would be received from G-2 indicating what should or should not

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have been sent, and on various occasions 3-US queried G-2 as to their needs. But little formal guidance was given from Washington. The staff was held responsible for passing all "important" information. Inevitably there were the border-line cases, and it is to be feared that the patient scholar, if he compared carefully the output of Hut 3 with what was sent to G-2, would detect certain inconsistencies in the selection.

Curiously enough the principles of selection were never formalized and reduced to paper. A green staff at Bletchley Park selected material for a green staff in Washington. The unbelievable patience, interest, and wisdom of key people in the Hut served to guide 3-US. Fortunately, too, the staff of 3-US threw itself with enthusiasm into the work, and as time went on certain unwritten principles evolved out of almost daily and sometimes rather pedantic discussions as to whether a given item was or was not of value to G-2.

In the beginning the selection was heavily weighted on the ground side, largely because of the background of the early members of the section. In mid-January 1944 Lt. Kellogg, a trained air intelligence officer, joined the section, and after he had become operational, which was in the short period of a month, the air content of messages more than held its own against the ground.

Naval messages caused a certain amount of trouble. The original agreement of May 1943 had limited 3-US to air and military intelligence. But many messages which were predominantly naval had a definite bearing on air or ground matters. These were normally transmitted, although in theory it was the American Navy, through the Admiralty, which passed such information to the few high-ranking leaders in Washington who were entitled to have access to Ultra.

The matter came to a head in April 1944. The particular item, pertaining to German troubles in the Crimea, was admittedly naval in origin but was interservice in application. Because of its significance it was taken, at the request of the Prime Minister, direct to the President. Naval authorities then raised the question as to whether 3-US had the right to pass such information. Conferences ensued, and documents were written, which are the only record in writing as to the principles of selection then in force. It should be added that no further objections on the part of the Navy were raised.

Washington's interest was naturally strategic rather than tactical. Hence, as a matter of course they were sent major order-of-battle items, messages throwing light on future operations, on manpower, on policy. But even from the start they also received the more significant so-called tactical items.

Supplementing what was selected from CX/MSS, 3-US also culled from Police Abwebr, diplomatic and low-grade military and air sources items which were of military significance.

As G-2 and 3-US grew, the volume tended to rise. Eventually, in the spring of 1944, when the primary concern of G-2 was Overlord, some of the material previously cabled was sent by bag, and all items relating to the Western Front were cabled. And immediately prior to Overlord, when the volume jumped to unprecedented heights, 3-US was forced to restrict itself, as far as cables were concerned, to the major items dealing with France and Italy.

By the summer of 1944 Washington was able to cope with all that 3. US was sending, and the selection of items to go by bag had increased to such a point that only a small proportion of teleprints and reports were not being passed. At the beginning of September, almost a year after the Washington service had started, 3-US proposed that G-2 be put on a par with the ministries in London by receiving a copy of all teleprints and reports. The matter was taken up with Group Captain Jones, who secured the necessary permission from British authorities, and beginning on 9 September the selection of items for the bag automatically ceased, since all were sent. At the same time, the almost intolerable burden of reporting each transmitted item to the ministries was dispensed with, since the ministries knew that Washington was getting the total output.

For the next four months the task of selecting items was restricted to what should go by cable, in what form it should go, and what priority it should receive. Then, in February, a major change developed which further affected the principles of selection. In the interests of speed and economy it was decided that, with certain exceptions, signals originating in the Watch should be passed directly to Washington. Thereafter, 3-US restricted itself to reviewing what had been signalled, augmenting the messages where necessary, and selecting from reports, ROB's, etc., items which were thought important enough to be cabled. Thus, during the final three months of the section's life, the task of selection dwindled.

In addition to selecting raw material from the normal output of Hut 3 and related agencies, 3-US was also responsible for passing to G-2 significant appreciations or comments by ministries or commands. From the beginning 3-US was allowed to scan all AIX's and

<sup>&</sup>lt;sup>9</sup>Reports based on decrypts of German signals relating to Russian order of battle.

MIX's 10 and forward to G-2 those which might be of use in Washington. Soon the service was widened. A Hut 3 Directive of 8 December 1943 announced that "Brigadier Strong and Air Commodore Woolley have been granted facilities to repeat certain Ultra appreciations (sent to War Office and/or Air Ministry) to Washington, to fulfill an obligation which they have through General Eisenhower to Combined Chiefs of Staff there. Normally replies to such signals will also be repeated to Washington in order to maintain a balanced picture there." The surprised historian reads in a note of the same date: "Such signals will be cleared to Washington by bag or by CXG signal at the discretion of Lt. Col. Taylor's section. If Lt. Col. Taylor's Duty Officer is not on the premises, Signals Officer will refer to Hut 3 D.O. for decision." What is surprising is the reference to Lt. Col. Taylor's Duty Officer at this date, when Taylor's section consisted of himself, Lt. Col. McKee, and Capt. Slusser.

Mention should be made of the handling of items in the "C" series. What was passed to the Director of Military Intelligence (DMI), and his equivalent at the other ministries, it was early agreed, should not be withheld from the G-2. But every item in this series which was passed to Washington was first cleared with Group Captain Jones. By no means all items were sent. Perhaps half were considered of sufficient importance to be selected. These originally went addressed "Eyes Only," followed by the names of the three recipients: the Chief of Staff (General Marshall), G-2 (General Strong, later General Bissell), and the Special Security Officer (General Clarke). Beginning late in August 1944 such items were passed in what was known as the MCC series, restricted to the three officers named above and the Director of Intelligence in MIS (Col. McCormack).

#### Procedure

A few words as to the minutiae of the Washington service. The task of the editors in 3-US was to go through the output of Hut 3 and cull from it items that should be sent. These items were divided into ground or air and each of these two (until the system was altered in September 1944) was further separated into four groups, depending upon the speed with which they should reach G-2. It was estimated that a cable sent from Bletchley Park in the morning would reach Washington (1) the same morning if given the priority "immediate," (2) the

The messages thus separated into groups were arranged according to subject matter and chronology. The editor then carefully examined the teleprint and accompanying signal, if any. Often the signal was deemed sufficient, but messages, like some of those signed Hitler or Rommel or Kesselring, were generally sent verbatim. At times the signal would be expanded, or the teleprint curtailed. To a limited extent the edited message would be annotated-more so on the air than on the ground side—but the annotations, as far as the historian is aware, were always factual with the exception of comments agreed upon with ministries and already passed to commands. In other words, the machinery whereby 3-US could write comments for Washington and have them agreed upon by the War Office or Air Ministry was seldom if ever used.

Once the material had been selected and edited the sole remaining job was to arrange it for transmission. In the very early days the various items followed one another without a break. On 6 September 1943 Col. O'Connor, whose office performed liaison in Washington, cabled "Helpful to us for reference if Taylor would number paragraphs." Thereafter, each numbered paragraph was a new item. Each was prefixed by the digraph "TP" or "JP" to indicate its nature, but after a few months the prefix became "Tare" or "Jig," a convention which continued to the end, long after JP's became KV's, VL's, HP's, KO's.

At first little attention was paid to the length of a cable. Col. O'Connor pointed out on 30 October 1943 that a given cable "was sixteen pages. Could you manage split up into shorter messages for convenience of ourselves and G-2." And in mid-January 1944 he cabled "Should be really grateful if you could arrange to split TIR's into shorter messages of maximum 500 words. It would save us much time and trouble and facilitate division of labor in our very small office." From then on the Washington cables were normally 400 to 500 words, divided into numbered paragraphs, and composed of related messages arranged as far as possible to tell a story.

(Continued next issue)

Lt. Col. F. W. Hilles, USA, directed a unit of 3-US at Bletchley Park under Col. Taylor, and, with the assistance of the chiefs of other units, compiled this brief history in 1945.

same day if given the priority "important," and (3) the next day if sent without priority. The fourth group, sent by bag, took approximately a fortnight to reach its destination until, during the final year, an air service was inaugurated, which cut the time by more than half.

<sup>&</sup>lt;sup>10</sup>AIX—Drafts of messages from Air Ministry based on Special Intelligence, for dispatch to commands as AWL's. (AWL's were messages from service ministries to commands, based on Special Intelligence.)

MIX -- Drafts of messages from War Office based on Special Intelligence, for dispatch to commands as AWL's.