

The Battle of Crete 1941: The Poverty of Ultra

It should not be difficult to describe the battle of Crete. It did not last long, beginning with the German invasion on 20 May 1941, after some aerial attacks, and ending on the night of 31 May-1 June, when the evacuation of most of the Allied troops was completed. Not many troops were involved compared to many other World War II conflicts: 42,000 on the Allied side, and 22,000 on the German side. The Germans commanded the air, and the Allies the sea. While there were five separate battle sites, only one turned out to be crucial - at Maleme aerodrome, at the western end of the island, where German reinforcements landed on 21 and 22 May after the New Zealand troops holding a strategic hill nearby withdrew, under the misapprehension that they had been so weakened as to be unable to withstand an enemy attack. In a striking description, Stewart (242 - see below for references) wrote of the 'strange and fateful quadrille' of the four New Zealand units involved, as 'each, unknown to the other, advanced and retired upon the empty hilltop'. The Germans then advanced eastwards, joining up with other groups which had landed on 20 May but which had until then been contained by the Allied forces.

'The battle of Crete', the New Zealand historian, D M Davin (vii) wrote in 1953, 'was, and I fear will remain, one of the most baffling and controversial of the late war'. More than 60 years later, his judgement remains accurate.

What has complicated and indeed bedevilled discussion is the role played before and during the battle by the Ultra intelligence material, derived from intercepts of German Air Force messages and made available to the General Officer Commanding the Allied forces on Crete, General Freyberg. Drawing on some rarely-considered sources (see Appendix A) and some old material newly assembled (see Appendix B) this paper:

- suggests that the amount of valuable material intercepted and turned into Ultra material was much less than previously estimated; that not all of what was intercepted was turned into Ultra material; that what was turned into Ultra material was not always sent to Freyberg; and that the messages sent to Freyberg did not always reach him;
- questions the value of the material, to the extent of asking what the Ultra material really contributed, and whether the battle would have been fought any differently in the absence of the material;
- notes that, as well as the Ultra material, Freyberg also had available to him material from an Australian intercept unit on the island, which gathered lower level signals intelligence, some of it in plain language; but this did not seem to have been properly assessed at the time;
- suggests that on the evidence of the battle of Crete, the 'rules' governing the distribution and use of the Ultra material were irrational and incoherent, at least at that time;
- revisits two aspects of the battle.

Some formal matters might be disposed of here. Footnotes are eschewed. An annotated bibliography is at Appendix C and there are references in the text by author, with page numbers, to the publications listed there. Only Ralph Bennett has more than one book on the list, so his titles have been abbreviated in the text. Appendix A contains a description of the decrypts of the raw material intercepted and then turned into Ultra messages - a source only once before used, to my knowledge. At Appendix B there is a list of the relevant Ultra

messages - all imaged - sent to Cairo or Crete before and during the period of the battle, together with some notes on the whereabouts of the material on the battle of Crete in the National Archives.

It might be noted here that the Germans relied heavily on radio, thus appearing to provide the Allies with a great advantage because of their ability to intercept and decrypt German radio messages: 'German headquarters in Greece could only communicate with the takeoff airfields and with the landing parties by using radio...(Bennett, UMS, 59)

Ultra Before the Battle

Those historians of the battle of Crete who were aware of the Ultra material had little doubt of the importance it played. Hinsley's 1979 narrative (415-421) flows smoothly from the early indications that the Germans had decided to invade Crete to a brief account of the battle, in the course of which, far from drawing attention to any limitations in the intelligence intercepted, Enigma was elevated to oracular status: 'Enigma had revealed...', 'Enigma now established...', [Enigma] vouchsafed nothing less than...' (much later in the book (571) he does refer to 'the selection of the intelligence for Cairo' at this time being 'patchy and capricious'). Bennett followed suit in 1989, expressing no reservations about Ultra (as he more accurately called it) and Crete: 'Ultra itself, however, goes a long way toward refuting the charge..' (58); 'the completeness of Ultra's forecast...' (60); 'Ultra was not yet in a position to play a major role...' (66).

It is essential however to distinguish precisely what was Ultra material - what was intercepted - and what was commentary. It was clear from Ultra messages that by early May the Germans were planning an attack on Crete (see Appendix B) but the critical message was OL2167 sent on 6 May to Cairo and Crete. which was based on paragraph 3 of CX/JQ923 (Hinsley (418, fn 84, wrongly numbers it as CX/JQ911), the decrypt of an intercept of the same day (decrypts are discussed at Appendix A). It read:

Preparation for operation against Crete probably complete on 17 May. Sequence of operations from zero day onward will be parachute landing of 7th Fliegerdivision plus corps troops 11th Fliegerkorps to seize Maleme Candia (Heraklion) and Retimo. The dive bombers and fighters will move to Maleme and Candia. Next air landing of remainder 11th Fliegerkorps including headquarters and subordinated army units. Then flak units further troops and supplies. Third mountain regiment from 12th Army detailed, elements of armoured units motor-cyclists anti-tank units to be detailed by supreme command army and all to be under 11th Fliegerkorps. Admiral south-east will provide protection with Italian torpedo boat [or boats] flotillas minesweepers and possibly u-boats. Sea transport by German and Italian vessels. Operation to be preceded before zero day by sharp attack on RAF military camps and anti-aircraft positions.

There was a further message OL2168 the following day:

Flak units further troops and supplies mentioned our 2167 are to proceed by sea to Crete. Also three mountain regiments thought more likely than third mountain regiment.

It is worth remarking here that as is evident from Appendix B, there were some OL messages in the next six days (OL messages began to go directly to Freyberg on 13 May) which elaborated on this plan - see OLs 258/260, 261, 262, 278 and 281; but they do not seem to have been sent to Crete.

On the same day there was a further message, OL2170. This read:

Further to 2167 this series concerning projected German attack on Crete. Following is estimated scale of attack and suggested timetable. Suggested timetable. First day or first day minus one - sharp bombing attack on air force and military objectives. First day - parachute landings and arrival of some operational aircraft. On first or second day arrival of air landing troops with equipment including guns, motorcycles and possible light AFVs [armoured fighting vehicles]. Second day - arrival of seaborne forces and supplies after arrival of air landing detachments.

Estimated scale of parachute and air landing attack. Number of troop carrying aircraft at present available in the area is about 450. This could be increased to 600 if required. Subject to operational facilities for the highest number being [available?] the scale of a parachute attack on the first day could be 12,000 men in two sorties. Scale of air landing of troops and equipment on second day could be 4,000 men, and four hundred tons of equipment or equivalent, carried by 600 Ju 52s. If an air landing operation took place on first day parachutists effort would be reduced by about 50%. A preliminary bombing attack would probably be made by long range bombers and twin engined fighters based in Bulgaria Salonica Athens and possibly Rhodes. Maximum effort for a day estimated at 105 long range bomber sorties and 100 twin engined fighter sorties. Aircraft available as occupying force - 60 Me 109s and 90 Ju 87s. Start from landing grounds in Peloponnese. Position of landing grounds not known but Germans are believed to be searching for suitable sites. Athens area is the operational area from which airborne attack will probably start. All above scales of effort are the maximum weight which it is believed could be attained. No account has been taken of effect of our action or possible lack of operational facilities in the Athens area for the maximum number of aircraft available. Foregoing from director of intelligence.

Note the difference in language between the two messages. The intercept is definite: this will happen, that will happen. The intelligence report seeks to expand upon the previous two messages but is carefully guarded in doing so - the estimated scale, the suggested timetable, this could be the case, probabilities are invoked as are beliefs, and so on. It is clearly based on inferences from the numbers of German aircraft in Bulgaria and Greece. Some of it is an extrapolation from OL2167 - for example, that the seaborne forces would arrive on the second day. As to the estimated numbers, 9,530 men landed in two sorties on the first day, and 2,000 on the second. (Freyberg 305)

The next relevant record is the appreciation issued on Crete on 12 May following the visit the previous day by Brigadier Dorman-Smith, bearing with him, on Paul Freyberg's account at 282, 'an updating of the latest ULTRA intelligence'. It reads as follows:

1. The following appreciation of possible German plan for attack on CRETE, is based on previous German air attacks, and on Intelligence reports of German resources in the BALKANS.
2. The first objective will almost certainly be the three aerodromes, HERAKLION, RETIMO and MALEME, the possession of which is an essential preliminary for the landing of troop carrying aircraft.
3. The second objective will be the seizure of SUDA BAY and HERAKLION ports to enable ships to land further troops and heavy equipment required for the complete occupation of the Island.
4. The following is the probable sequence of events:
 - a) *D - 2 and D - 1*. Heavy air attacks on RAF and troops, especially AA guns.
 - b) *D 1 day*. Fighters and medium bombers low flying attacks on aerodrome perimeters to neutralise defences, to be followed almost immediately by parachutists.
 - c) The first sortie of parachutists at each aerodrome will number about 500 in five coys, of 100 each, dropped from 30-40 JU52. Height of jump will be about 300ft. Parachutists will be landed all around the perimeter of the aerodromes and up to 1,500 yards from the perimeter. Coys will

be formed up ready for action within 12-15 minutes of jumping. They will have LMGs [light machine guns] MMGs [medium machine guns], and mortars, and will probably make extensive use of smoke.

d) Within half an hour of the dropping of parachutists, the first batch of airborne inf. will arrive. They will have heavier weapons. It is expected that this operation will be carried out irrespective of the success or failure of the parachutists. An estimate of 5,000 troops from 350 aircraft may be landed in the first sortie.

e) The next step will be the landing of dive-bombers, fighter and recon aircraft closely followed by aerodrome staffs, fuel and AA weapons.

f) the JU 52s used to drop parachutists will probably return with another 1,500 men which will be dropped at various key points to prepare the way for the capture of HERAKLION and SUDA BAY ports, and to cause disorganisation and confusion.

g) *D 2.* Having seized and provisioned aerodromes, this day will be devoted to securing with the help of further air bomb troops, the ports of HERAKLION and SUDA BAY. Dive bombers will operate in close support of ground troops.

D 3 and subsequently

h) Ships will commence to arrive on this day, and the complete occupation of the Island will follow as quickly as possible.

5. From the above appreciation it will be noted that the entire plan is based on the capture of the aerodromes. If the aerodromes hold out, as they will, the whole plan will fail.

6. It is to be stressed to all troops defending aerodromes that the only danger is from the preliminary low flying air attack. provided men are properly dug-in, and where possible concealed, they have nothing to fear. It is important, however, that not only the men, but also their weapons must be protected during the preliminary air attack.

7. It is to be further noted, that up to the present, the aerodromes have NOT been bombed, nor have the ports been mined. The obvious deduction is the Germans hope to use both themselves in the near future.

8. Although this appreciation has not mentioned sea landings on beaches, the possibility of these attacks must not be overlooked; but they will be of secondary importance to those from the air.

9. WHEN READ, THIS PAPER WILL BE DESTROYED BY FIRE.

GSr
Force HQ
12 May 1941

K.L.STEWART
Brigadier
General Staff

While still being qualified by words such as 'probable', this document nonetheless has an air of greater certainty about it and asserts as fact matters which in the previous two messages had either been estimates or not been mentioned at all. Thus ships 'will commence to arrive' on day 3, while airborne infantry will arrive on day 1 within half an hour of the parachutists, whose landing areas were specified. The estimated figures of parachutists landing varied as between the two messages. Many of the figures claiming precision were quite wrong. Nearly all the troops who arrived on 20 May were parachutists (4(d)). The dropping areas in 4(c) turned out to be quite wrong, although the intelligence staff who composed the report were not to know that most of the parachutists would in fact drop on areas occupied by Allied troops. The numbers at 4(c) and 4(f) were also wrong: in the first sortie (at Maleme, Galatas and Suda Bay) 6,030 men landed, and in the second sortie at Retimo and Heraklion 3,500 (Freyberg 305).

The final message sent to Crete in this sequence before the battle was OL1/302 of 13 May, which reads:

The following summarises intentions against Crete from operation orders issued.

Para 1. The island of Crete will be captured by the 11th Air Corps and the 7th Air Division and the operation will be under the control of the 11th Air Corps.

Para 2. All preparations, including the assembly of transport aircraft, fighter aircraft and dive bombing aircraft, as well as of troops to be carried both by air and sea transport, will be completed on 17th May.

Para 3. Transport of seaborne troops will be in cooperation with admiral southeast who will ensure the protection of German and Italian transport vessels (about twelve ships) by Italian light naval forces. These troops will come under the orders of the 11th Air Corps immediately on their landing on Crete.

Para 4. A sharp attack by bomber and heavy fighter units to deal with the allied air forces on the ground as well as with their anti-aircraft defences and military camps, will precede the operation.

Para 5. The following operations will be carried out as from day one. The 7th Air Division will make a parachute landing and seize Maleme, Candia and Retimo. Secondly, Dive bombers and fighters (about 100 aircraft of each type) will move by air to Maleme and Candia. Thirdly, Air landing of 11th Air Corps, including corps headquarters and elements of the Army placed under its command probably including the 22nd Division. Fourthly, Arrival of the seaborne contingent consisting of anti-aircraft batteries as well as of more troops and supplies.

Para 6. In addition the 12th Army will allot three Mountain Regiments as instructed. Further elements consisting of motor-cyclists, armoured units, anti-tank units, anti-aircraft units will also be allotted.

Para 7. Depending on the intelligence which is now awaited, also as the result of air reconnaissance, the aerodrome at Kastelli [Pediados] south east of Candia and the district west and southwest of Canea will be specially dealt with, in which case separate instructions will be included in detailed operation orders.

Para 8. Transport aircraft, of which a sufficient number - about 600 - will be allotted for this operation, will be assembled on aerodromes in the Athens area. The first sortie will probably carry parachute troops only. Further sorties will be concerned with the transport of the air landing contingent, equipment and supplies, and will probably include aircraft towing gliders.

Para 9. With a view to providing fighter protection for the operations, the possibility of establishing a fighter base on Skarpanto will be examined.

Para 10. The Quartermaster General's branch will ensure that adequate fuel supplies for the whole operation are available in the Athens area in good time, and an Italian tanker will be arriving at the Piraeus before May 17th. This tanker will probably also be available to transport fuel supplies to Crete. In assembling supplies and equipment for invading force it will be borne in mind that it will consist of some 30 to 35,000 thousand men, of which some 12,000 will be the parachute landing contingent, and 10,000 will be transported by sea. The strength of the long range bomber and heavy fighter force which will prepare the invasion by attacking before day one will be of approximately 150 long range bombers and 100 heavy fighters.

Para 11. Orders have been issued that Suda Bay is not to be mined, nor will Cretan aerodromes be destroyed, so as not to interfere with the operations intended.

Para 12. Plottings prepared from air photographs of Crete on one over ten thousand scale will be issued to units participating in this operation.

A crucial question is: how was this message viewed by Freyberg?

According to his son and biographer, Paul (276-7):

OL302 was nothing less than a summary of the German plan for the attack on Crete...

[General] Freyberg was taken aback. The information was factual and, coming from where it did, obviously authentic. It showed a far heavier weight of parachute and air landing troops than had been mentioned at the take-over conference, or in the JIC Appreciation, and it increased the threat from the air compared with that from the sea by a ratio of well over two to one. But, worst of all, the intelligence showed for the first time that the deployment along the beaches was wrongly placed to counter an airborne invasion of such dimensions and directed against the airfields, particularly at Maleme.

Later champions of Ultra were likewise convinced that Freyberg had received accurate information. Thus Hinsley et al described OL2167 and OL2168 as listing 'the exact stages of the plan from D-day' (418) and 'on 16 May, the troops were given the final estimate of the likely scale of the attack' (419) - this being based on OL1/302. In UMS Bennett wrote about Crete and Ultra in a very confident and assured manner, thus:

'... it was probably only Ultra's warning which enabled the defenders to come so near success...' (51)

'Thus, a fortnight before the attack took place...Freyberg had a complete outline of Student's plans in his hands and could arrange his countermeasures accordingly so far as security regulations and the poverty of his resources permitted.' (56)

'Even Ultra seldom gave so complete and accurate a forecast again...' (56)

Although critical of the facts that 'little differentiation was made between speculation and hard intelligence' and that there was some confusion between German army units in OL1/302, Beevor (90-91) claimed that 'few commanders in history had enjoyed such precise intelligence on their opponent's intentions, timing and objectives'. Cox argued that 'Freyberg went into this battle very fully informed, through Ultra, about the strength and plans of his enemy' (106); and that 'Ultra had made it plain that there would be no attack from the sea on D Day'.

Barber and Tonkin-Cowell reproduce OL1/302 and then comment (35): 'With this communique it was scarcely possible for Freyberg to have a clearer picture of the enemy intentions'. Finally, Keegan (194) describes it as

an almost comprehensive guide to Operation Merkur [the German name for the operation], one of the most complete pieces of timely intelligence ever fall into the hands of the enemy. It revealed the timing of the attack, the objectives and the strength and composition of the attacking force.

A comparison of OL1/302 against what actually happened during the battle, especially on the first day, raises serious doubts about the accuracy of these claims.

The first German troops to land on Crete, on the morning on 20 May, were in gliders - 70-odd, according to Beevor (103), each with ten men from the Storm Regiment - and they came down in the areas around Maleme, Galatas and Canea. They were followed by paratroops. The transport planes and the accompanying bombers and fighters from the German 8 Air Corps returned to their airfields in Greece, and came back to Crete in the afternoon when more paratroops were dropped around Retimo and Heraklion. Later estimates (Freyberg 305) were that on that first day, 9,530 troops arrived on the island by parachute or glider, 6,030 in Maleme, Galatas and Canea, 2000 in Heraklion and 1500 in Retimo. (Another 600 meant for Heraklion had been left behind). 'No engined plane', Stewart emphasises (220), 'landed by design on Crete during the first 24 hours'. Nor, he might have added, had the Germans planned that this would happen: the parachute and glider troops were to secure the three airports on the first day, after which reinforcements would land.

While gliders had been mentioned in OL1/302, they were only a probability after the first sortie. This notwithstanding that they had been mentioned in OL262 of 10 May, OL319 of 14 May, (see Appendix B) and that the German 11th Air Corps, to which the troops who landed on the first day belonged, had been the subject of Enigma decrypts in March concerning preparing aircraft for multiple glider-towing (Hinsley 415, although the target was not then known). That the second sortie would take place hours after the first and at different locations was apparently not known.

As to seaborne reinforcements, the forecast in OL1/302 of about 12 German and Italian ships proved to be quite wrong. Although intercepts showed that arrangements were being made for such ships (OLs 361 and 373 - see Appendix B) they seem not to have been concluded in time, and there were fears about mines in the ports on Crete. The Germans were forced to resort to two motor sailing flotillas, each of which could carry only one battalion as well as heavy weapons and supplies. One was to land west of Maleme on the afternoon of the first day, and the second east of Heraklion on 21 May (Davin 87), both these destinations being away from Allied troops. None of these changes was picked up by intercepts.

The message also said that all preparations would be completed on 17 May; but it did not say when the attack would occur - despite the claims noted above.

On the second day of the battle the Germans landed troop carriers at Maleme at the rate of 20 an hour, and more parachutists landed around the aerodrome, these arrangements having been made on the evening of 20-21 May in response to the disaster of the first day. As will be illustrated below, none of these changes was intercepted in sufficient time to be of any use to Freyberg. The first sailing flotilla had reached only as far as Melos on the first day, and set off for Crete on 21 May. Head winds delayed its scheduled arrival in daylight under Luftwaffe cover, and it was intercepted and destroyed by the Royal Navy in the evening, about 18 miles north of Canea. The second flotilla was dispersed by the Royal Navy near Melos on the morning of 22 May. (Davin 209) As noted below, some of the relevant signals for the 21 May encounter were read by the Australian intercept station on Crete; but they seem to have passed Ultra by.

The forecasts were also quite wrong concerning the numbers of German troops to be landed during the battle. On Beevor's account, 22,040 were landed in total; 13,980 by troop-carrier at Maleme; and 8,060 by parachute and glider at Maleme, Canea, Retimo and Heraklion. As noted, only two battalions set out by sea. So much for the invading force of 30 to 35,000 claimed by OL1/302. There were 520 transport aircraft as against the 600 forecast in OL2170 and OL1/302; and as against estimates by Whitehall of 855 supporting aircraft, and by GHQ Middle East of 440, the actual number was 650 (Hinsley 419).

The most accurate forecast was in the original messages reproducing the intercepts - OL2167 and 2168. Much of the rest was educated guesswork but this was not made plain to Freyberg, who was seriously misled by the appreciation in particular, as will be discussed further below.

Ultra During the Battle

The historians' post-battle euphoria concerning the pre-battle intelligence also applied to the Ultra material intercepted during the battle. Thus Bennett: '...the number and quality of the intercepts remained very high throughout the operation ... and the speed with which messages were decrypted and signaled (sic) was greater than ever.. (UMS 59) Again, an analysis of the material provided - and more importantly, not provided - tells a different story.

Two preliminary considerations are relevant at this point: the state of communications between the German forces which had landed in Crete, and their headquarters in Greece, from which one might reasonably make inferences as to the sort of messages which were passing to and fro and thus were susceptible of being intercepted; another is the battle situation at the relevant times - the background against which the German signals were being sent.

As to the first, the indications are that after landing, most of the German forces in Crete had very good radio contact with their headquarters. In writing his account of the battle, Stewart was able to consult Major-General Walter Gericke (who as Captain Gericke had been in command of IV Battalion of the Storm Regiment during the battle) and through him General Student himself, who had been in charge of the invasion of Crete. Student reported that apart from Retimo, where the wireless apparatus had been badly damaged on landing, radio contact with the attacking groups at Maleme, Chania (Canea) and Heraklion 'was good from the first..the parachute regiments came through soon after dropping and then gave their regular situation reports to Athens'. (Stewart, 253) Gericke confirmed this to Stewart, telling him that his Regiment had 'unbroken radio contact with Athens' from the start. (251, fn 3) On the other hand, Schreiber et al (545-6) claim, without quoting any source, that contact between Athens and the German troops on the ground was not established until the afternoon.

As to the battle situation, as noted above, it is generally agreed that the first day of the battle was a disaster for the Germans, with more than 1800 casualties. Several commanders were killed, and many of the supplies which were dropped fell into the hands of the defenders, so that the Germans were short of ammunition and food. Captain von der Heydte, the commander of 1 Battalion, 3 Parachute Regiment, wrote later that on the afternoon of the first day medical supplies were running short and ammunition was getting low. (93).

One might reasonably expect, against this background, that given the good communications between Athens and the German forces which had landed (except at Retimo) the Ultra intercepts would present an accurate account of the German situation.

So what do the decrypts tell us about the crucial first few days of the battle of Crete?

The first relevant report is for 20 May (CK/JQ/972). It records a reconnaissance report sent at 2200/19/5 evidently by VIII Fliegerkorps, which include 'Own operational activity' and 'Results of reconnaissance'. The operations included attacks early in the morning by various aircraft (specified) on Suda Bay and on the three aerodromes, and a further attack on Suda Bay in the afternoon. A direct quote follows from a message sent at 0630/20/5 (all times are GMT; Greece was one hour ahead; General Jeschonnek was the Luftwaffe Chief of Staff)

According to isolated reports already received, freight carrying gliders (Lastensegler) also are operating* in accordance with plans. General JESCHONNEK requests you to keep supreme Command of the Armed Forces (O.K.W.) informed

*Note: The gliders were "putting out" (men or material) - ABSETZEN - according to plan.

A further message, untimed but also on 20 May, reported attacks by 18 Junker aircraft on A/A west of Maleme aerodrome and by 28 Junkers on A/A at Canea, with 'many hits on A/A positions'. Some words were then omitted followed by 'on the aerodrome no a/c dispersed, nor on the aerodrome of Malemes'. The first wave of Storm-Regt and 3rd Parachute Regt had been "put out" at Malemes and Canea 'up to the present according to programme'. *

*Hinsley describes at 549 the operational chain of command in the German Air Force thus: Luftflotte (Air Fleet) was the largest operational sub-division, followed by Fliegerkorps (Air Corps), and then Geschwader (resembling an RAF Group), which comprised three or four Gruppen (resembling an RAF Wing) and in each Gruppe three or four Staffeln (resembling an RAF Squadron); in the battle of Crete the units involved were IV Air Fleet, and VIII (supporting aircraft) and XI (transport groups and glider wing) Air Corps; AKG - see below - was a Bomber Group.

This formed the basis of OL 383 which was sent at 1328 hours the same day:

AT NOUGHT NINE NOUGHT NOUGHT GMT TODAY TUESDAY EIGHTEEN AND TWENTYEIGHT JUNKER 87 AIRCRAFT REPORTED BOMBED AC AC MALEMES (MALEMES) AND CANEA (CANE) RESPECTIVELY, OBTAINING MANY HITS. ((DIRECTOR FOR ALL ORANGE LEONARD 383)) NO AIRCRAFT SEEN ON EITHER AERODROME. FIRST WAVE OF STORM REGIMENT AND THIRD PARACHUTE REGIMENT DROPPED AT BOTH PLACES ACCORDING TO PLAN AND TOWED GLIDERS ALSO USED.

While by the time the message arrived it would have been of historical rather than current interest, there are several disturbing features to it. There was no aerodrome at Canea. No time was given in the messages which would enable 0900 to be fixed as the time of the attack. Davin (93) and German records suggest that the gliders had finished landing by 0900, and the bombers had clearly preceded them.

As noted in Appendix B, a further message - OL385 - wrongly claimed that Maleme was in German hands but it was not yet possible to land there; communications had been established with West and Central Groups [troops on the ground]; and General Suessman and crew had been killed in glider crash.

Apart from a further message about aircraft markings, that was it from Ultra on the first day of the battle.

Some late reference to the events of 20 May was contained in the report of 22 May (CX/JQ/978), which began 'Source saw second part of evening report 20/5/41' and went on to describe points near Maleme aerodrome which had been attacked at 0500 and at 1730; attacks at 0530 on AA batteries near Chania and Korakes; fighter protection of parachute troop landing at Rethymon; attacks from 0600 on Iraklion aerodrome; and attacks at 1140 on Suda Bay. None of this was thought worth passing on in the form of an OL message, presumably because of the effluxion of time. No 'points near Maleme aerodrome' had been attacked on 20 May until 'shortly after six o'clock in the morning' (Davin 92).

A further message in this report also dates from 'late on 20/5'

Gruppen 101, 102 and 60 are subordinated with immediate effect to K.G. z.b.V. 2 (All these Gruppen are at TOPOLIA).

The Geschwader, whilst preserving the former Gruppen, will form two complete Gruppen and will ferry with them to Iraklion *I and II Mountain.....5* in the air landing operation. [chain]

Landing of 1 Gruppe, 1200.....2 Gruppe, 1400. On landing, the Gruppen are to be separated

A footnote says that * The original text of this was I and II

The message makes no sense, but notwithstanding, OL397 was sent off on 21 May at 1755 hours, as follows

IN AIR LANDING OPERATIONS PROBABLY (DIRECTOR FOR ALL ORANGE LEONARD THREE NINE SEVEN) EARLY AFTERNOON TWENTYFIRST MAY TWO MOUNTAIN BATTALIONS TO BE FERRIED TO IRAKLION (IRAKLION)

In fact, Davin records at page 242, there were no further parachute drops at Heraklion until 23 or perhaps even 24 May; he also notes at page 211 that the German orders laid down for 22 May 'expressly state that the plan to land part of 5 Mountain Division at Heraklion now lapsed...' This too does not seem to have been picked up by Enigma, showing the danger of getting only some signals when battle had commenced.

Note that most signals share a common characteristic: they appear to have been sent by the pilots of the planes which took the gliders or the paratroops to Crete, or from one high-level German Air Force group to another, rather than from troops on the ground.

The most striking fact about these reports of 20 and 21 May is the absence of any Ultra information about the appalling German losses on 20 May and the reaction by the German high command in Athens, which led to the German landings at Maleme on 21 May. There can be no doubt that the German high command was well aware of the losses: Heydte (110-12) and Beavor (150-1) both give graphic descriptions of its reaction to the news, including the decision to test the defences on the western side of Maleme aerodrome as 'a final gamble'. A reconnaissance plane landed there early on 21 May and took off again and the pilot was able to confirm that the western edge was no longer exposed to direct fire, the New Zealanders having withdrawn during the night. Had the relevant German signals about the losses been intercepted and the substance of them conveyed to Crete, revealing the parlous state of the German troops around Maleme (and Galatas also), might a counter-attack have been mounted on the night of 20 May or early in the morning of 21 May? Such a move was considered at the time by the New Zealand Division battalion commanders in the Maleme area (Freyberg does not seem to have been involved) but they decided against it (Davin 185-6). An ineffectual counter-attack was in fact launched at Galatas by New Zealand and British forces on the evening of 20 May, but called off. (Davin 167-172)

This gap passes Bennett by.

Another report of 21 May (CK/JQ/976) does contain some information about Colorado, including 'Intentions for 21/5' which read:

VIII Fliegerkorps (1) Covering the landing of the remaining parachute forces. (2) Silencing of still active artillery. (3) Supporting of the attack on CANEA and SUDA BAY. (4) Attacking of ships with armed recces. a/c and specially detailed forces.

This became the basis for OL393, which was sent off at 0300 hours on 21 May. It read:

DURING TWENTY FIRST FOLLOWING OPERATIONS WILL RECEIVE SUPPORT FROM EIGHTH FLIEGERKORPS COLON FIRST COVERING LANDING OF REMAINING PARACHUTE FORCES SECOND SILENCING ANY STILL ACTIVE ARTILLERY THIRD ATTACK ON CANEA (CANEA) AND SUDABAY (SUDABAY) FURTHER (DIRECTOR FOR ALL ORANGE LEONARD 393 GENERAL FREYBERG NOT INFORMED) ATTACKS ON SHIPPING

This does not seem to have been sent to Freyberg (see Appendix B).

The same report of 21 May on also included the following:

First report on situation in COLORADO for 21/5, read as follows:

- (1) Enemy resistance in pill-boxes on the eastern edge of MALEMES aerodrome broken today. Region west of aerodrome freed of enemy. Aerodrome useable from 0530 hours onwards.
- (2) "CENTRAL GROUP" (Grupp Mitte) has driven back enemy attacks during the night and drawn up its units round the Supply Depot at GALATOS. One Battalion of Parachute troops (Fallschirmjaeger) landed near MALEMES at 0530 hours.
- (3) From 0430 hours onwards own... and advancing on Heraklion.
- (4) [shipping movements]

This went off at 1335 hours on 21 May as OL394, thus:

ON MORNING TWENTY FIRST GERMANS BELIEVED FOLLOWING COLON FIRST MALEME (MALEME) AERODROME SERVICEABLE AND AREA TO WEST CLEAR OF OPPOSITION BEFORE NOUGHT SIX NOUGHT NOUGHT (GMT) STOP PARACHUTE BATTALION ALSO LANDED IN NEIGHBOURHOOD MALEME (MALEME) BY SAME TIME STOP (DIRECTOR FOR ALL ORANGE LEONARD THREE NINE FOUR GENERAL FREYBERG NOT INFORMED) SECOND CENTRAL GROUP DRAWN UP ROUND GALATOS (GALATOS) SUPPLY DEPOT STOP THIRD BRITISH NAVAL UNITS BELIEVED TO HAVE WITHDRAWN FROM WATERS NORTH OF COLORADO

This signal too does not seem to have reached Freyberg - see Appendix B. Had it done so it may have been the first indication he received of the situation at Maleme, as it was not until that day that he had any information as to the events there on the previous day. It is not clear why the information in the decrypt about the eastern edge, which was accurate, was withheld from the OL message.

A further message of 2250/20/5 contains orders from Fliegerfuehrer that

Gruppe 172 to carry supplies in 46 a/c for the F-S operation. Enquire from Chief of Staff where to land. Staffel must be over objective at 0530 hours. Landing place for 3rd Staffel: just north-east of reservoir (Stausee) on the road Alikeonon - Canea. For 4th Staffel landing places (Rethimnon and Heraklion) will be ordered later.

To which Hut 3 had added:

NOTES: (1) Gruppe 172 is presumably KGr.z.b.V.172
(2) F S probably stands for "Fallschirm Sprungseile", i.e. jumping off or release cords for parachutes. Geschwader BUCHHOLZ, to which KGr.z.b.V.172, belongs, was being fitted with these on 14/5.
(Cf. CK/JQ/953, para 32 and 966, para 2)

This went off as OL395 at 1355/21/5/41 as

SUPPLIES PROBABLY LANDED BY PARACHUTE EARLY MORNING TWENTY FIRST MAY NORTH EAST OF RESERVOIR ON ROAD BETWEEN ALIKIONON AND CANEA

That supplies were to be carried in 46 aircraft for a much larger operation was omitted, as were details of other places where the squadrons might land, at an unspecified time which on 21/5 might still have been in the future. The German 3 Parachute Regiment occupied the area referred to in OL395. Von der Heydte (143-4) recorded later that supplies were not in fact received by his battalion until the night of 25-26 May, and then from the German Mountain Regiment which had landed at Maleme rather than any air drop.

The next relevant message is clearer, but increases one's concern about timeliness and interpretation. It appears in the report for 23 May (CX/JQ/983):

Late on 21/5 Generalmajor CONRAD, Fliegerfuhrer of XI Fliegerkorps reported to K.G.z.b.V.2 as follows:

- 1) Aerodrome MALEME, secure in our hands, probably still blocked as a result of to-day's air landing.
- 2) K.G. z.b.V.2 with Gruppen 101, 102 and 60 will land I Battl. Mountain Rifle Regt. 85 (I Batl. Get Jagerregt. 85) near MALEME, commencing 0445.
- 3) Possibilities of landing:
 - a) MALEME aerodrome (in so far as it is free of aircraft and not under artillery fire) will mark out a white landing-T and a green signal will be fired by the landing detachment.
 - b) Landing-T will be marked out on the beach west of the dried-up river-bed. Touch down on landing-T.
- 4) For the carrying out of the landing 3 hours will be allowed for the landing of each Gruppe, since landing on the shore can only be effected one at a time: For that reason long intervals between Ketten [chain] must be observed so that the landing of the Gruppe extends over the entire period of the time allotted.
- 5) Request the pilots to observe the most rigid flying discipline.
Calm and careful and unflurried approach to the landing-T as practised at the "C" school ensures the success of the air-landing operation.

The other two paragraphs concern the reserve, Battalion Mancke, and the need to prepare and report 'by return'.

Again, it was not thought necessary to pass this on, notwithstanding the reappearance of Gruppen 101, 102 and 60, presumably because it was historical.

Davin (225) duly recorded the arrival at Maleme airfield of I Battalion of 85 Mountain Regiment (and other battalions) on 22 May, and later at page 244

At Maleme the enemy had kept on landing troop-carriers, not only on the airfield but on the beaches and in the area to the west. In three hours during the afternoon 59 had been counted landing, and this rate of 20 an hour might be taken as an average for this day and the preceding day.

The Problems with Ultra

What are the general conclusions which can be drawn from this sequence of signals?

The first and most disturbing is that Enigma did not for whatever reason intercept all or even most of the relevant signals. The important omissions from 20 and 21 May - concerning the German losses and the plans for a further attack - have been noted. Equally disturbing, there

is no indication either that those handling the intercepts were aware of these gaps or that they made the recipients aware of them, so they could take this into account in making assessments of such information as they did receive. 'Ultra warnings', Bennett writes (UMS, 60), 'that Maleme was now the principal objective began just after midnight on 21-22 May and were regularly repeated, together with evidence that it was becoming the main entry point for the reinforcements which Student hastily poured in to secure his hold on the island....' But these decisions were made, as Beevor and Davin show, on the evening of 20 May and the morning of 21 May, the day when the reinforcements began to arrive at Maleme. On Stewart's account (259, fn 23), Gericke got his orders from Student at 4 a.m. on 21 May when he read them by torchlight. Gericke feared that his battalion would be wiped out in a counter-attack before the reinforcements arrived. Where was Ultra? Why was it 24 hours late? And why is Bennett apparently oblivious to this fact?

The second is that Ultra was too often behind the game. OL385, Bennett proudly records (UMS, 59), was sent off only three hours and twenty-five minutes after the dispatch of the German message which prompted it. Fine; but what of the messages quoted above which were - for whatever reason - recorded in the decrypts days after they were sent by the Germans?

Many of the problems identified here were caused by the situation in England and at Bletchley Park.

At the very beginning of the process, intercepting enemy signals, Birch reports (124) that in March 1941, against an estimate of 190 receivers in the UK needed for the interception of Enigma traffic, only 72 were available. By July another estimate put the total number of sets required to take the Enigma traffic of the German Army and Air Force at 309, including 70 overseas. This estimate came with a warning that nobody could say how many frequencies the two used. In addition, there were on Hastings' account (77) not enough operators:

German signals were at first intercepted by a battery of army wireless-operators stationed in an old naval fort at Chatham...In the early war years there were never enough operators, and both the RAF and the army were reluctant to acknowledge the priority of meeting GC&CS's demands.'

At Bletchley Park, there was a shortage of the crucial 'bombes', described by Hastings (75) as 'primitive but revolutionary electro-mechanical device[s] for exploring multiple mathematical combinations'. At the end of 1940, there were only two (Sebag-Montefiore 112) and as Hastings observes (80):

One of the principal constraints on codebreaking, especially between 1940 and 1942, was that access to scarce technology had to be apportioned between competing claimants of the three services, and there was never enough 'bombe time' to go around.

Such material as was intercepted ran into more problems in Hut 6, where the intercepts were received and decrypted. Although 'the first half of 1941 witnessed the beginnings of a broader outlook', Birch records at 123,

What work was undertaken on [German high-echelon traffic] seems to have depended at this time on the predilections of the young cryptanalysts in Hut 6, but their choice of key was largely determined by the quantity of traffic that it carried and the quality of the cribs* it produced. Their policy hitherto had been - and still was - to concentrate all interception, traffic analysis and cryptanalytic resources on a few well-tried problems that were known to produce good cribs.

[*A 'crib' is defined in the glossary at xxvii thus: A plain language (or code) passage of any length, usually obtained by solving one or more cypher or code messages, and occurring, or believed likely to occur, in a different cypher or code message, which it may provide a means of solving.]

This was not the only problem Hut 6 had at that time:

At the GC&CS end no special provision had been made for decryption, which was treated as a spare time job between 'breaks' for the girls in Hut 6 who 'decoded' Enigma signals whenever keys were broken, so that "any luck the cryptographers had, automatically holds up further the Middle East traffic". By July 1941 cyphered raw material was coming in at the rate of 60,000 groups daily, and there was already a backlog piling up in GC&CS of several hundred thousand groups.

Quoting Welchman, Keegan (207) says that Hut 6 'contained scarcely anyone with more than a smattering of German.' Writing of Hut 3, however, where the decrypts were translated, evaluated and distributed, Keegan says that these processes were undertaken by

...young, inexperienced and largely unmilitary officers ...who seem to have been more concerned to provide a smooth narrative on the Oxbridge essay pattern - most were academic linguists - than the sharp assessment of enemy aims and capabilities than a hardened operational intelligence analyst would have composed.

A further complication lay in the organisation of Bletchley Park in 1941. As Christopher Grey has shown (see Appendix C), drawing upon the National Archives material, until a reorganisation in 1942 which established a single command structure for military and civilian staff, there were major problems among the three services, between service and civilian staff and between the services and the Government Code and Cypher School (GC&CS) which was part of MI6 and thus came under the Foreign Office. There were in addition problems which arose from coping with an organisation which was growing rapidly and operating on a 24-hour basis. Personal animosities were unavoidable: the then Director of Naval Intelligence, Rear Admiral John Godfrey, wrote of the then head of Bletchley Park and fellow naval officer Commander Alastair Denniston, that he had 'shown an amazing lack of imagination and pettiness of outlook'.

Birch at 126 confirms Bennett's comments on the operation of the system:

When the service to Cairo opened in March 1941, the officers in Hut 3 seems at first to have been terrified of their secret weapon - for the first month their signals averaged no more than one a day. Through inexperience their selection was haphazard and unrealistic and their drawing unreliable, partly due to their conscientious efforts to paraphrase the German text and partly to their failure to distinguish fact (what the message said) from inference and comment. Middle East recipients must have been puzzled to assess this highly secret information, which was as patchy and capricious as it was discontinuous.

Another conclusion is the comfortable but misplaced assumption by the senders of the Ultra signals that they all arrived in Crete. Some of the messages to Cairo recorded that Freyberg had not been informed and that later messages recorded that he had been informed of the earlier messages. But file HW20/1 has a list of OL messages, in manuscript, that were either not sent to Freyberg or were sent to him later than intended. A copy of the list is at Appendix B.

Leaving aside the material brought to Crete by Brigadier Dorman-Smith on 11 May (see Appendix C), only three Ultra messages were known with certainty to have reached Freyberg. OL302 or OL1/302 of 13 May became the basis for the intelligence report circulated by

Freyberg on 16 May (Davin, 77), which read, according to Bennett, ‘alarmingly like a close paraphrase of OL302’ (UMS, 57, fn 9). The cause for alarm was that if a copy of the report had been captured by the Germans, it might have been linked with the German signal and perhaps betray Ultra. The second message was OL12/370 of 19 May, forecasting that D-day would be 20 May, and Freyberg’s demeanour on that day (Beevor 107) suggests that the German attack came as no surprise. The other message was OL389 or OL15/389 of 21 May (Beevor 157) which again became the basis of an order from Freyberg about an expected seaborne attack that evening, when the first German flotilla did in fact arrive. There is no other evidence of Freyberg receiving Ultra messages, in the sense of issuing orders or intelligence reports based upon them; as noted, after the battle had commenced on 20 May they were in any event of little value. No doubt he received more than three; but we cannot know with certainty - and will now never know - how many more, which ones and the times at which he received them.

Finally, and perhaps worst of all, the ‘intelligence’ picked up by Enigma and recycled by Ultra was too often distorted, thus increasing the distrust by the recipients of not only individual messages but the OL system generally. OL397, quoted above, said that particular German battalions were to be ‘ferried’ by air to ‘Iraklion’ probably early afternoon 21 May. Assuming that the message reached both Freyberg and Heraklion, what were they to think when no such landings took place on that day, but some days later, without warning? Although the instruction was that Ultra messages had to be destroyed after reading, those sending them evidently expected them to be kept: Appendix B has several examples - in bold type - of messages referring to earlier messages.

Other examples in the Cairo OLs provide further evidence of what Bennett called fumbling in the dark. OL291 of 13 May (file DEFE 3/686, image no 272) read as follows:

EARLY ON MAY TWELVE GERMAN CONVOY TWO FIVE (DIRECTOR FOR NAVY
AIR ORANGE LEONARD TWO NINE ONE) SOUTH OF PANTELLERIA
(PANTELLERIA) ON CONVOY ROUTE BELM (BELM) STOP SPEED ELEVEN
KNOTS

This was evidently queried, prompting the following plaintive response in OL294 of the same day (file DEFE 3/686, image no 275):

FURTHER TO ORANGE LEONARD TWO NINE ONE COMMA (DIRECTOR FOR
NAVY AIR ORANGE LEONARD TWO NINE FOUR) MEANING OF BELM (BELM) IS
UNKNOWN COMMA AND IT IS UNCERTAIN WHETHER CONVOY TWO FIVE IS
NORTH OR SOUTHBOUND

Those who write about the battle of Crete would do well to keep in mind Bennett’s conclusion: ‘Although it sometimes seemed otherwise at the time, the results of disseminating Ultra intelligence in 1941 must now be judged on the whole disappointing’.

The Australian Intercept Station

A further factor complicating intelligence and Crete is that Freyberg had his own intercept station on the island, the existence of which seems to have escaped notice or been misunderstood. Cox identifies it correctly (see Appendix C). It was the No 4 Australian Special Wireless Section, formed in June 1940, which had also been evacuated from Greece. A good informal history of the Section exists, written by Geoffrey St Vincent Ballard, himself a

member of it, evidently on the basis that he spoke German. The role of the Section, according to Ballard, was 'the interception and evaluation of enemy wireless communications which were known to provide valuable and accurate information' (43). The Commanding Officer was Captain Jack Ryan, and the head of the Intelligence Section was Lieutenant 'Mick' Sandford, who like Ballard had been trained at the Air Ministry Wireless Station at Heliopolis near Cairo.

There were more than 50 in the Section, which was able to break the three-letter air-ground codes then being used by the German Air Force. It supplied 'a steady stream of operational intelligence' to Freyberg (73), including enemy occupation of Aegean islands astride the approaches to Crete; details of enemy air activity in the general area south from Athens; movement of large numbers of transport aircraft to Greece, and sightings of British naval movements in the Rhodes area. There were in addition 'a huge volume of reconnaissance reports, sightings, Luftwaffe order of battle information and weather reports' (74).

After the battle began, the items intercepted included: further aircraft movements to Greece, the progress of the first German naval flotilla towards Crete (the destruction of which on 21 May members of the Section witnessed), and 'a stream of tactical reports, mostly in plain language, on the fighting around Maleme which provided a non-stop commentary on the situation', including 'reports on the fighting in various sectors, the location of the front, the capture of certain positions, details on points of resistance, use of certain buildings as strongpoints and sightings of our own forces' (78).

While it is clear in retrospect that these intercepts would have included details of the precarious state of the Germans around Maleme (and elsewhere) on the first night of the battle, it is likewise clear that Freyberg did not then have available to him, as he did later, the capability of assessing and evaluating this material. More accurately, he did have the capability but it was not at the time sufficiently well-trained. On Cox's account, there was an intelligence staff on Crete, headed by a Brigadier (who was mostly on other duties) and including three British Army captains sent from Cairo and three other British junior officers who were attached as intelligence officers. There were also the New Zealanders Robin Bell and Cox himself. The intelligence activity described by Cox - later one of Freyberg's specialist intelligence officers - limits his own role to examining captured documents and questioning German prisoners, as well as carrying messages to and fro between Freyberg and the Australian Section. Another account by one of the British intelligence officers - David Hunt - has him likewise doing no more than examining documents and questioning prisoners (36-47). What they found out and what happened to it remains obscure. Perhaps the recipients were just overwhelmed by the volume of material. It looks unlikely that it had any effect on the battle.

Stewart claims (374-5) that 'by the night of 23/24 May, Freyberg's Intelligence Staff had greatly increased their efficiency' and 'produced for him a report which was remarkably accurate'. It estimated the number of Germans who had landed on the island, the numbers at the major landing places, the numbers of casualties and perhaps most importantly the suggestion that 'no more than one air landing division was taking part, and that only 600 parachutists were "still to land"'. In fact, they had already landed on 21 May.

Did Ultra really make a difference in Crete?

As noted, the general view among historians of the battle of Crete who knew of Enigma and Ultra is that they made a crucial difference. While these claims are open to dispute because of the content of the Ultra material, they also carry with them the implication that Freyberg's

dispositions for the defence of the island were based upon and were a consequence of the German plans passed to him as a result of the Ultra decodes. Thus Bennett (UMS, 56):

Thus, a fortnight before the attack took place...Freyberg had a complete outline [OL1/302] of Student's plans in his hands, and could arrange his countermeasures accordingly so far as security regulations and the poverty of his resources permitted. [The security regulations point is taken further in Appendix C in the discussion on Paul Freyberg's book.]

Schreiber et al (541) make the same claim:

As a result of information provided by the British secret service, [Freyberg] was aware of German military preparations in Greece and the probable organization and main objectives of the coming attack...He therefore placed most of his troops in the area around Maleme, Khania, and Souda Bay...

A close reading of events which occurred before Freyberg even arrived on Crete casts doubt on the truth of these assertions, and thus also casts doubt on the extent of influence claimed for Ultra.

Hinsley et al (416-7) trace the Ultra messages in April 1941 which eventually revealed on 27 April that the Germans were to attack Crete, although there was some uncertainty in London until confirmation was received in the first few days in May. This is clearly a crucial date: what preparations and dispositions had been made in Crete before that date?

Hinsley et al (415) also show that as early as November 1940 it had been 'expected that the Germans would use paratroops in the Balkans as they had done in Norway and the Low Countries'. In that month Brigadier Tilbury was appointed as commander of the forces on Crete, and Davin (12) records that 'operationally, Brigadier Tilbury had appreciated that any attack would most probably be airborne with Suda Bay for its objective, and that landings might be expected at the Maleme, Retimo or Heraklion airfields'. Tilbury was replaced in January 1941, and the third and fourth commanders came and went in February and March, but some stability was achieved at the end of March or early April when Major-General Weston was appointed. Meanwhile some training exercises had been conducted by the British troops already on the island, among them two against parachute attack on Maleme and another against parachute attack on Galatas.

On 15 April Weston submitted to Cairo his appreciation of the situation in Crete. German invasion with airborne forces (and by sea if Greece fell into German hands) was envisaged; troops should thus be based at Heraklion, Retimo and in the Suda-Maleme sector. On 27 April he was given command of all British troops on the island: the task of the defence was 'to deny the enemy the use of air bases in Crete'. The British/New Zealand/ Australian forces evacuated from Greece had begun to arrive on Crete on 25 April, and the following day orders were issued by Weston. While they were modified by later arrivals and developments, they 'reflect the situation as seen by Weston at this time' and contained 'an outline appreciation of vulnerable points which did not alter'. Thus Maleme, Suda Bay and Heraklion were 'essential to the defence, while the retention of Retimo was at least desirable'. Further, airborne attack was envisaged as the most likely - hence the importance of the airfields - but seaborne invasion was possible also. The dispositions of the arriving troops were made accordingly. (Davin 27)

General Maitland ('Jumbo') Wilson, who had been General Officer Commanding the Allied forces in Greece (and who had served with the New Zealand division in World War 1), arrived in Crete on 28 April and was commissioned by Wavell to provide, in conjunction with Weston

and General Sir Iven Mackay, the General Officer Commanding the 6th Australian Division, an appreciation of the position. He too thought that 'Heraklion and its airfield, Canea, Suda Bay and Maleme would have to be held at all costs' (Davin 39).

Meanwhile, Ultra material about Crete had begun to be sent to Cairo 'towards the end of April' and directly to Crete on 28 April (to Group Captain Beamish, Air Officer Commanding). This material was clearly too late to influence Weston's orders, although it is of course possible that they had been influenced by such Ultra-derived information as he may have received from Wavell in Cairo.

Freyberg assumed command on 30 April, when he was told by Wavell that 'Crete would be attacked in the next few days ..the scale of attack envisaged was five to six thousand airborne troops plus a possible seaborne attack. The primary objectives of this attack were considered to be Heraklion and Maleme aerodrome'. There does not appear to be any basis for these estimates in the Ultra material from that time, in particular the date of the attack. There was some disagreement between Wavell and the War Office as to the scale of the air attack. More precise information, derived from Ultra, arrived in Crete on 6 and 7 May, as noted above.

So what changes did Freyberg make on or shortly after his arrival? Davin (43) reports that 'He had no reason to quarrel with previous appreciations of what were the vital points; they were the three airfields and Suda Bay area.' His orders of 3 May divided the garrison into four: Heraklion, Retimo, Suda Bay and Maleme. As discussed, the Ultra material showed that the German appreciation of the major targets on the island agreed with those of the occupying forces. OL2167 sent on 6 May showed that the German intentions were that parachute troops would on the first day land at Maleme, Candia (Heraklion) and Retimo; a further message on 19 May identified these three places 'particularly'. Even some at least of the later troop movements had been decided upon before Freyberg arrived (Freyberg 288-9).

This analysis suggests that it is at least arguable that all Ultra did was to confirm the correctness of the dispositions already made, the German plans for an attack on the island being a mirror image of the Allied plans for its defence. Both German and Allied experienced commanders took the same view of the island's vulnerable points - even down to Kissamos Kastelli (see below) An exact parallel occurred later in the war at the battle of Alam Halfa, where 'Montgomery made troop dispositions which intelligence subsequently proved to be ideal - but he made them 48 hours before he received the intelligence' (Bennett, II, 90, fn 1) What the Ultra material did do was to reveal - eventually - the timing of the attack, although Freyberg did not pass this on.

This line of argument might reasonably be taken further. What would have happened before and during the battle of Crete had no Ultra material been available? Freyberg would have had to rely on the assessments and dispositions made by his predecessors. Wavell's estimates of 30 April would have been more intelligence- than Ultra- inspired, given that it was not until 27 April that the Ultra material first mentioned Crete (Hinsley 417). As to the timing of the attack, Freyberg and the troops would readily have been able to infer that the bombing and strafing raids which preceded 20 May were softening-up exercises for the real thing. The troops would in the absence of Ultra have been in much the same position as they actually were on 20 May: 'there was scepticism enough', Davin (88) records of the mood on that day, 'for those who declared that today would be the day'.

As noted, the Ultra material was so incomplete and so late that it contributed nothing of real and immediate value after the battle had commenced. It did nothing to ameliorate or prevent the disastrous decision to withdraw from Hill 107. The German reinforcements landing at

Maleme were plain enough for Freyberg himself to see from his headquarters above Canea, and the attempts to combat them owed nothing to any Ultra material. Nor did the retreat and the withdrawal.

In short, the battle without Ultra would have proceeded in the same way and resulted in the same outcome as the battle with Ultra. That should be Ultra's Cretan epitaph.

The Muddle About Ultra Recipients and Use

In his book, Paul Freyberg raises the question of the control of Ultra, and exposes the muddle which seems to have enveloped the question so far as General Freyberg was concerned. The only conclusion from what follows is that Wavell was not authorised to tell General Freyberg the true source of Ultra, but did so, and that Menzies (the head of MI5) and Churchill were not aware that he had done so. There is also evidence of a wider muddle with Ultra.

The relevant sequence of events regarding Crete was as follows (Freyberg 268-84).

30 April: Wavell tells General Freyberg about Ultra, including its true source, but also warns him that he cannot act on Ultra information alone; [there is, as Bennett notes (BB 281) no reason to disbelieve General Freyberg (or his son) on this point];

Early May: Churchill wishes to send the full Ultra material to General Freyberg; Menzies refuses to agree and threatens to resign if the Churchill insists; Menzies' position is that while the full material might go to an army headquarters, it should not go to any lower formations on the grounds that they might be overrun by the enemy;

May 10: Churchill thinks of a plan whereby 'the actual text of all the messages' are sent to General Freyberg by special officer by air; no one else should be informed but the General, 'who would give his orders to his subordinates without explaining his full reasons'; this was agreed to;

May 11: pursuant to the Churchill plan, Dorman-Smith is sent from Cairo to Crete with 'an updating of the latest Ultra intelligence'

Later in May: On Churchill's 'insistence', 'the Bletchley Park air intelligence section produced a paper purporting to be a compendium of German documents obtained through Secret Service channels from German GHQ in Athens, the summary being couched in terms consistent with such an alibi. This was then signalled to Crete'. [on 13 May] The compendium was prepared by Group Captain Humphreys at Bletchley Park (Bennett II, 197, and Freyberg 276) This was OLI/302.

After the war, the 'cover story' that the Ultra material came from a highly placed agent in Athens, and that this was what Freyberg had been told, was propagated. It appears in Cave Brown's biography of Menzies (Freyberg 268), it is accepted by Beevor (89, who finds Paul Freyberg's account 'unconvincing') by Keegan (194), and indeed by Cox (51), who claimed that Freyberg did not know the truth 'until late in the war'. It also appears in some of the Ultra historians. Thus Hinsley (417):

...the Prime Minister having decided that the Enigma material must continue to go to Crete, General Freyberg, who took command on 30 April, received it from GC and CS [Bletchley Park] disguised as information supplied by an SIS agent in Athens.

And Birch (127):

In the case of GOC Crete, it was considered that, in view of his exposed position, Special Intelligence could only be provided under its Secret Service disguise - a decision of the Prime Minister.

The muddle is made worse by Bennett, who claims (II, 197) that Churchill 'had ordered Wavell (GOC Middle East) to tell Freyberg, when he appointed him GOC Crete, that he would be receiving Ultra and the Wavell had explained exactly what Ultra was'. Unfortunately no source is given for Churchill's order. Bennett concludes that Churchill's instructions to Bletchley Park about the compendium were thus 'the consequence either of forgetfulness or muddled thinking'.

In a fascinating article (see Appendix C), David Reynolds shows the struggle that took place between Churchill and the intelligence agencies when he was writing *The Second World War* (published 1950). In some ways the rule still was that information derived solely from Ultra could not be mentioned in case Ultra itself was put at risk of becoming known. The draft on Crete included the following:

At the end of April our Intelligence Reports gave us full and exact information of the German plan. We knew the general scale and the actual day of the impending attacks, both by land, air and sea. I took extraordinary measures not only to convey our information to General Wavell, but also to convince him of its truth. To General Freyberg, who commanded in Crete, I sent by air a special officer to show him the authentic evidence of the kind of attack he would have to meet.

The version which eventually appeared (at 279 in Freyberg) was somewhat watered down and included the following (while preserving the error about 'the end of April'):

In no operation did I take more personal pains to study and weigh the evidence or to make sure that the magnitude of the impending onslaught was impressed upon the Commanders-in-Chief and imparted to the general on the actual scene.

Later in his article Reynolds observes that 'Churchill believed [Freyberg] had been told that the source was humint' [human intelligence].

While Reynolds gives no source for this belief, it hardly seems credible that Churchill would write as he did in the draft had he ordered Wavell to tell Freyberg about Ultra and its true source. His conduct in having Dorman-Smith sent and in getting the compendium assembled is consistent with his belief that Freyberg did not know the true nature of Ultra. It therefore follows that Wavell told Freyberg on his own initiative, and kept to himself the fact that he had done so. Bennett (BB, 281) has a variant: Churchill ordered that Freyberg be given access to Ultra, but Menzies forbade it but did not tell Churchill. This does not however explain - indeed it contradicts - Churchill's belief that Freyberg had not been told of the true nature of Ultra.

The last and biggest part of the Crete muddle is that so far as we know (see Appendix B) original Ultra material was being sent to Crete from Bletchley Park beginning on 28 April, and continued being sent until Crete was evacuated at the end of May. Further, messages specified as being 'Personal for General Freyberg' were sent from 13 May. It thus appears to follow that Menzies had no idea of what Bletchley Park was doing so far as Crete was concerned - further

evidence of which is that initially the officer receiving the Ultra material there was Group Captain Beamish, Air Officer Commanding, an officer far too junior in Menzies' hierarchy to be receiving it.

There are other indications of a general muddle concerning Ultra and the use to which it might be put. Paul Freyberg (281) quotes Hinsley as telling him, with regard to the use to which Ultra might be put in the absence of other information:

My feeling is that the rules were if anything even more rigorous in the spring and summer of 1941, when ULTRA on any scale was a very recent acquisition, than they became later, when more resources were available in the way of air reconnaissance and prisoners of war which could provide cover for the ULTRA evidence.

As against this, however, Bennett has a powerful counter-example: no evidence exists that General Wilson, who was in charge of the Allied forces in Greece, was forbidden to make use of Ultra material without cover, and he did in fact so use it. Wilson was also in the same position as Freyberg: neither commanded an army 'but an ad hoc force assembled in haste' (II 201). Either might have been captured. Bennett also notes that Ultra material was disseminated in the first half of 1941 to the British Military Attache in Belgrade, 'who commanded no troops and so could not conceivably use the information' - and who was later captured. Finally, Bennett records that

There is no evidence that either Wilson or Freyberg was instructed to disguise Ultra beyond recognition - as was insisted upon later - if he embodied it in orders to subordinates. Freyberg seems to have made fairly transparent use of it in this way [a reference to Freyberg's intelligence report circulated on 16 May which Bennett thought read 'alarmingly like a close paraphrase of OL302' UMS, 57, fn 9]

What supports Bennett's case on this point - and apparently unbeknown to him - was that the Ultra material sent to Greece also went to the Air Officer Commanding (Birch 125). Sebag-Montefiore quotes other situations where Ultra was used without cover, some quite contrary to Hinsley's view quoted above, and in fact in situations which involved Hinsley. In 1941, Hinsley persuaded the Admiralty that crucial information about Enigma could be obtained from German weather ships, described by Sebag-Montefiore (144) as 'trawlers sent to isolated spots north of Iceland and in mid-Atlantic to observe the weather and report what they had seen back to Germany'. They were using Enigma machines, and were thus a valuable prize. The 'little weather trawler' *Munchen* was accordingly captured in May 1941 (by 'three enormous cruisers, as well as four of the fastest destroyers in the Fleet', on Sebag-Montefiore's account at 144), and crucial documents recovered. There is no indication of any 'cover' being provided, e.g. by way of a British aircraft.

In the following month, the Germans changed the settings on Enigma and Hinsley recommended that another weather ship be captured, and indeed identified a potential target, the *Lauenberg*, near Iceland. Much anxious consideration was given to the question of whether capturing another weather ship so soon after the *Munchen* would give rise to German suspicion that the codebooks were the object. 'Eventually it was decided to risk it' and more crucial documents were recovered. Again, there was no 'cover'. (Sebag-Montefiore 166-9) While the stakes were high - the U-boats were very active at the time - this is further indication that the rules applying to the use of Ultra information were on one reading flexible, on another inconsistent, on another just muddle.

These rules sometimes created absurd situations. While General Freyberg could not use Ultra to reshuffle his troops on Crete, the arrival of fresh British troops on 16 May for the planned reinforcement at Heraklion could proceed because the arrangements had been made before the Ultra material became available - although the Germans could not have known that. As Paul Freyberg observes (289), 'it is difficult to avoid the conclusion that such an arbitrary and contradictory distinction in the application of the ULTRA rules achieved the worst of both worlds'.

It might be noted that so far as General Freyberg was concerned, what he was told as to the source of Ultra was of little moment. Whatever he believed the source to be, he was absolutely clear that he could not discuss the material with others on Crete, and he could not use it when it was the only source of information.

The most recent history of Enigma and Ultra has this to say, as yet another variant on the theme (Hastings, 85):

Stewart Menzies performed an important service by dissuading the prime minister from fulfilling his frequent desire to dispatch raw Ultra direct to commanders-in-chief in the field, as he had done in the case of Crete.

Before leaving the discussion of Ultra, it is only fair to record that both Hinsley and Bennett underwent something of a transformation between initial enthusiasm for its value (particularly in the case of Crete) and subsequent scepticism.

Thus Hinsley said (1993):

Some people think we should have prevented or destroyed the invasion - an air landing invasion. In fact Bletchley Park felt very strongly for the first time in the war that its product had not been used properly in the case of the Crete invasion. I think possibly that we were wrong now that we can see the evidence in more detail, but at least it helped to make it a disastrous operation for the Germans even though they actually got Crete as a consequence.

And Bennett in 1996 (II, 195):

What proportion of the Crete orders was decrypted and read at Bletchley was, and still remains, uncertain. It was certainly great, but certainly not exhaustive. Ultra was never more than a random selection of the enemy's correspondence; it included most of what he put on the air, but no more. This was probably not fully enough realised at the time, and is sometimes overlooked even now.

Not all historians of Crete were of the same mind. Beevor's account of the battle finds limitations with the Ultra material only in the way it was misunderstood in London and by Freyberg.

Bennett also pointed out later (he served at Bletchley Park and indeed wrote some of the OL messages which went to Freyberg) the consequences of 'the extreme novelty of the situation' in April 1941 (II, 196):

..everyone concerned in the production of Ultra was suddenly compelled to run before he had learned to walk..most of us had been in uniform only a few weeks, and were totally ignorant of

military ways and military vocabulary; there was no speedy and secure wireless channel exclusive to Ultra; MI6 had not yet formulated security rules...; and the commanders in the field, unused to red hot intelligence which was absolutely reliable, distrusted it and did not know how to use it. All these limitations were to appear in some measure during the Crete campaign. (p 196)

He went on to describe how all those involved, in Whitehall, Bletchley and the Mediterranean, were 'fumbling in the dark' and that 'a backward glance shows up glaring faults', although arguing that 'hindsight is a cheat'. (II, 196-7).

Three Aspects of the Battle - Two New and One Revisited

One aspect of the battle which does not appear to have been sufficiently examined is German intercepts of Allied messages.

Both Davin (183) and Stewart (169 and fn) provide examples of the assistance given to the Germans by poor security on the part of the allied troops, notably the RAF - a matter of some irony given that it was the German Air Force which was the source of the Ultra material regarding Crete. Quoting German sources, Stewart notes that on the first day of the battle, when the RAF camp at Maleme was overrun, the Germans captured intact the code books which showed the allied order of battle for all units and formations, including the Greek forces.

It is in the Ultra material, however, that the scale of the German activity in this area is revealed. Thus OL378 of 19 May (DEF3/687, images 23 and 24) and OL427 of 23 May (ibid, image 31) informed the Director Air that GAF Intelligence Branch in Berlin had received a report from the Interception Service in the Balkans on British air to ground wireless traffic. The report showed the movements of RAF aircraft in the Middle East, including clear text signals. Security failed to improve: a further report of 24 May - OL433 (DEF3/687, image 32) - showed that German Intelligence in Berlin had received details of no fewer than five RAF signals of 23 May, all of them concerning Crete - one as to 'time of intended attack by Blenheims' and another about 'the arrival of six Hurricanes'.

Twelve Blenheims in fact arrived over Maleme in the afternoon of 23 May and according to German sources quoted by Davin, they destroyed six enemy aircraft. A further force of Blenheims and Marylands arrived in the evening but again according to German sources did no damage. Two Blenheims were claimed to have been shot down. (272) Two flights of six Hurricanes were sent to Heraklion on 23 May. The first six were attacked by British ships en route, on the assumption that they were enemy aircraft, with two being destroyed and three being forced to return to base. The sole survivor reached Heraklion but was destroyed there. Of the second flight, four were damaged on arrival and had to return to base, while one of the remaining two was destroyed on the ground.

CX/JQ/988 of 23 May duly recorded seven fighters landing at Heraklion with one being destroyed on the ground; and 'a few Blenheims' appeared at Maleme and also attacked German troops in the area, one aircraft being shot down.

A further example of lax RAF security was provided by the Australian Wireless Section, which probably on 23 May intercepted a signal 'in clear' from General Ringel (since the previous day the German commander in Crete) asking for munitions. The reply about two hours later was also intercepted, saying that the munitions would be landed at Maleme aerodrome at 1600 hours that day. Creforce was immediately informed and shortly afterwards an RAF signal 'in clear' was intercepted asking for two Hurricanes to be sent between 1530 and 1630 hours. A

German signal was then intercepted to the effect that German aircraft were setting out from Malaoi, a German fighter base. (Sandford memorandum of 3 June 1941 in HW66/2)

The decrypts also contain a good deal of intercepted British information, which appears under the heading 'German Y Service' - a reference to local German interception stations. It was apparently thought best not to pass on all such material. CX/JQ/982 of 22 May, paragraph 10, reported 'two decoded British messages' from Heraklion to Creforce HQ (this seems wrong). The first looks likely to have been a local message, perhaps sent in response to Hargest's suggestion (Davin 229) that aircraft at Maleme were evacuating troops: 'German transport a/c have landed and certainly not flown back'. The second looks likely to have been an intercept of a message sent out as the result of an intercept by the Australian Section, as it refers to 'specified target for early morning day bombers' and goes on to give details of how to identify German soldiers at the three aerodromes.

Further decoded messages are recorded in CX/JQ/988 and /989.

At least in North Africa, the Army likewise had security problems. OL376 of 19 May reported that the German Africa Corps had deduced from reconnaissance the possibility of British withdrawal from Sollum to Marsa Matruh. OL412 of 22 May (DEF3/687, image 30) said that, with reference to OL376, 'the enemy also obtained this information through his listening service'.

Hastings (453) identifies a Bletchley Park report (in the National Archives at HW/13/52, dated 26 June 1941) which not only provides further examples of Allied material intercepted by the Germans during the Battle of Crete - most of it from RAF signals - but also gives a comprehensive account of German Air Force interception stations. It notes that each of the three arms of the German forces had its own interception service, and that in the case of the German Air Force, each Luftflotten (Air Fleet) had its own units. 'It is clear', the report states, 'that there can be very little W/T [wireless telegraphy] which escapes this elaborate net' (para 16). It thus comes as no surprise that the report also noted that 'Many British Operational signals were decoded and sent on to G.A.F. units during the battle of CRETE' (para 34). Much the worst example was the interception of an Ultra message to General Freyberg, particulars of which are given by Sebag-Montefiore at 181. As it was dated 24 May 1941, began with the words 'According to most reliable source' and included the words 'attack Suda Bay', it is possible to identify it as OL21/428. As the entry for that message at Appendix B shows, there was difficulty in sending it to Crete, so it must have been the case that it was sent by some less secure means than usual and this gave the Germans the opportunity of intercepting it.

Has any assessment been made of the scope of German intercepts regarding Crete, and their value?

A second aspect of the battle worth noting is that the New Zealand troops had in 1940 fortuitously received training in England in dealing with parachutists and possible sea-landings. Details are provided in Appendix C under the heading 'New Zealand Electronic Text Centre'.

The aspect of the battle worth revisiting is the vexed question of protecting Maleme airfield. Freyberg has been criticised for not putting enough troops there in the first place, for not keeping a closer eye on what was happening there, and for failing to mount a timely counter-attack after the Germans had secured a footing. Neither Hinsley nor Bennett make all of these criticisms, although their descriptions of what happened during the battle are brief. Hinsley's summary (421), after quoting some critical comments by Churchill on the command in Cairo, is that:

It is perhaps fairer to conclude that, whereas the Germans had the strength to off-set bad intelligence, the British, whether from weakness or for other reasons, were not in a position to make better use of an intelligence service that was at last getting into its stride.

Bennett concludes thus:

As things stood in reality, the advantage was bound to lie with the other side, although Freyberg knew what it planned to do. Crete is a prime example of the truth that force as well as foreknowledge is needed to win battles. (UMS 61)

Elsewhere he argues that 'Freyberg can ...be blamed for not taking steps to protect the western side of Maleme airfield better' (BB 283)

Others are more critical. Beevor (94) says that the failure to put more troops on the western edge of the airfield in the bed of the nearly dry Tavronitis River was a 'most astonishing' move on Freyberg's part. Brigadier Puttick, who had succeeded Freyberg as commander of the New Zealand Division, asked for reinforcements for this area, and Greek troops further west at Kastelli Kissamou were identified to fill the gap. Freyberg refused permission, according to Beevor (94), 'either to safeguard the secret source of their intelligence, or because he did not want to diminish his coastal defences'. On Davin's version (60), Freyberg and Puttick considered that on 13 May, after the permission of the Greek authorities to the move had been obtained, that it was too late to move them and that in any event there were difficulties with transport and getting dug in.

Perhaps surprisingly, Cox (106) also joins in the criticism, referring to the failure to garrison the Tavronitis as 'a manifest tactical blunder' and 'a strange error' for a man of Freyberg's experience to make; he does not say whether he pointed this out at the time. He claims that Freyberg cancelled the plan to move the Greek troops because of lack of time but that 'this ruling was made a week before the assault began.' (106) He shrewdly infers that the real reason was Freyberg's concern about betraying his secret source of intelligence, which appears to have been closer to the truth. In a sense Freyberg had become Ultra's prisoner.

This criticism overlooks several aspects of the battle. As to Freyberg's decision not to move the Greek troops having been taken a week before the assault began (20 May), the planned date of the assault shifted several times. On 13 May all preparations were to be completed on 17 May. On 16 May the invasion was to begin on 17 May but it was likely that it would be postponed for 48 hours. Then 19 May seemed the earliest date and finally 20 May looked most likely. These shifting dates make Freyberg's decision explicable.

The most baffling aspect of this line of criticism, however, is that it gives no thought to the consequences of moving the Greek troops from Kastelli Kissamou, fifteen miles west of Maleme. The Muerbe Detachment of 72 paratroops (from the Assault Regiment) landed south and east of Kastelli Kissamou on the first day of the battle and were heavily defeated by the Greek forces under their New Zealand instructors, Muerbe and 53 of his men being killed and the remainder taken prisoner. (Davin 95 and 173-4) What would have happened had the Greek forces not been there is shown by subsequent events. German reinforcements by both land and air attacked the town on 24 May and captured it, although Greek resistance continued for at least two more days. As forecast in OL27/464 of the previous day (see Appendix B), on 27 May the Germans were able to land some light tanks. (Davin 291-2) Had the Greek troops been moved to Maleme, the Germans would have landed unopposed on 20 May and with tank reinforcements would have attacked Maleme from the west.

Paul Freyberg (283-8) argues that his father was aware of the weakness on the western side of Maleme airfield, particularly as the information brought by Dorman-Smith on 11 May had said (wrongly) that no ships would arrive until the third day of the battle, with greater emphasis thus being given to the initial airborne attacks on the airfields. General Freyberg sought permission to redeploy his forces around Maleme accordingly but was refused by General Wavell because the intelligence was derived solely from Ultra - this rule, as noted, having been introduced to ensure that the Germans would not become suspicious of the reasons for allied actions and thus change the Enigma codes. Paul Freyberg is persuasive on this point, noting that Salisbury-Jones Court of Inquiry report into the battle of Crete referred, at General Freyberg's prompting, to an alternative plan of deployment at Maleme which was not implemented. He is, so far as I am aware, the first to have pointed out the significance of this part of the report

It is worth noting that while the German reconnaissance was deficient so far as the presence and dispositions of the troops near the aerodromes were concerned, it was accurate in locating suitable landing places for the two flotillas - away from Allied occupied areas. Had they landed in daylight under Luftwaffe protection, they would have been unopposed.

A Last Word on Freyberg

Freyberg took away from Crete at least two lessons. The first was the need for up to date intelligence, provided daily, by those best equipped by education and experience to provide it. Thus he selected from the New Zealand Division Cox and Davin, both met above and both Rhodes Scholars, and Paddy Costello, Cambridge graduate and later spy (see kiwispies.com) Montgomery followed suit, appointing in 1942 Captain Edgar (Bill) Williams, an Oxford don, as his intelligence officer. Williams stayed with Montgomery until the end of the war. (See C. S. Nicholls, 'Williams, Sir Edgar Trevor [Bill] (1912-1995)', *Oxford Dictionary of National Biography*, Oxford University Press, 2004; online edn, May 2011 [<http://www.oxforddnb.com.ezproxy.londonlibrary.co.uk/view/article/57959>, accessed 14 Dec 2015])

The other lesson was the importance of troops being able to move at night, a practice which he introduced with the New Zealand Division in North Africa later in 1941 (Freyberg 340).

Much has been written about the fog of war, and from one aspect Student was victorious on Crete because he knew better than Freyberg what was happening on the ground; and he knew this better because he had better communications with his troops, despite being in another country. Critics of Freyberg might also usefully reflect upon Tolstoy (825):

A commander in chief always finds himself in the middle of a shifting series of events, and in such a way that he is never able at any moment to ponder all the meaning of the ongoing event. Imperceptibly, moment by moment, an event is carved into its meaning, and at every moment of this consistent, ceaseless carving of the event, a commander in chief finds himself in the centre of a most complex play of intrigues, cares, dependency, power, projects, advice, threats, deceptions, finds himself constantly in the necessity of responding to the countless number of questions put to him, which always contradict each other.

Acknowledgements

Thanks are primarily due to my friend and colleague Dr Aaron Fox in New Zealand. We have a common interest in the battle, and at one point during the writing of this paper he shone the

light when I had lost my way. He was a fount of relevant material. The staff at The National Archives at Kew were unfailingly helpful, as were those at the London Library, the print holdings and on-line sources of which were indispensable.

Because of 'limitations on our resources', The National Archives were unable to check the accuracy of the material in Appendices A and B below. Comments on them would thus be particularly welcome, as would comments on other aspects of the paper. They might be sent to bmdmlenihan@btinternet.com

Denis Lenihan
London
2015-6

Appendix A: The German Air Force (GAF) Enigma, Ultra and further details of the decrypts

The rarely-considered material is the decrypts of the signals transmitted by the German Air Force (GAF) Enigma machines and intercepted by the British. The process of turning the intercepts into usable intelligence is worth repeating. German Enigma signals were intercepted at various listening stations (Y stations) and transmitted or transported to Bletchley Park, where they were decrypted, 'emended' (de-corrupted) and translated, assessed and then distributed as Ultra material, including directly to Crete. The decryption of German army and air force signals was carried out in Hut 6, and the other processes in Hut 3. While most of the transmitted (OL) messages relating to Crete have been available in the Archives for some years (the DEFE3 files began to become available in 1977), the translations of the decrypts (the CX/JQ etc series), on which the OL messages were based, have only become available more recently - beginning in 1996. Their absence had been noted by Bennett in 1989 (UMS, 20) and by Keegan in 2003 (208), although it appears that Keegan in quoting Bennett failed to check with the National Archives. It is these translations which contribute to the re-assessment of aspects of the battle of Crete in this paper.

So far as I know, the only persons to have previously used the decrypts were Hinsley et al for their work on the history of British intelligence, published in 1979. They were given access to Ultra material for that purpose but the Crete decrypts at least were then closed again until 1996. Curiously, when writing of Crete at least, the authors relied more often on CX/JQ documents rather than the OL messages sent.

The relevant decrypts are in the National Archives reference HW, described as 'Records created or inherited by Government Communications Headquarters (GCHQ)', which is in 85 series covering the period 1914-2012. Reference HW5 is the series of immediate interest, its title being 'Government Code and Cypher School: German Section: Reports of German Army and Air Force High Grade Machine Decrypts (CX/FJ, CX/JQ and CX/MSS Reports)'. It covers the period 1940-1945, is in 767 volumes and is 'accruing'. This HW5 series began to be received by the National Archives from GCHQ in 1996. HW5/10 to HW5/16 are all entitled 'German section: reports of German army and air force high grade machine decrypts' and cover the period from 14 March to 28 May 1941 in one or two-week slices. HW5/15 and 5/16 cover the period of the Crete battle, the first concerning May 15 to May 21 and the second May 21 to May 28, which is the focus of this piece.

Each document in these two files is headed 'Most Secret', numbered 11, dated and was sent to Commander Saunders, a naval officer who was at the time head of Hut 3. Each also has a CX/JQ prefix and then a number, with cross-references to other reports with such prefixes and is of several pages with numbered paragraphs. They are not addressed to anyone, and simply begin with 'The following items are of special interest' which in our case is 'Operation Colorado', Colorado being for a time a code name for Crete. The first sub-heading is Germany and NW Europe, then Air and then Operations. There are further sub-headings such as Naval and Shipping, and under 'Air' Aerodromes, Personnel and Aircraft Markings, the purpose of which was presumably to gather under each sub-heading the relevant Ultra messages. Railways occupy a good deal of the reports (German Railways had its own Ultra key). Some reports were quite long: CX/JQ/930 of 9 May is 11 foolscap pages, and was one of several reports made on that day.

The contents appear to be detailed raw material, in a way that the OL messages are not; but clearly the OL messages are drawn from this material and indeed on the appropriate part of

each report the relevant OL number has been written in manuscript. Attempts are occasionally made to disguise the source, by the use of such improbable phrases as 'Source saw an urgent telegram...', or 'source overheard scraps of a telephone conversation...' Dates of receipt are recorded, but not the time; some messages are from the same day as the date of the report and some from previous days. German words and phrases appear, sometimes not translated. The documents have been cyclostyled, the process by which at that time - before photocopiers - multiple copies were produced and printed in a distinctive purple colour.

Finally it is worth noting that as Bennett points out (II, 34 ff), it is more accurate to speak of Ultras rather than Ultra. On his analogy, there were three Ultra sisters each with a brood of children: Army, Navy and Air. 'The GAF general key yielded to the cryptographers early in 1940 and was decrypted almost every day for the rest of the war; in addition, progressively smaller and smaller air commands were given their own key, all of which were broken in due course, though not all of them all the time.'

Appendix B: Crete, Ultra and the National Archives; and a chronology of relevant Ultra messages

The following contains a newly-assembled chronology of messages containing Ultra material sent to Crete (but not always received) in the period from 28 April to 28 May, with a summary of the contents of each. All have been imaged and are thus easily accessible. All the file references are to National Archives files, which may be retrieved simply by entering the file number into 'Discovery' on the wondrous Archives website. Files which are imaged are identified in *italics*.

The following guide to the relevant files and OL numbering systems may be helpful. The best starting point is HW20/1, which contains all the OLs 1-500, the Cairo series, covering the period of the Battle of Crete. The OL series commenced in March 1941 and between then and November 1941, when the prefix was changed to MK, 2060 OLs were sent based on CX/MSS material intercepted. (HW3/119, page 225). There were two variants of the OL series of interest to us. OL71 of 8 April said that in future OLs sent to both Cairo and Greece would be numbered in sequence starting with OL2001, while those for Cairo only would continue in the two figure series (which later ran into the three and four figure series). This arrangement continued when direct transmission to Greece ceased and was replaced by direct transmission to Crete, OL2151 of 28 April announcing the new arrangement. OL2170 of 7 May was the last in that series. It was in turn replaced with the OL1/ series which were sent direct to Freyberg, the last three figures being the same as in the OL series. Thus the first, OL1/302, was sent directly to Freyberg on 13 May, being a copy of OL302 which went to Cairo. The last such message - OL36/489 - went to him on 28 May. HW20/391 has complete runs of OL2151 to OL2170 and of OL1/302 to OL36/489.

Starting with HW20/1 enables the reader to do several things. It first of all gives an appreciation of Crete in the context of the other fronts in that area of concern to the Allies, in particular North Africa and the Middle East. Until near the invasion of Crete, OL messages regarding these two fronts greatly outnumbered those concerning Crete. It also enables the reader to identify those Ultra messages about Crete which were apparently not passed on to Freyberg. Finally, reading the file enables one to realise how few messages in total were apparently passed to Freyberg - only 36, as noted, in a little over a fortnight, and only 20 from the day the battle commenced until it was effectively over.

While other files have only parts of the OL series, a great advantage is that some are imaged and thus accessible from off site. *DEFE3/686* looks at first glance to be the imaged version of HW20/1, but the title notes that 53 messages 'have been retained by the department'. Those which concern Crete are however on *DEFE3/687*. Better yet, *DEFE3/894* is the imaged version of the relevant parts of HW20/391, having a complete run of both OL2151 to OL2170 (at images 2 to 16), and OL1/302 to OL36/489 (at images 17 to 41). As noted, not all messages on these files concern Crete.

A list of imaged messages, with their various numbers, which concern Crete in the 'Freyberg period' - from 28 April to 28 May - and their source, is below, together with a brief summary of each. Those marked * refer to the list at the end, which is taken from HW20/1, and from which it is plain that not all messages sent to Freyberg reached him.

In this list, *DEFE3/894* is in italics; DEFE3/686 is underlined; and DEFE3/687 is in larger type.

28 April: *DEFE3/894*: OL2151 (re numbers - see above);

30 April: *DEFE3/894*: OL2152 (re German occupation of Scarpanto airfield - some special operation foreshadowed); 2153 (correcting addresses on 2152); 2154 (in next few weeks Suda Bay and Crete aerodromes will not be bombed to enable German Air Force to carry out planned operations);

1 May: *DEFE3/894*: 2155 (cancels but repeats 2144)

2 May: *DEFE3/894*: 2156 (grand parade German army air units Athens);

3 May: *DEFE3/894*: 2157 (air transport units not ready for large scale operations before 6 May earliest); 2158 (ultimatum to garrison Melos dropped on aerodrome 2 May had not expired by evening); 2159 (minelaying operation on unknown harbour); 2160 (air operation against Mytilene intended); 2161 (German Admiral Southeast interested in operation referred to in 2160)

4 May: *DEFE3/894*: 2162 (occupation of Mytilene to take place on 4 May); 2163 (bombers to attack Suda Bay 4 May but time uncertain); 2164 (Italian shipping movements including around Crete); 2165 (German air force movements to Salonica and then Athens about 8 May);

6 May: *DEFE3/894*: 2166 (For Air Officer Commanding Crete - is Freyberg receiving OL information from Cairo; if not please arrange to pass to him all relevant OL information); 2167 (detailed information for operation against Crete - preparations probably complete 17 May; full text in narrative above);

7 May: *DEFE3/894*: 2168 (elaboration on 2167); 2169 (Melos to be occupied by Germans on 7 May to prepare aerodrome); 2170 (long message about estimated scale of attack and suggested timetable - see text in article above);

8 May: *DEFE3/686*: OL258 (re reconnaissance photos of Crete)

9 May: *DEFE3/686*: OL260 (corrects 258)

9 May: *DEFE3/687*: OL261 (Preparations in Athens for new operation (from Director of Intelligence))

10 May: *DEFE3/686*: OL262 (air movements including glider towing Junkers - probably concerns Operation Crete)

11 May: *DEFE3/686*: OL278 (12 ships for 'attack on Crete')

12 May: *DEFE3/687*: OL281 (GAF order of battle)

12 May: *DEFE3/686*: OL284 (air attack on aerodromes in Crete 14/5 - see below under 13 May)

13 May: *DEFE3/894*: OL1/302 (very long message to Freyberg re forthcoming attack - see text in article above); OL2/284 (German aircraft will probably attack aerodromes on Crete on 14 May);

13 May: *DEFE3/687*: OL303 (Aircraft movement in Greece may be re occupation of Crete)

13 May: *DEFE3/686*: OL304 (info in 284 sent to Freyberg)

14 May: *DEFE3/894*: OL3/308 (German aircraft on 13 May saw convoy which lay off Heraklion); OL4/309 (Antikythera to be occupied by Germans and provided with anti-aircraft defences); OL5/313 (if no shipping targets sighted 14 May aircraft will attack Suda Bay); OL6/314 (in future Colorado to be used instead of Crete);

14 May: *DEFE3/686*: OL317 (Flak units may be sent to Crete)

14 May: *DEFE3/687*: OL319: (Air intelligence re gliders - but no confirmation that they will be used on a large scale - parachute regiments, paratroops, arms etc; not intercept material)

15 May: *DEFE3/894*: OL7/325 (attacks on Maleme and Heraklion aerodromes 14 May may have been reprisals for British night raid on Tatoi and Kalamaki);

16 May: *DEFE3/894*: OL8/337 (attacks on British aircraft at Heraklion aerodrome intended 16 May, also transfer of aircraft to Scarpanto); OL9/339 (day one of operation against Colorado may be 17 May but postponement of 48 hours appears likely); OL10/341 (19 May now seems earliest date);

16 May: *DEFE3/686*: OL340 (shipping movements - **refer to 278**); OL346 (GAF and submarine spotting)

17 May: *DEFE3/686*: OL348 (Italian boats and Colorado)

17 May: DEFE3/687: OL353 (aircraft recognition signals)

17 May: DEFE3/894: OL11/354 (photographic reconnaissance planned for today, especially aircraft dispersed around aerodromes)

17 May: DEFE3/687: OL357 (GAF estimated order of battle)

18 May: DEFE3/686: OL361 (shipping movements re Colorado)

18 May: DEFE3/687: OL364 (more detail re 357)

19 May: DEFE3/894: OL12/370 (on May 19 conference of officers commanding air force units to take place at Eleusis aerodrome to discuss operation against Colorado - today may be day minus one); OL13/372 (shipping targets to be attacked 19 May, reconnaissance of whole of Colorado to be carried out); OL14/375 (on 18 May Germans believed bay of northern point Antikythera only place suitable for landing - aircraft landings not possible - **refer to 309**)

19 May: DEFE3/687: OL373 (more details re ships - **further to 361**); OL378 (German intercepts - see article above)

20 May: DEFE3/686: OL383 (aircraft at 0900 today bombed Maleme and Canea with many hits, no aircraft seen; first wave Storm Regiment and 3rd Para Reg dropped at both places according to plan - towed gliders also used); OL385 (Maleme aerodrome and ac ac position in German hands but not yet possible to land there; communications established with West and Central Groups, Suessman and crew killed in glider crash)

20 May: DEFE3/687: OL 384 (aircraft recognition signals); OL390* (389 not sent to Freyberg - see below)

21 May: DEFE3/686: OL387 (recces from Scarpanto - looking for naval units east of Crete); OL388 (more on 387); OL392 (more on 388); OL393* (landing of remaining parachute forces and silencing remaining artillery, attack Canea and Suda Bay, further attacks on shipping); OL394* (on morning 21st Germans believed Maleme aerodrome serviceable and area to west clear of opposition by 0600, para battalion landed neighbourhood Maleme same time, central group around Galatas supply depot, British naval units believed withdrawn from north of Crete - F not informed);

21 May: DEFE3/894: OL15/389 (operations planned for 21 May is air landing to attack Canea, and landing from echelon small ships depending on situation at sea); OL16/395 (Supplies probably landed by parachute early morning 21 May on Alikionon-Canea road);

21 May: DEFE3/686 OL397 (two mountain battalions to be 'ferried' by air to Heraklion probably early pm - sent 1755); OL399 (Germans claim to have occupied Maleme)

22 May: DEFE3/686: OL401 (drops on and around Maleme 21 May); OL403 (Germans claim to have captured Maleme)

22 May: DEFE3/686; OL402* (Italian destroyer left Piraeus 21st carrying further battalion 6th Mtn Div); OL406* (one coy at Tanager and another at Mogara - 11th F.korps - presumably for air landing Crete)

22 May: DEFE3/894: OL17/411 (German intentions to consolidate today at Maleme with further air landings; troop movements by sea; Italians to land at Siteia)

22 May: DEFE3/686 OL411* (contents of OLs 402, 404 and 407 passed to Freyberg 22 May at 1005 hours GMT); OL415* (10 dive bomber aircraft intended for Maleme to attack naval units); OL417 (GAF aircraft to Eleusis after bombing naval units); OL419 (GAF units in Africa to operate against Crete); OL421* (GAF units to Tatoi 23 May)

23 May: DEFE3/894: OL18/422 (more troops to be landed Maleme 23 May, main attack to capture Suda Bay; some GAF units being moved away); OL19/415/420 (some bombers to be based at Maleme today; Italian aircraft to bomb Ierapetra); OL20/424 (German casualties very high especially in air transport units - more aircraft coming from Italy and Germany)

23 May: DEFE3/686 OL426 (3 or more fighter aircraft based at Maleme by day)

24 May: DEFE3/894: OL21/428* (German troops have reached coast near AG Marinas and cut off British east of Maleme; units of centre group to attack Suda Bay; proposed to bring up three more companies to Heraklion); OL22/431* (Centre and Maleme groups in contact at

Galatas on 23 May - to attack Suda Bay; at Heraklion, reinforced group to attack aerodrome; air attacks expected on shipping at Heraklion and Ierapetra); OL23/437 (German position at midnight 23 May - west group had contacted Canea group, line held in east heights south of Galatas and in south two miles north of Alikianou etc - use of Colorado being discontinued); OL24/440 (Port Lutro considered by Germans to be likely point for disembarkation);
 24 May: DEFE3/687: OL433 (More leaks - see text above)
 25 May: DEFE3/894: OL25/451* (troop movements) but message cancelled;
 25 May: DEFE3/687: OL453 (aircraft recognition signals)
 26 May: DEFE3/894: OL25/466 OL25/466 (exhaustive reconnaissance of aerodromes expected today - search for British fighter aircraft - Germans expecting to take Galatas at any moment); OL26/459* (Germans intend today further reinforcements via Maleme); OL27/464* (Germans intend on 26 May to prepare Kastelli, probably in Kisamos Bay, as port of disembarkation for ships); OL28/469* (all times in OL messages are GMT);
 28 May: DEFE3/894: OL29/495* (**troops mentioned in 484 are from Rhodes - 407 refers**);
 28 May: DEFE3/687: OL498 (Italians landing at Siteia - **495 and previous refs**)
 29 May: DEFE3/894: OL30/506: Italian troops landed Siteia 28 May; German intentions 29 May to relieve Retimo
 27 May; DEFE3/894 but note OL numbers - first five messages cancelled; OL29/474 (troop movements 27 May); OL30/475 (troop movements 27 May); OL31/477 (German intentions 27 May); OL32/478 (Germans watching for disembarkations); OL33/479 (attacks on aerodrome north of Oudura [?]); OL34/484* (Italian troops embarked 27 May to land Crete 28 May)
 28 May: DEFE3/894 but note OL numbers; OL35/486* (German troop movements 28 May); OL36/489* (German intentions for 28 May).

List of files and comments taken verbatim from two-page manuscript list on HW20/1

OL390 Not passed to Freyberg
 OL393 Freyberg not informed
 OL394 “
 OL402 “
 OL406 “
 OL407 “
 OL411 Contents of OLs 402, 404, 407 were passed to Freyberg in following form:
 OL423 Contents of OLs 415 and 422 were passed to F as follows:
 OL424 Various reports received including information contained 421 this series have been communicated to F in following form:
 OL432 It has not yet been possible to contact COLORADO for transmitting OL428
 OL435 Ref OL428 & 431 F now informed
 OL444 Not poss to contact CRETE for transmission of OLD440 to F
 OL448 F being independently informed [presumably via Cairo]
 OL450 Cannot contact CRETE for transmission of OL448
 OL451 F being independently informed
 OL454 F not informed
 OL459 F being independently informed
 OL464 F [not?] informed
 OL466 F being informed
 OL469 F independently informed
 OL475 “
 OL477 “
 OL478 “

OL479 “
OL480 Ref our 474, 475, 477 no contact CRETE
OL484 F being independently informed
OL486 “
OL489 “
OL495 Trying to inform F

There are several gaps in the series so far as Crete is concerned. The first is from the end of the four-digit OL series (OL2170 of 7 May) until the first of the OL1/302 series of 13 May. While OL messages concerning Crete continued to be sent to Cairo (seven of them, although 284 was later sent to Crete as 304), there is no indication that they were repeated to Crete. This may have prompted the re-numbering system which indicated those OL messages which had been repeated to Freyberg. The place in this sequence of OL2166 of 6 May (the AOC Crete was Group Captain Beamish, who received the Ultra signals) is unclear. What prompted it? Likewise puzzling is the note on file HW14/15 dated 23 May giving details of new arrangements by which messages were to be sent to Freyberg, which suggests that the previous arrangements were deficient.

The second gap is between 16 and 19 May, when a further nine OL messages concerning Crete were apparently not repeated to Freyberg. Perhaps the most extraordinary gap is between 19 May (OL14/375) and 21 May (OL15/389) - the battle having begun on 20 May. There are further OLs apparently not sent to Freyberg on 21,22 and 23 May - but see the list above from HW20/1, which complicates matters.

While it is arguable that some of these messages need not have gone to Crete (eg OL353 re aircraft recognition signals), it is impossible to conclude from this analysis either that Freyberg was sent all the OL messages which concerned Crete, or that all the messages which were sent were received by him.

Note also the examples (in **bold** type) of one message referring to one or more earlier messages, which suggests that there was some expectation at Bletchley Park that messages were being kept despite the order that they be destroyed after having been read. Were the order to have been obeyed, it would have been very difficult for readers of the later messages to recall the contents of the earlier.

Note also that despite the mention of gliders in OLs 262 and 319, these messages were evidently not passed to Crete; and there was no mention of gliders in the appreciation of 12 May, while the comprehensive intelligence assessment in OL1/302 noted only that 'further sorties [after the first day] would probably include aircraft towing gliders'.

Appendix C: Notes on some works dealing with the Battle of Crete (in date order of publication)

B H Liddell Hart: *The Other Side of the Hill: Germany's Generals, Their Rise and Fall, with Their Own Account of Military Events 1939-45*; revised and enlarged edition; London, 1951

Work that Liddell Hart was doing after the war brought him into contact with former German generals and admirals and 'in the course of many discussions with them I was able to gather their evidence on the events of the war before memories had begun to fade or become increasingly coloured by after-thoughts'. (7)

One of his subjects was Student, some of whose comments about Crete appear in Davin and Stewart (see below). He confirmed that sea reinforcement 'had been intended originally, but the only sea transport available was a number of Greek caiques'. These were nonetheless intended to carry 'the heavier arms for the expedition - anti-aircraft and anti-tank guns, the artillery and some tanks - together with two battalions of the 5th Mountain Division...our operations on land, in Crete, were much handicapped by the absence of the heavier weapons on which we had reckoned'. (239-40)

Student claimed also (241) that had he known that the Allies on Crete had a manual on defence against parachute troops, which included important parts of German operation orders for an earlier attack in Holland and which had been captured after the invasion, he would have altered his tactics. Specifically:

Planning the attack, at the beginning of May, I had at first the idea of dropping the paratroops south of Maleme and Heraklion, or the whole mass south and south-west of Maleme only, and making an ordinary ground attack on the airfield - with the help of the air force. There were large plateaux suitable for dropping zones 'outside' the enemy. This method would have been employed by me had I known of the British defence booklet.

He confirmed what has since become accepted on the Allied side (241):

If the enemy had made an organised counter-attack during this night [May 20th] or the morning of May 21st, he would probably have succeeded in routing the much battered and exhausted remnants of the Assault Regiment - especially as these were badly handicapped by shortage of ammunition.

While some of Student's views may have been 'coloured by after-thoughts', they should nonetheless be taken into account in any objective study of the battle.

D M Davin: *Crete*; Wellington and London, 1953; a volume in the Official History of New Zealand in the Second World War.

This is still the classic account of the battle, admirably thorough and balanced, and including excellent maps. The author was helped by having access to some German records concerning the battle. It is now on-line at <http://nzetc.victoria.ac.nz/tm/scholarly/tei-WH2Cret.html>

New Zealand Electronic Text Centre (nzetc.victoria.ac.nz): online copies of the following three volumes, with relevant references to the training the Second Echelon of the Second New Zealand Expeditionary Force undertook in the United Kingdom:

Documents Relating to New Zealand's Participation in the Second World War 1939-45, Vol 1, 1949; at pp 133-4 is Freyberg's appreciation of 4 July 1940 of a German invasion of England, including the possible use of 10-15,000 paratroops in one day and thus the need for the New Zealand troops to be fully mobile; at p 141 is Freyberg's letter of 15 August 1940 concerning the exercises undertaken by the Echelon, including how to repel a seaborne invasion.

Angus Ross: *23 Battalion*, 1959; at pp. 17-19 is an account of how the New Zealanders were in 1940 the front-line troops in the Maidstone-Chatham-Faversham area to deal with enemy airborne or parachute troops;

W G McClymont: *To Greece*, 1959; at p 38 are details of how in September 1940, with the Battle of Britain at its height, 7 NZ Brigade was to deal with airborne landings in the Chatham-Maidstone area, while 5 Brigade would counter-attack towards Dover and Folkestone.

von der Heydte, Baron: *Daedalus Returned*; Crete 1941, London 1958

The author was a captain in the Third Parachute Regiment and the commander of 1 Battalion which came down near Galatas. The book is a fascinating account of the battle around Galatas from the German side, including the difficulties faced because of lack of food and ammunition, and the continual fear of a counter-attack.

I.McD. G. Stewart: *The Struggle for Crete 20 May-1 June 1941*, London, 1966

Stewart used Davin's material but also had access to more German material. He speculates that the source of the intelligence received about the battle was Admiral Wilhelm Canaris, then the Chief of the Abwehr, the German military intelligence service. This was a belief widely held at the time - see Freyberg 276, footnote.

Just as Beavor made much of his erroneous belief that Freyberg was obsessed with sea landings (see below), Stewart returns again and again to his belief that Freyberg was convinced that 'troop-carriers would be able to crash-land in open country'. That the basis for Freyberg's conviction is not made clear does not prevent Stewart from referring to it on no fewer than nine occasions (index p 508). By troop-carriers, Stewart means wheeled aircraft. It does not seem to occur to Stewart that Freyberg was quite right: the troop-carriers were called gliders, and they did crash-land in open country, at great cost to the Germans.

David Hunt: *A Don At War*, London, 1966

The author was an intelligence officer on Crete but beyond recording that he interrogated German prisoners and studied captured enemy documents, he has disappointingly little to say.

Ronald Lewin: *Ultra Goes to War: The Secret Story* (London 1978) While this is a good general account of the Ultra material which was available - and the use to which it was put, or not put - at various stages of the War, it is depressingly inaccurate on the battle of Crete. Thus Freyberg is said to have had on 1 May 1941 an appreciation which 'provided him with a detailed picture of Student's intentions and capability', the appreciation having been made by the Joint Intelligence Committee based on Ultra material. Each of these three assertions is wrong. It is not clear what access Lewin had to Ultra signals. In the bibliography, he says that 'The Ultra signals in the Public Record Office at Kew are to be found in file DEF/E3' (379). The reference should in fact be DEF/E3, and there are now more than 1000 files under that reference. While there is Ultra material there referring to Crete, he does not quote any of it.

As a further complication to the question of Freyberg's understanding of the source of Ultra, Lewin claims that he was 'not indoctrinated' and that 'this would explain why during the later desert campaigns Freyberg sometimes asked Montgomery's Chief Intelligence Officer Bill Williams "What's happened to that Foreign Office chap we had working in Berlin?"' (158, and footnote 2 on 367, where the source is given as 'personal to author from Williams').

F H Hinsley et al: *British Intelligence in the Second World War: Its Influence on Strategy and Operations*, Vol 1; London; 1979

The authors of this work were given apparently given access to all the Ultra material (including the decrypts), which was then closed again. The OL series later became available in the Public Record Office (now the National Archives), as did the decrypts somewhat later again. As Bennett says (II 62-3), while it is indispensable as a work of reference, the book is 'too compressed and too indifferent to literary style to make easy reading even for scholars'; and 'the chief impression it leaves on the mind is that of massive weight and often tedious detail amid which breadth of vision and overview become lost to sight'. The early chapters in particular are very hard going. The section dealing with Crete is discussed in the body of this piece.

Geoffrey Cox: *A Tale of Two Battles*, London, 1987

Cox was present at both battles, the first of which was Crete, of which he gives an excellent short account. He identifies the Australian Special Wireless Section, to and from which he carried messages. His claims that 'Freyberg went into this battle very fully informed, through Ultra, about the strength and plans of his enemy' (p 106); that 'Ultra had made it plain that there would be no attack from the sea on D Day'; and that the failure to garrison the western side of the Tavronitis River was 'a manifest tactical blunder' are all wrong, but he had little to go on at that point beyond Hinsley and some early misleading accounts of Ultra. He does however very shrewdly infer that Freyberg could not move the Greek troops from Kastelli Kisamos because of the restrictions placed upon him by possession of the Ultra material. As against this he does not consider the consequences of the Germans landing at Kastelli Kisamos unopposed.

Late in his life Cox composed a paper commenting on two aspects of Beevor's book. He argued that Beevor's claim that the seaborne contingent was only a minor element was not borne out by the figures in OL1/302 which showed that '12,000 men would be landed by air, and 8000 by sea' - the last figure hardly being a minor element. The figures in that message were in fact 12,000 and 10,000 but Cox's point stands. He also considered Beevor's claim that Freyberg had misread OL15/389 as to the likelihood of an imminent seaborne attack in the Canea area (see

above in the body of this piece). While conceding that Beevor was probably right, Cox argues that the misreading did not matter as there was nothing in the signal to cause Freyberg to modify the plan for the counter-attack on Maleme, and he had made his dispositions to deal with the threat from the sea. 'Freyberg, Crete, and the Beevor Fallacies' by Sir Geoffrey Cox, 31 March 1999. My copy came from the Alexander Turnbull Library in Wellington, NZ, with a note saying that it came from 'papers relating to DNB entry for Lord Freyberg MS-Papers-8181-145'.

Later in the war, Cox was one of Freyberg's specialist intelligence officers. Another was the New Zealand historian of the Crete battle, Dan Davin; for an account of his duties, see Keith Ovenden: *A Fighting Withdrawal: The Life of Dan Davin*, Oxford, OUP, 1996, pp 177-191

Ralph Bennett: *Ultra and Mediterranean Strategy*; London, 1989 (referred to in the text as UMS)

Bennett had worked in Hut 3 at Bletchley Park. This was the first of his works to deal with Ultra and was evidently written in the first flush of enthusiasm after getting access to the OL series. It needs to be balanced by his later more sober works - see below.

Laurie Barber and John Tonkin-Covell: *Freyberg: Churchill's Salamander*, London, 1990

Chapters 2 and 3 are about the battle of Crete. The authors were at a disadvantage in that they had to rely mainly on Hinsley for information on Ultra, although they did have access (via microfilm) to some of the OL material then in the Public Record Office. Freyberg is said to have been kept in ignorance about the true source of the Ultra material. They were evidently not aware of the four-number OL series, nor of the OL1/ etc series, and attempt to make the source of OL302 the decrypt CX/JQ911, as quoted by Hinsley (numbered wrongly, as noted above), even though they were a week apart. There is also some misinterpretation of later OL messages, so that OL404 is said to have 'contained a specific instruction that General Freyberg was not to be informed...', but that later 'it was decided that OL404 and other messages should be passed to General Freyberg. This decision is revealed in OL411...' (89). A 'Churchillian hand' is suspected of having intervened (90). As Appendix B shows, the delay was due to more mundane reasons.

Paul Freyberg: *Bernard Freyberg, VC; Soldier of Two Nations*, London, 1991

This is General Freyberg's biography by his son. He is convincing on most aspects of his father's time on Crete: Wavell telling him about the real nature of Ultra and the limitations on its use; Group Captain Beamish, the senior RAF officer on the island and thus part of Creforce Headquarters, being the Ultra liaison officer there (he was the recipient of Ultra material before Freyberg arrived and 'had a wireless set powerful enough to communicate directly with Bletchley Park'); how the General was a prisoner of Ultra, being unable to act on the information unless it was confirmed by another means; and - the only historian to reveal this, to my knowledge - the inclusion, at Freyberg's suggestion, in the subsequent Salisbury-Jones Court of Inquiry report, of the existence of an alternative plan of attack (that is, his) on Maleme.

There are two major errors, the first leading to the second. The first concerns the timing and the manner of Ultra material arriving on the island regarding the planned German attack. Using unit war diaries, Davin has the following sequence at pp 77-8:

‘on 30 April the war diaries of 5 Brigade, HQ NZA, and 23 Battalion all record information from Creforce that the enemy was assembling troop-carriers, bombers and gliders for the invasion of Crete and that this invasion might be expected for 1 or 2 May. A message from General Freyberg to the troops on 1 May also warned them to “be ready for immediate action”...;

‘A Creforce instruction (4 May) passed on by Division (5 May) indicated that the attack would be by both land and sea, and a similar instruction (4 May) from 5 Brigade emphasized the airborne aspect of the coming assault;

‘The attack by this time was expected for any day between 17 and 19 May by an intelligence report communicated to battalions on the 16th....airborne force of some 25,000 to 35,00 men and a seaborne force of 10,000 men..the objectives of the enemy would be Maleme, Canea, Retimo and the Aghya valley’.

The first message seems to have derived from Wavell’s conversation with General Freyberg on 30 April (Davin p 40; Freyberg pp 267-8).

The second seems to have been derived from the War Cabinet Joint Intelligence Committee Appreciation (Freyberg p 271) which General Freyberg received on 1 May.

It is only with the third message that the influence of Ultra becomes apparent. This was circulated on 16 May and thus derived from OL1/302 sent on 13 May. Bennett says (UMS 57) that what was circulated ‘reads alarmingly like a close paraphrase of OL302’ - alarming because if a copy of it fell into German hands, the resemblance might be noted and the Ultra secret revealed.

Against this sequence of events, Paul Freyberg’s account makes no sense. He has an appreciation being issued to ‘all commanders down to battalion level’ on 12 May and claims that it was based on OL302 which ‘may have arrived as early as 6 May...’ but ‘probably did not reach Crete until some time on 7 May’. (276-7). But as Appendix B shows, the OL three-digit numbering system has OL302 being sent on 13 May, and the sequence of numbers before and after it confirms the date. (Many of the OLs around this time did not concern Crete). He also has it being repeated to Heliopolis on 13 May - ‘Freyberg had already been informed direct’. Also according to Paul Freyberg, Dorman-Smith brought with him to Crete on 11 May ‘updated’ Ultra intelligence. It is not easy to work out what this might have been. General Freyberg already had OL2167 and OL2168 which had been sent to him on 6 and 7 May, and OL2170 of 7 May, and only a further four OLs had been sent between that date and 11 May, when Dorman-Smith left Cairo. They are listed in Appendix B. None materially alters OL2167. It may be that this is more muddle on who had access to Ultra material and who did not.

Paul Freyberg, who seems to have been unaware of the four digit OLs, claims that updated intelligence ‘was incorporated into an Appreciation that was issued next day by the BGS [Brigadier General Staff] to all commanders down to battalion level.’ He reproduces General Freyberg’s copy at 283-4 (it is reproduced in the narrative above). This too causes problems. An analysis of the appreciation shows that a good deal of the detail is inconsistent with OL2170 - e.g. ships will not commence to arrive until day 3 according to the appreciation but on the second day according to OL2170 (itself an estimate - OL2167 and OL1/302 were not specific). This suggested a greater initial attack from the air. The circulation on 16 May of the intelligence report must have caused confusion among the recipients of the appreciation, as

the two documents were inconsistent - e.g. the appreciation had the first sortie of parachutists at each aerodrome numbering about 500, but the intelligence report of 16 May had 'some 12,000' in the 'parachute landing contingent'.

Clearly the appreciation, like OL2170 and OL1/302, was the work of intelligence staff rather than being based wholly or even largely on Ultra material.

There is a further puzzling aspect. Paul Freyberg makes no mention of the intelligence report circulated on 16 May, and Davin is silent on the appreciation of 12 May. Stewart seems to be the only historian to have discussed both documents, having obtained a copy of the appreciation from Davin's papers, thus deepening further the mystery of why Davin did not mention it. Stewart noted at 103 - very acutely and very accurately - that there was

a curious inconsistency about this appreciation, a combination of correct and meticulous detail with one or two considerable errors and one glaring omission. The result might be taken to suggest that military secrets leaking from somewhere very close to the inner direction of the war in Germany were becoming distorted and misunderstood in the process of their interpretation in London.

Paul Freyberg's second major error follows from the first. He has it that once his father received OL1/302, he realised that he would need to alter his troop formations to allow for the greater initial attack from the air. This was the alternative plan of attack on Maleme mentioned in the Salisbury-Jones Report. Wavell refused permission for such a move, as it would have been undertaken solely on the basis of Ultra information and thus risked betraying Ultra. As soon as General Freyberg received this decision 'he knew for certain that Crete would be lost' (286). It turned out that contrary to OL2170 and the Dorman-Smith material, the first flotilla of ships was in fact originally due to reach Crete on the evening of the first day of the attack, and the second group was to arrive near Heraklion the following day. These plans were postponed by one day 'shortly before the start of the attack' because of concerns that the landing-places might not be in German hands on the first day. (Schreiber 538-9). The first flotilla did in fact approach Crete on the evening of 21 May, only to meet the Royal Navy. The second flotilla did not get near Crete and retreated to Piraeus after coming into contact with the Royal Navy early the following day. Had they come by day under Luftwaffe protection, they would almost certainly have landed.

Paul Freyberg mentions only the first of these two flotillas, dismissing it as 'another distraction' (305).

The book does not discuss Bennett's 1989 comments on the battle and on Ultra. As Beevor's book (see below) mentions Freyberg's, it was presumably published after Freyberg's. Freyberg had however crossed swords with Beevor in the correspondence columns of *The Times* on 4 and 9 May 1991, and had another letter in *The Spectator* of 10 May 1991. Bennett accepts most of Freyberg's account - see below.

Antony Beevor: *Crete: The Battle and the Resistance*; London, 1991

This is well-written but marred by Beevor's disparaging remarks about Freyberg and his alleged obsession with a seaborne attack. Bennett disposes of the second, but neither he nor Beevor mention the continuing concern in London about a seaborne attack even *after* the two German flotillas had been destroyed or dispersed by the Royal Navy on the night of 21-22 May.

Thus after the loss of several of his ships, and with the remainder short of fuel and ammunition, the Commander-in-Chief, Mediterranean, Admiral Cunningham, decided on 23 May to withdraw his forces to Alexandria, signalling to the Admiralty that 'losses were so heavy that there could be no justification for continuing the attempt to prevent invasion by sea'. In reply, the Admiralty 'stressed once more the importance of the battle and said it was vital that the sea invasion should be held off for another day or two to give the Army a chance of dealing with the enemy landed by air'. (Davin 275-6) Even as late as 25 May, when the situation on the island was in fact irretrievable, Churchill 'thought that Admiral Cunningham should be prepared to take greater risks and that if the seaborne landing could be held off for another three days the battle would be won'. Wavell was informed that 'the Navy and RAF must take whatever risks were necessary to prevent reinforcement by sea, whether it was attempted by night or day...considerable losses might be probable...but they would have to be accepted'. (Davin 328-9) No doubt some indication of this was passed to Freyberg by Wavell.

Beevor does not speak of Churchill's obsession, nor the Admiralty's obsession, with a seaborne attack.

Beevor disparages Freyberg by the facile tactic of quoting only adverse comments about him, and omitting all mention of the praise he attracted at the time of Crete and later - from among others Churchill and Montgomery (and Rommel) - and his promotions and later appointments. One of the sources of the adverse comments was Brigadier Eric Dorman-Smith, or to give him his full name, Eric Edward Dorman Dorman-Smith, who on the basis of one encounter with Freyberg in May 1940, described him as 'Bear of Little Brain', drawing upon AA Milne. Dorman-Smith was at that time Acting Director of Operations on Wavell's staff. Later he was on Auchinleck's staff and acting major-general; neither survived Montgomery's arrival in North Africa, and Dorman-Smith was reduced to his substantive rank of colonel. In 1944 he was given command of a brigade in Italy, but was again dismissed. On his return home to Ireland, he changed his name to O'Gowan, had to be dissuaded from taking libel proceedings against Churchill over his History of the Second World War, and in the mid-fifties allowed his property to be used by the IRA for training purposes. None of this is mentioned by Beevor.

For further detail of Dorman-Smith see

Lavinia Greacen, 'Smith, Eric Edward Dorman Dorman- (1895-1969)', *Oxford Dictionary of National Biography*, Oxford University Press, 2004; online edn, May 2008 [<http://www.oxforddnb.com.ezproxy.londonlibrary.co.uk/view/article/63739>, accessed 14 July 2015]

Beevor also errs regarding the Ultra Liaison Officer on Crete, who was Group Captain Beamish (see under Paul Freyberg above). Captain Micky Sandford is referred to on page 161 as 'the Australian intelligence officer who decoded each Ultra signal, showing the message to Freyberg and then destroying it'. In Appendix C however, in a more detailed discussion about the Ultra signals, Sandford is at page 349 wrongly identified as Captain Sandover. There was also on Crete at the time a Major Ray Sandover, commanding the 2/11th Australian battalion, and the two are distinguished in Beevor's index at page 381.

The Sandford/Sandover confusion was furthered by John Keegan, normally a careful scholar, in his chapter on Crete in *Intelligence in War* (London, 2003 - see below). At page 192, he has the Ultra material being handled by Captain Sandover, using Beevor's page 349 as his source. In the index at page 438, he refers to him as Captain T C Sandover, but also correctly refers to Major R L Sandover as a battalion commander.

In his *Freyberg's War* (Auckland, 2005), Matthew Wright describes at 56-7 most of the Enigma material being decrypted 'in RAF headquarters' by Captain M Sandford, not otherwise identified.

Sandford deserves to be better remembered. Alastair Wallace Sandford was born in Adelaide in 1916, the son of Sir Wallace Sandford. He studied law at Oxford, where he edited *New Oxford Poetry* 1936. He described himself as a barrister-at-law when he enlisted at Wayville, South Australia in 1941. There he was found to be asthmatic and thus not fit for active service, but fit for 'special selected jobs only'. He was posted as Lieutenant to Australian Headquarters 1st Aust Corps as Intelligence Officer in 1941, and served in Greece, Crete, the Middle East and the Pacific, being promoted to Lieutenant-Colonel in 1943. He was Mentioned in Dispatches in 1942 for 'gallant and distinguished services in the Middle East', and awarded the US Medal of Freedom in 1949 'for distinguished services in the cause of the Allies'. Sandford was at some time Australian Commanding Officer of the Central Bureau, a joint American-Australian SIGINT organisation created in 1942, based initially in Melbourne and then in Brisbane, under US Army control. He was discharged in the UK in 1946, later lived in Italy and died in his 50s. Sources: National Archives of Australia, bar codes 6389615 service file (imaged) and 7764659 re Central Bureau (imaged); Adelaide *Advertiser* 13 October 1937 at nla.gov.au/nla.news-article36378188; and www.ozatwar.com/sigint/2013_aug_cbic.pdf

Geoffrey St Vincent Ballard: *On Ultra Active Service: The Story of Australia's Signal Intelligence Operations during World War II*, Melbourne, 1991

Chapter 8 of this good informal history is about the experience in Crete of the 4 Australian Special Wireless Section, to which the then Lt Sandford was attached. He was not, however, in charge of the Section, as Cox claimed (p 82), that role being filled by Captain Jack Ryan. It is clear from this account that Sandford was not the Ultra liaison officer on Crete.

Sir Harry Hinsley: The Influence of ULTRA in the Second World War, lecture at Cambridge, UK, 19 October 1993, <http://www.cix.co.uk/-klockstone/hinsley.htm> (referred to in the text as 1993)

Ralph Bennett: *Behind the Battle: Intelligence in the War with Germany 1939-1945*, London, 1994 (referred to in the text as BB)

Appendix II concerns Crete, and Bennett there briefly makes the same points about Freyberg as he does in greater detail in his 1996 book (see below).

Gerhard Schreiber et al: *Germany and the Second World War*, Vol 3 The Mediterranean, South-East Europe, and North Africa 1939-1941, Oxford, 1995

A scholarly and fascinating account, using mainly German documents, of the battle from the German side. So far as Ultra is concerned, it relies on Hinsley, and it wrongly states that Freyberg deployed his troops 'as a result of information provided by the British secret service'.

Ralph Bennett: *Intelligence Investigations: How Ultra Changed History*; London, 1996 (referred to in the text as II)

Chapter 10 is devoted to Crete. Bennett is more realistic here about the limitations of Ultra and of those producing it in May 1941. He convincingly defends Freyberg against Beevor's charges that he was obsessed about an attack from the sea.

Hugh Sebag-Montefiore: *Enigma: The Battle for the Code*, London, 2001

This very scholarly account is devoted primarily to Naval Enigma, and to the contribution made to breaking the code by ordinary British seaman who risked their lives in capturing Enigma codebooks and apparatus from German U-boats and trawlers. It is thus little concerned with Crete, but as noted in the text the author does provide evidence of one message from London to Freyberg, based on Ultra material, being intercepted by the Germans in May 1941; and he also provides examples of Ultra intercepts being used without 'cover', thus risking its betrayal to the Germans.

John Keegan: *Intelligence in War: Knowledge of the Enemy from Napoleon to Al-Qaeda* London, 2003

Chapter 5 is about Crete, and begins with a clear and useful summary of the Enigma machine. The description of the Ultra material, as noted, is unfortunately wrong. Keegan goes on to suggest that there was an important omission: it 'did not specify which units were to land where'. Had it done so, 'Freyberg might have conducted the battle differently' by concentrating more troops at Maleme. It is not a persuasive argument. He is also in error in writing (191) of the arrival in Crete from Greece of the Allied troops 'in early May'. In fact most if not all had arrived late in April.

Frank Birch: *The Official History of British Sigint 1914-1945* Vol 1 Part 1, Milton Keynes, 2004

This volume, edited by John Jackson, proclaims itself as the official history, and the author proclaims himself as the official historian. It is also described as Volume 3 of the Bletchley Archive. Much of it is impenetrable, being a combination of a badly-written jargon-filled account of the interplay of various bureaucratic and executive bodies, and an excessively technical description of the workings of signals intelligence. As indicators of its complexity, there are just over eight pages of abbreviations, and a 16-page glossary. It barely mentions Greece and Crete. Some relevant and comprehensible information has been worked into the narrative above.

David Reynolds: The Ultra Secret and Churchill's War Memoirs; *Intelligence and National Security* 20 (2) 2005, pp 209-224

Leo Tolstoy: *War and Peace* Vintage edition, London 2009

Christopher Grey: The Making of Bletchley Park and Signals Intelligence 1939-42; *Intelligence and National Security* 28 (6) 2013, pp 785-807

Max Hastings: *The Secret War: Spies, Codes and Guerrillas 1939-1945*, London 2015

A very well-written account, with a welcome hard-nosed attitude towards Ultra; it was he who uncovered the report (CX/MSS/SI at Archives, reference HW13/52) on the Y service of the German Air Force, containing a number of allied messages intercepted by the Germans; he refers to it on p 453 thus:

On 26 June, a long report from Bletchley drew War Office attention to British operational signals decrypted by the Germans during the Cretan debacle, some of them detailing aircraft and warship movements.

While the description of the contents of the report is accurate, there is no indication at least on this file that it was sent to the War Office. In any event, given that most the German intercepts were of RAF signals, a better destination would have been the Air Ministry. In his brief discussion of Crete, the author shrewdly confines himself to quoting from OL2167 of 6 May (p 84) and not the succeeding intelligence assessments.

New Zealand National Library: Various reports of events in Crete, May 1941; on line at http://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE18363036; and Crete - Historical papers, orders, etc. May 1941; on line at http://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE21909396

The first contains a report by Group Captain Beamish to General Freyberg on the RAF in Crete, which includes (at file 39) as an appendix a report by the RAF Chief Signals Officer. He records (perhaps indiscreetly) at paragraph 13 that 'On 26th April, a Type X machine was received and put into operation'. Type X machines were used to encrypt Ultra material in the UK before it was sent abroad, and at the destinations Type X machines were used to decrypt it. Curiously, the report does not mention the Australian unit (and Ballard - see above - in turn does not mention the RAF) although they appear to have been stationed very close to each other on Crete.

The second contains (at file 18) 'Notes of a Conference at Force HQ on 12 May 1941', perhaps after the meeting with Dorman-Smith. One of the matters considered was 'the possibility of glider landings on the beaches and small areas of flat ground'. This was a perceptive comment, gliders not being mentioned in the Ultra material until OL1/302 of the following day.

