

# The Military Survey (Geographic) Branch

Royal Engineers Association

Autumn Newsletter 2023 – issue 89

## The Doppler Geociever Fix of Rockall

by Ian Thurgate



*Rockall - showing the antenna and rigged shelter and Hall's Ledge.  
The line of white water in the left middle distance is Hale's Reef*

In July 1977 towards the end of my first 512 STRE tour, PO Dave Carey and I were tasked with carrying out a Doppler Geociever fix of Rockall, the granite outcrop in the North Atlantic best known as being one of the sea areas named in the nightly shipping forecasts. I knew Dave, a Royal Navy Hydrographer, from our time doing Geociever fixes on the major survey control points in Botswana. During that work Dave sat one evening and pondered aloud “What am I, a sailor, doing sitting in the middle of the (Kalahari) desert?!”. Little did I know that, 8 months later, the boot would well and truly be on the other foot, and I would find myself sitting on a speck of rock in the middle of the North Atlantic!

Rockall is a pyramid-shaped granite outcrop approximately 60 feet/18 metres square at sea level rising about 65 feet/20 metres. It has a narrow ‘L’ shaped ledge, “Hall’s Ledge”, about 8 feet/2.5 metres below the top. It lies 200 nautical miles west of North Uist in the Outer Hebrides.

Rockall's existence had been known for many years and whilst UK, Ireland and Iceland felt it was theirs, no-one had really been too bothered about legalising a claim. That changed when thoughts of oil and natural gas exploration, and sub-terranean mining became a possibility. The island was formally claimed as part of the UK in 1955 (coincidentally by a landing party from the Royal Navy survey ship, HMS Vidal) and incorporated into the UK by Act of Parliament in 1972.

The small team of Dave and I were tasked to: - set-up the Geociever equipment on the rock; carry out the necessary 'observations' (track 40 different satellite passes) recording met readings; and also take a bearing and distance to Hales Reef, a few hundred metres away from the rock itself.

We didn't anticipate any major problems in doing the actual satellite tracking: the equipment could generally operate itself, although sometimes the operator had to manually tune in the receiver to the satellite signal. The concerns were how to protect the equipment against elements, and how to maintain power to the equipment for the 3 to 4 days it would be on the rock. The solution was to use a large wooden crate which we lined with tarred paper to give protection against the wet, and a bank of 12v 75ah lead acid batteries which were fixed on the floor of the crate, with the equipment sat on a shelf above them.

Measuring a bearing and distance to Hales Reef was going to be a challenge – we weren't sure that we would be able to take sun or star observations to determine a bearing nor did we have anything to measure the distance to a point we could not set foot on, let alone 'man'. Luckily, Norman Leppard, Head of Survey 6 at the Directorate of Military Survey, contacted the Royal Artillery and persuaded them to loan us a PIMS gyro-theodolite and a 2-metre rangefinder. An hour or two's familiarisation and training at Larkhill, and we were ready to go!

Whilst we were 'ready to go', getting there was the next job. Again, Norman had come up trumps! With a Land Rover and trailer on loan from 42 Regiment we made our way to HMS Gannet at Prestwick airport. From there we flew by Sea King helicopter of 819 Naval Air Squadron, to RFA Olwen, a Royal Fleet Auxiliary vessel, and sailed out to Rockall sea area.

Early the following morning we boarded the helicopter to have a quick recce of the island and get a feel for how we might get onto it. It was still dark and so we searched using the helicopter's radar..... We found lots of targets - it was quite amazing to see the number of fishing boats there - but we couldn't find Rockall! At first light we tried again and soon found it.

We had been given strict safety instructions from the ship's captain, who had ultimate responsibility for us. These included: wearing rubber immersion suits and life jackets from the time we boarded the helicopter on the ship until we set foot back on board; there would be no less than two people on the rock at any one time; the ship would remain in visual contact with the island; the helicopter would remain on the flight deck whilst people were on the rock - albeit engines off; a radio link between us and the ship would be maintained. The Captain would not allow us to remain on the rock overnight and we would vacate it whenever instructed to by the ship.

Dave and I were winched on to the rock on the first flight. Our first action was to loop a thick rope over the uppermost part of the rock that we could then rope ourselves onto, to prevent us going into the water should we slip. The equipment came over on the next two loads, underslung from the aircraft. The original plan was to site the antenna next to a navigation beacon that had been installed on the rock by 39 Engineer Regiment the previous year, but we found that, whilst the lamp outer casing was still in place, the lamp itself and the glazing of the main casing had disappeared. We therefore set up the antenna within the casing and roped it down to the framework. The rest of the equipment was sited, in its crate, on Hall's Ledge. We set the equipment up and then with the aid of banderols, a tarpaulin, and more rope, fashioned a shelter for the equipment crate and ourselves.

After 3 days we had recorded 42 seemingly good 'passes' and so we stripped out the equipment and did the final tasking of measuring the bearing and distance to Hales Reef. The PIMS performed well but we found focusing two split images of water breaking over the reef impossible. Luckily, the Navy stepped in, and the Sea King hovered over the reef, lowered one of its sonar buoys and we observed that.



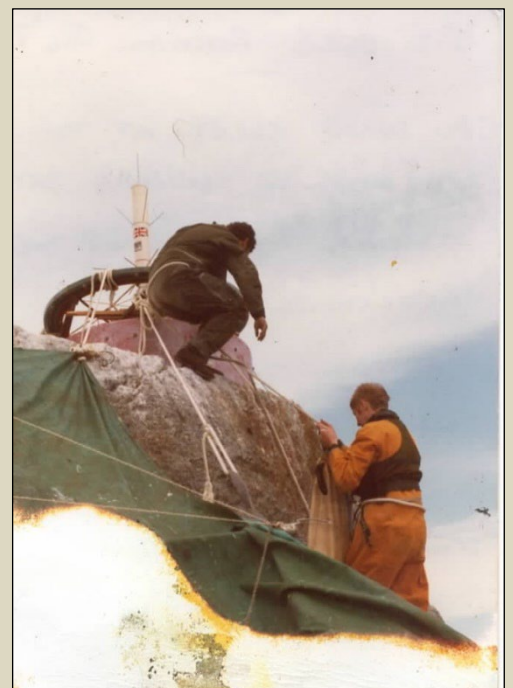
*Camping on the rock. Everything was, literally, tied down! (Water damage to the top of the photo.)*

Norman Leppard had deservedly joined us on the rock for the strip out of the equipment. With everything cleared, the three of us stood up on the highest part to refit the cover on the navigation beacon. As we did so, there was the very loud and recognisable sound of a wave crashing and we instinctively gripped on to the beacon frame. We were covered in spray and, looking down, saw Hall's Ledge awash! Norman's flight helmet, which had been sat atop of a pick helve wedged in a crevice, was spotted floating off in the direction of the reef. We all had a very sobering thought, "What if that had that happened whilst we were working on the ledge.... Or, worse, if we'd stayed on the rock overnight...!" So, whilst we were very pleased with a job well done, it was a slightly subdued party that flew back to the ship.



*The author "suited and booted" on the rock.*

*Dave Carey (left) and Norman Leppard starting the strip-out of equipment (water damage of the photo at the bottom)*







*Flying back to RFA Olwen on the Sea King (water damage to the top of the photograph)*



*An overhead view of Rockall – taken from the door of a Sea King helicopter.*

Some years later I was looking through old 512 photos.... It seemed quite ironic that a lot of those I took on Rockall, but only those I took on Rockall, had been damaged..... by water!

## Frigg Field

We received the following comments from branch member Carl Calvert:

*I was very interested in Dr John (Paddy) Hughes article on Frigg Field.*

*After I finished my MSc in Geodesy at Oxford, I took over a project Norsnet which had been planned by Lt Col George Preiss. The project involved determining ED50 in the North Sea and Ron Bordley and I wrote a paper which won the Hydrographic Society Prize for Norsnet.*

*It involved Satellite Doppler observation on most of the North Sea Oil Platform and stations in Belgium, Holland, Denmark, and Norway over a five-day period of 24 hour obs.*

*Our determination led to a new transformation from OSGB36 to ED50.*

*The point of telling you this is to say that the biggest difficulty was on Frigg and an OS surveyor (Bob Fenner) had to relate the original platform PGM to the new one which was on a different level. Because our computations (PE) were about +/-metre in accuracy the transformations failed originally because of this, then unknown, fact on Frigg,*

*It is often the historical data and datums which are required to 'nail' new work onto the ground.*

*I was in Saudi (with a Military Visa) prior to Operation Granby and the above sentence proved true.*

*Yours aye*

*Carl*

Carl Calvert MA MSc PgDLaw FRICS CITP MBCS FRIN MInstRE MBCartoS  
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## Rockall

The *Editor* was interested to read Ian Thurgate's article above and what he found on first arriving on the Rock in July 1977.

I cast my mind back 50 years to the summer of 1973 when I was serving with TSS JARIC RAF Brampton and was given an overlapping pair of RAF photographs of Rockall and asked by the OC Major Hugh Woodrow to try and get some dimensions of the rock, including height above sea level?

The plan was for Sappers to install a Navigation Beacon on the 'Rock' and to enable this they needed to build a scaffolding 'Cradle' to be dropped on the top.

I cannot recall the full details of the operation, but the feedback was that they only had to make minor adjustments to the 'Cradle' on arrival, which was a pleasant surprise, with all things being considered!

*Noel Grimmett*

## Persia and Iraq Force (PAIForce)

### Chronology of Events

The chronology of events for the campaign in Iraq and Persia commences on 3 April 1941, when a coup d'état installed a pro-German government. Fearful for the security of British interests in Iraq (mainly oil supply), the U.K. Government instructed G.H.Q. India Command to send an expeditionary force to Basra. This had been planned for, as the U.K. were allowed to station troops in Basra under a treaty with Iraq. The initial force comprised two brigades from the 10<sup>th</sup> Indian Infantry Division, which secured Basra and drove up to Baghdad. On the approaches to Baghdad, the Indian brigades met an ad hoc force called 'Habforce', which had invaded Iraq from Palestine. Baghdad was entered by British troops on 31 May 1941, and an armistice signed.

On 8 June 1941, British forces invaded Syria to overthrow the Vichy French government in Syria and Lebanon. Elements of the 10<sup>th</sup> Indian Infantry Division and 'Habforce' were used in this campaign, together with Australian, Indian, and British troops from Palestine. The Vichy French surrendered on 12 July 1941.

On 26 August 1941, British forces invaded Persia, a sovereign country, in order to secure the country against German influence. The Persia premier agreed to a ceasefire on 28 August 1941, although some armed resistance continued. On 1 September 1941, British forces met up with Russian troops which had invaded Persia from the north.

Persia and Iraq were then garrisoned in order to open up a supply route to Russia and to guard against German invasion through the Caucasus mountains in early 1943. This threat quickly evaporated in mid-1943, so Persia and Iraq Command was gradually run down during the rest of the war.

The higher formations deployed in Persia and Iraq were 10<sup>th</sup> Army, III Corps and XXI Indian Corps.

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## **REPORT ON THE WORKING OF THE SURVEY SERVICE PAIFORCE OCTOBER 1942**

### Part 1 General

1. Colonel G P Heaney Deputy Director Survey, 10<sup>th</sup> Army arrived at GHQ Paiforce on 9 October and has been attached to GHQ to officiate as D Survey pending the arrival of Colonel Papworth. Since that date, the Survey Directorate has been functioning as such. A clerk attached from Survey Directorate 10<sup>th</sup> Army arrived a few days later, and Major C A K Wilson RE, DAD Survey, 10<sup>th</sup> Army arrived on 26 October to take over similar duties at GHQ.

#### 2. Organisation

The first task of the new Directorate has been the establishment of a properly organised Record Section. The move of 10<sup>th</sup> Army to Persia in August and its assumption of a mobile role had necessitated leaving a large number of records in Baghdad where changes of building and the impossibility of providing and adequate staff and supervision had resulted in considerable confusion. All records not immediately required by the 10<sup>th</sup> Army are being called in and will be stored in GHQ.

#### 3. Areas of Responsibility

No 2 and 4 Ind Fd Survey Coys IE and the Map Depots at Kermanshah and Tehran (when established) have been placed under orders of 10<sup>th</sup> Army. 10<sup>th</sup> Army has also been responsible for initiation of all survey work and mapping in the area bounded by: -

North; Lat 37° N from Long 45° E to 54° E  
East: Long 54° E from Lat 37° N to 32° N  
South and West; Lat 32° N from Long 54° E to 50° E  
thence to include sheets I-39 N, M; 1-38 R, Q, K, E; J-38 V.



4. Units

The formation of a map distribution unit eventually destined for 10<sup>th</sup> Army and consisting of HQ, Map Supply Section; 1 Corps Sub-Section and 5 Div Sub-Sections has been approved under W.E. ME/637/1 and W.O. Serial No. 49730 under title of 10 Ind Fd Survey HQ. This is the establishment approved by Mideast for “X” Ind Fd Survey HQ Coy less the Computation Section and Survey Park Section. As these two Sections are essentially GHQ rather than Army troops, application is being made for their formation and incorporation in No 1 Ind Fd Survey Corp.

5. Mobile Echelon 512 Fd Survey Coy RE left Baghdad on 26 on return to Mideast. Its place will be taken by two topo sections of 19 Fd Survey Coy RE now in Mideast.

6. Units are located as follows: -

Under Tenth Army	
2 Ind Fd Survey Coy IE	Tehran Persia
4 Ind Fd Survey Coy IE	Hamadan Persia
Under GHQ Paiforce	
1 Ind Fd Survey Coy IE	Baghdad Iraq
19 Fd Survey Coy RE	Ahwaz Persia
10 Ind Fd Survey HQ IE	Baghdad Iraq
1434 Flight RAF	Tehran Persia with a detachment in Mosul Iraq



*19 Topo Coy RE Journey to Ahwaz Persia (1,700 miles) – OC Major F Q Mansfield RE (photo – D P House)*

**Part II – TRIG CONTROL & SURVEYS**

5. Ground Surveys

Original and reconnaissance surveys on 1/250,000 scale are being carried out as under: -

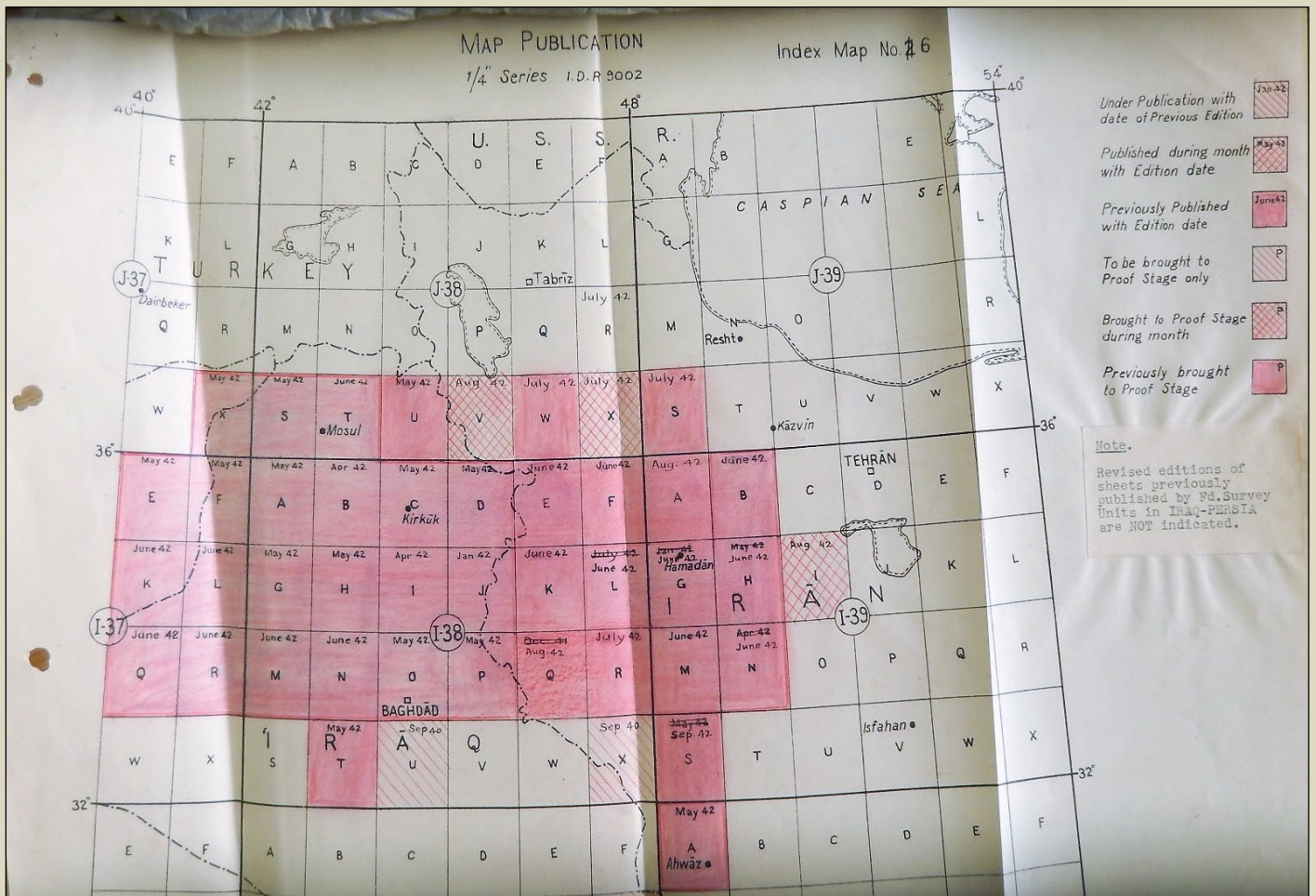
B (4) Section Lieut Ross I.E., in sheets I-39 J, P, U, V.

C (4) Section Capt Verma I.E., in sheets I-39 O, W, X.

Jemadar Abdul Hamid returned on 11 after completing a road reconnaissance survey from Takistan (J-39 T, P 80) to Tabriz.

## 6. Air Survey – Compilation and Groundwork

An Air Survey Detachment of 4 Ind Fd Survey Coy IE consisting of all available air surveyors from Indian Fd Survey Units and 19 Fd Survey Coy RE is working under Captain Evans RE assisted by Subedar Sen is employed on 1/25,000 air survey maps of defensive positions along the line Askaran – Milamas – Kangavara – Razan Pass. Work is proceeding satisfactorily but will take some months to complete. Jemadar Mohar Singh with 5 Air Surveyors are providing height control by ground methods for an air survey of the Gach-I-Sar area (J-39 V, H2418).



Index Map 1:250,000 Series IDR 9002 – Iraq and Persia.

## 7. Photography – 1434 Flight RAF

The Russians have refused permission to photograph the unsurveyed portions of sheets J-38 Q and R which are immediately North of the limit of the Russian area of NW Persia.

The weather has been steadily getting worse but about 800 square miles has now been photographed to provide “ground cover” of a large area between Bijar and Sain Quleh in sheets J-38 W, X, and I-39 F.

An area of about 100 square miles round Zenjan and 80 square miles round Tehran have also been photographed.

A detachment has moved to Mosul Iraq to photograph a large area astride the Ruwandiz gorge in J-38 U and the tie strips for this area have already been flown. The weather is, however, bad and snow has already appeared on the higher hills so it may not be possible to complete photography of the whole area before winter.

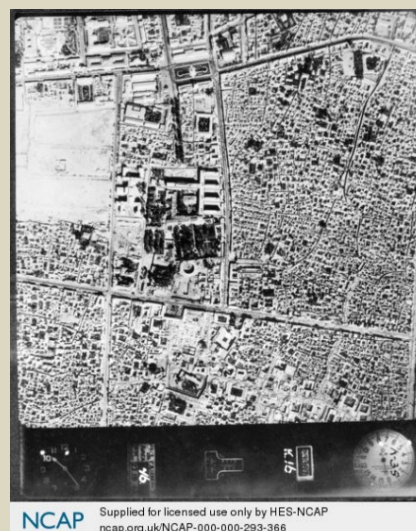
(1434 Flight RAF – after research there appears to be little information about 1434 Flight RAF other than it is a Photo Survey Flight and flying Bristol Blenheims? There is no reference to the flight in Wing Commander Jeffords MBE – RAF Squadrons. However, it does link directly to NCAP and in particular the photographic cover of Persia (Iran) Sortie 1434/0076 – dated 25 October 1942 – Scale 1:20,000.)



*Location: Ferdowsī, Khīābān-e; Tehran; Iran*  
*Coordinates (lat, lon): 35.681029, 51.422027*

*Sortie: 1434/0076*  
*Frame: K0016*

*Image type: Vertical*  
*Scale: 20,000*



## **REPORT ON THE WORKING OF THE SURVEY SERVICE PAIFORCE NOVEMBER 1942**

### **Part 1 General**

1. Colonel K M Papworth arrived on the 24 November and took over his duties as D D Survey Paiforce from the same date. Colonel G F Heaney D D Survey 10<sup>th</sup> Army will be remaining at GHQ until about the 12 December to allow Colonel Papworth to tour 10<sup>th</sup> Army area during the early part of December.

#### **2. Organisation**

The designation of the Head of the Survey Directorate, Paiforce has been given as D D Survey by the War Office and not D Survey. The work of sorting out records is now well advanced, and all records have been received from 10<sup>th</sup> Army.

#### **3. Units**

Authority has been granted for the disbandment of the following units: -

- H.Q. 1 Indian Field Survey I.E.
- H.Q. 2 Indian Field Survey I.E.
- H.Q. 4 Indian Field Survey I.E.
- D.D. Survey H.Q.

Their personnel go to No 10 Indian Fd Survey H.Q. which as explained last month will be a Map Distribution Unit. The remaining personnel will be formed into 2 Drawing Sections and 1 Survey Park Section on W.E. Ind/II/31/3 and 1 Computation Section on W.E. ME/637/1. These sections are formed as independent sub-units but, as they are not self-contained, will always be attached to other units as convenient for administration.

4. A exchange of Drawing Sections was effected between 19 Fd Survey Coy RE and 514 Corps Fd Survey Coy RE in Mideast in order to return sections to their rightful units. Lieut Mason RE with the section for 19 Fd Survey Coy RE arrived in Baghdad from Mideast on the 13 November and Lieut Ratzeburg EAE left for Mideast the following day with the section for 514 Corps Fd Survey Coy RE.

5. On the 13 November Lieuts Verbi EAE and Urry RE with 2 Topo sections of 19 Fd Survey Coy RE also arrived in Baghdad from Mideast and proceeded to Ahwaz by road on the 16 November. These topo sections which are being returned to 19 Fd Survey Coy RE are in replacement of the Mobile Echelon 512 Fd Survey Coy RE, which returned to Mideast last month.

6. 1434 Flight RAF has ceased work for Paiforce and is returning to Mideast.

7. **Units** are located as follows: -

Under GHQ Paiforce	
1 Ind Fd Survey Coy IE	Baghdad Iraq
19 Fd Survey Coy RE	Ahwaz Persia
10 Ind Fd Survey HQ IE	Baghdad Iraq

Under Tenth Army	
2 Ind Fd Survey Coy IE	Tehran Persia
4 Ind Fd Survey Coy IE	Hamadan Persia

Map Depots are located as under: -

Under GHQ Paiforce	
Baghdad	
Kirkuk	
Zubair	
Ahwaz	
Under Tenth Army	
Kermanshah	

A Map Depot will be established in Tehran as soon as arrangements are complete for the hiring of a suitable house.

8. **Personnel**

Of no particular relevance.

9. **Political**

Surveyors of 2 Ind Fd Survey Coy working on I-39-E have had some difficulty with the Russians who are operating the branch of the railway line from Tehran to Samnan. The Russians objected to our surveyors crossing the railway line and on one occasion arrested and locked up a small party for about 3 hours. The matter had been taken up by the British Military Attaché, Tehran.

## Part II – TRIG CONTROL & SURVEYS

1. **Units under GHQ Paiforce**

No 1 Ind Fd Survey Coy IE has carried out no field work or air survey during the month.  
No 19 Fd Survey Coy RE, no report.

2. **Units under 10<sup>th</sup> Army**

Owing to bad weather progress reports from 2 and 4 Ind Fd Survey Coys were delayed, and the progress given is based on estimates formed on the most recent reports dated 14 November from 3 Coy and on the 7 November from 4 Coy

3. **Climate and health**

The weather was favourable until about the 7 November. After then there was heavy rain which delayed field work. He health has been good.

4 to 7. Details of Ground Surveys were omitted.

8. **Air Survey – Compilation and Groundwork**

The Air Survey Group under Capt Evans RE assisted by Subadar Sen continues to make good progress on 1/25,000 air survey maps of defensive positions along the line Askaran – Milamas – Kangavar – Razan Pass. This work has been somewhat delayed by the necessity for returning 11 air surveyors who had been borrowed from 19 Coy and now have been returned to 514 C Fd Survey Coy RE Mideast. Their places will be taken in due course by men from the drawing section which has recently arrived from 514 C Fd Survey Coy RE.

9. **Photography – 1434 Flight RAF**

The detachment at Mosul photographed about  $\frac{3}{4}$  of the Ruwandiz area of 880 square miles before being withdrawn. Since early in the month the area has been covered in clouds, so it has been impossible to complete the whole area required. The eastern portion, which was of first priority has, however, been entirely covered.

Areas of 208 square miles near QUM (I-39-I) and 54 square miles near Sultanabad (I-39-H) were photographed at the request of A.A.P.I.U.

Since its arrival at Tehran in July 1434 Flight has photographed upwards of 5,000 square miles in N W Persia and Iraq. Now that the winter rains have set in suitable weather for photography in this area will be rare until well on into the spring. The flight is therefore being transferred out of this command.

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## PERSONNEL OF SURVEY SERVICE PAIFORCE

### British and Indian commissioned officers and Subedars employed on technical duties.

(Officers are shown in the units and posts in which they are at present working.

These are not necessarily those in which they hold W.E. vacancies)

#### Survey Directorate G.H.Q. PAIForce

D.D. Survey Colonel K M Papworth

A.D. Survey Major C A K Wilson RE

#### No 19 Fd Survey Coy RE

Major F Q Mansfield RE

Capt M Perks RE

Lieut A B Verbi EAE

Lieut R J Urry RE

Lieut S E Evans RE

Lieut C R Davies RE

Lieut H B MacMillan RE

#### No 10 Ind Fd Survey HQ

Capt E J Daniel IE

Lieut F W Swan IE

Subedar A C Maulick IE

Subedar Muzaffar Hussain IE

Subedar A N Ramanathan IE

#### No 1 Ind Fd Survey Coy IE

Major R L T Rogers RE

Capt P G Mott RE

Capt K L Dhawan IE

Lieut K B Muthanna IE

Lieut J Clarke IE i/c Repro Group

Lieut W Brooks IA Adj

Subedar M A Azim IE

Subedar Manawar Khan IE

Subedar Sultan Mahmud IE

Subedar M Z A Quraishi IE

Subedar J N Kohli IE

Subedar A K Abdullah (Repro) IE

#### Survey Directorate 10<sup>th</sup> Army

D D Survey Colonel G F Heaney

A D Survey Lt Col L F de Vic Carey RE

D A D Survey Capt G H H Quiggin RE

Survey Assistant Capt A J H Bensley RE

Survey Assistant Capt P A Thomas RE

OC General Section Subedar C M Azimuddin IE



No 2 Ind Fd Survey Coy IE

Major Gambhir Singh IA  
Capt A R Qunaishi IE  
Capt J C Berry IE  
Capt A Ahad IE  
Lieut A Lord IA Adj  
2/Lt J Cowley RE  
Subedar M A Faruque IE  
Subedar A O Datte IE

No 4 Ind Fd Survey Coy IE

Major L H Williams RE  
Capt S E Evans RE  
Capt H M Rimmer RE  
Capt A D Verma IE  
Lieut J C Ross IE  
Lieut U D Mamgain IE  
Lieut H H Phillips IE  
Lieut D W Dunn IE  
Lieut W L Reading IA Adj  
Lieut S Michael IE  
Subedar N N Dhawan IE  
Subedar L R Howard IE  
A/Subedar S D Gupta IE  
Br WO Cl II H R Reynolds RE

The Survey Directorate HQ Persia and Iraq Command closed down wef 26 February 1946

Appendix C  
To SURVEY REPORT PAIFORCE  
DECEMBER 1942

1434 FLIGHT RAF

SURVEY AREAS IN PERSIA AND IRAQ

Sortie No	Name	Area Sq Miles	Started	Finished	Height (feet)
70	Swarandar & Chariveh Shah	1,040	20.7.1942	13.8.1942	17,500 asl
71	Gardan-I-Bidurkh & Milimas	1,250	26.7.1942	18.8.1942	17,500 asl
72	Askaran	550	14.8.1942	31.8.1942	17,500 asl
73A	Gach-I-Sar	(192	9.9.1942	14.9.1942	18,000 asl
73B		(172	9.9.1942	12.9.1942	18,000 asl
74	Zenjan	156	22.9.1942	8.10.1942	14,000 asl
75	Bijar-Sain Q' Aleh	2,000 +	24.9.1942	Suspended 13.10.1942	17,000 asl
76	Teheran	92	14.10.1942	29.10.1942	8,500 asl
77	Ruwandiz	836+	23.10.1942	Suspended 31.10.1942	17,000 asl

78	Arak (Sultanabad)	54	2.11.1942	20.11.1942	12,750 asl
79	Qum	208	2.11.1942	13.11.1942	14,500 asl

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Total	<u>6,550</u>	+ Areas 75 and 77 incomplete owing to unfavourable weather. 1,200 sq miles of 75 and 202 sq miles of 77 remaining unphotographed.
Less Areas of 75 & 77 Incomplete	1,402	
Total	<u>5,148</u>	

FLYING HOURS TILL END OF JUNE 990.25

FLYING HOURS JULY – NOVEMBER (INCL) 495.20  
 Total 1,485.45

SURVEY AREAS TILL END OF JUNE 21,346

SURVEY AREAS JULY – NOVEMBER (INCL) 5,148  
 Total 26,494

ADD Military Mosaic (SHAHABAD) 20

ADD Photo Recce (FIRUZABAD – FARRASHBAND) 300

GRAND TOTAL TO DATE 26,814

18 December 1942

Primary Source Document

TNA FILE WO 402/178 – Monthly reports of the Survey Service HQ PAIForce from October 1942 to February 1946. 184 pages.

*(Researched, transcribed, and compiled by Noel Grimmett April 2021)*

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**Important Notice**

Gentlemen, and indeed, Ladies,

Please see below a message from Ross Thurlow regarding the proposed 13 Squadron History:

Gents

*First of all, thanks very much to everyone who has contributed their 13 Sqn reminiscences. Unfortunately, we don't have enough to make putting together any document worthwhile so, I'm asking one final time for contributions in the hope we get sufficient. Consequently, I'm asking that anyone who is still interested and who hasn't already contributed, sends me their articles by the end of November. I look forward to a deluge!*

Ross Thurlow OBE  
 13 Sqn History Editor

*Sec's Appeal.*

*Reading Ross' message, it seems the written history of 13 Squadron, continued on from its 150th anniversary, is in serious jeopardy. Whilst some who promised contributions and have done so, there are a number who have yet to send them through to Ross. I would appeal to those persons to "put pen to paper" and get them through to Ross by his deadline of 30th November.*

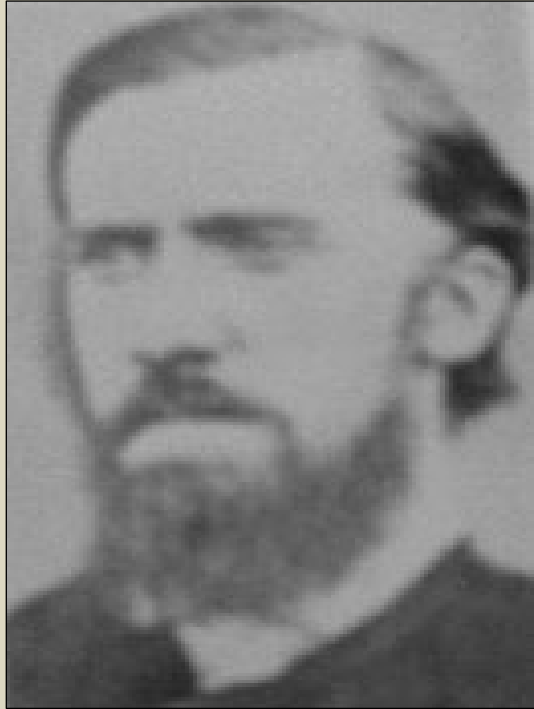
*Even with those contributions, there will be gaps, and this appeal is extended to OCs, 2ICs, SSMs and, indeed, any ex 13 Sqn personnel with recollections, tales and whatever - including photographs - recording the Squadron's activities from 1975 onwards.*

*Please don't be concerned about grammar or "good English", that can be addressed by the editorial team.*  
 lan

## Friedrich Heinrich (Fred) Jeppe 1833- 1898

Following on from the article on the Boar War (by Chris Nash) in the last edition of the Newsletter I thought members would be interested in the life and times of Fred Jeppe who surveyed the first map of the Transvaal. Incidentally Fred Jeppe is an ancestor of Sue Wood, the wife of General Roy Wood.

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*Born: 25 July 1834, Rostock, Germany.  
Died: 17 July 1898, Pretoria, South Africa.*

Friedrich Heinrich (Fred) Jeppe emigrated to South Africa in January 1861, arriving in Durban in April. After some time, he joined his eldest brother, Hermann O.C.F. Jeppe, in Potchestroom. A third brother, Julius, joined them in 1870.

In December 1863 Fred married Susanna W. Truter. He appears to have been a merchant for some time, but in December 1866 was appointed as postmaster at Potchefstroom. In 1868 he became in addition Postmaster-General of the South African Republic. He introduced postage stamps of his own design in 1870, as well as mail carts linking the Transvaal to Natal, the Orange Free State and Cape Colony. In 1869 he was given the additional post of Treasurer-General of the republic. He was also a member of the government's Executive Council from 1871.

In 1874 he was transferred to the seat of government, as postmaster of Pretoria. He gave up his post as Treasurer-General that year, and his remaining two posts the next year. Meanwhile the King of Portugal had named him a Knight of the Order of Jesus Christ in 1874, so that occasionally he used the title, Chevalier. From 1878, during the British rule of the republic, he worked as a translator and interpreter of the Supreme Court and compiled government statistics. At this time, he served on the committee of the recently established Pretoria Public Library.

In 1868 Jeppe, with the help of Alexander A.B. Merensky, compiled an *Original map of the Transvaal or South African Republic* on a scale of 1:1 850 000. It was the first topographic map of the territory compiled locally from farm diagrams and other information, including a compilation started in 1866 by Carl Mauch. There was yet no triangulation on which it could be based, and it contained no contours or spot heights. None the less it was surprisingly accurate and by far the best map of the territory up to that time. It was published as an annexure to Jeppe's first article, "Die Transvaal'sche oder Südafrikanische Republik, nebst einem Anhang: Dr.Wangemann's Reise in S.A.", in *Petermann's Geographische Mitteilungen* (1868, Vol. 24).



Petermann added some information to the map that was not locally available. In the article Jeppe became probably the first person to ascribe a volcanic origin to the Pretoria Salt Pan (now regarded as an impact crater). His work led to his election as a fellow of the Geographical Society of London in 1874.

Some years later he published the Transvaal book almanac and directory for 1877, a compilation of useful information about the territory and its administration. Subsequent editions were published in 1879, 1881, 1887 and 1889. Also, in 1877 he completed Jeppe's map of the Transvaal or South African Republic and surrounding territories... (scale 1:1 850 000), which was published in London. It included information provided by various explorers, whose routes are shown. He wrote a "Note on some of the physical and geological features to accompany (Jeppe's) new map of the Transvaal and surrounding territories", which appeared in the Quarterly Journal of the Geological Society of London (Vol. 47, pp. 217-250) that year. An index to the map, listing some 2000 features, was published in 1880. Through this work he became the most important cartographer of the Transvaal. He always acknowledged the sources of information received from others for inclusion in his maps.

In 1888 Jeppe described "The Kaap goldfields of the Transvaal" in the Proceedings of the Royal Geographical Society and "Die Witwatersrand-Goldfelder in Transvaal in Petermann's Mitteilungen. The next year he produced his third map, Map of the Transvaal or South African Republic and surrounding territories (scale 1:1 000 000, London, 1889). It was beautifully drawn and detailed, included the whole of the Orange Free State, Natal, Griqualand West, and Lesotho, and was again the best map of the Transvaal to date. The name Johannesburg is shown on it for the first time, and it included an index of all mining leases. This map was a remarkable achievement and was reprinted many times. It was followed by Jeppe's Schets kaart aantoonende de Zoutpansberg goudvelden (c. 1:531 000, Pretoria, 1893) and a paper on "The Zoutpansberg goldfields in the South African Republic" in the Geographical Journal. In 1896 he produced a Map of the southern goldfields of the Transvaal (1:253 440), with a geological section of the Banket formation by A.R. Sawyer.

Meanwhile the government of the republic had requested him and Chief Justice J.G. Kotzé in 1882 to record all the laws of the country. This mammoth task resulted in *De locale wetten der Zuid-Afrikaansche Republiek 1849-1885, bijeengebracht... door F. Jeppe en naauwkeurig herzien door J.G. Kotzé...* (Pretoria, 1887-1889).

In 1891 Jeppe joined the civil service again, becoming chief computer in the office of the Surveyor-General. He visited Germany in 1897, but in July the next year fell ill from a liver ailment and died soon afterwards. At this time, he was working on a cadastral map of the Transvaal in cooperation with his son, Carl F.W. Jeppe, based on surveys filed in the Surveyor-General's office. This *Jeppe's map of the Transvaal or South African Republic and surrounding territories* (scale 1:476 000) was printed on six sheets in Switzerland just before the outbreak of the Anglo-Boer War. Despite all precautions it became available to the British War Office, where it formed the basis of British military maps of the Transvaal. It was the first map of the Transvaal to show topographical detail and was the crowning achievement of nineteenth century South African cartography.

Jeppe was a modest man and versatile official, who kept out of politics. He was a Freemason and served on the council of the Lutheran Church in Pretoria during the eighteen-nineties.

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Compiled by: C. Plug Last updated: 2020-04-24, 23:04:24







## Soldiers' Soldier Award

### No 57 Military Engineer Geographic Technician Class 0-2 Course

The Branch recently made its Soldiers' Soldier Award to a student on No 57 Military Engineer Geographic Technician 0-2 Course.

Unlike most awards, the Soldiers' Soldier award isn't made to the student with the best academic achievement, but instead is made to the individual who, as chosen by his/her peers, best epitomised the REA motto of "Service not Self" during the course.

The competition was close, but the winner was Sapper George Gibbons who was awarded a copy of Alan Gordon's Book "The Regiment that Mapped the World" and a prize of £25.

The presentation was made by Ted Davies, the Branch Treasurer, following the end of course discussion.



*Sapper George Gibbons receiving his "Soldiers' Soldier" Award from the Branch Treasurer, Ted Davies.*



## Notices

### Advance Notice - Mil Svy Geo Branch AGM/Reunion 2024

Please note for your diaries that the combined Branch AGM/Reunion 2024 is to be held on Saturday 20th April.

Note: New Venue - Newbury Rugby Club, Monks Lane, NEWBURY, RG14 7RW - see below.

Whilst recognising that the Sgts' Mess, Hermitage, has been seen as the spiritual home of the Branch for many years, the committee have been disappointed by the venue on the last two occasions. In particular, over the food - the standard and portion sizing/control and alternatives, and that in 2023, the final charges were considerably higher than originally quoted. Inside information suggests that issues have certainly not improved and therefore we have sought an alternative venue.

Newbury Rugby Club has excellent facilities including parking and a good reputation. It is also close to Hilton Newbury - South should any member require overnight accommodation.

Full details including Returns will be given in the next Newsletter and via email in due course.

Please note: This departure is a trial. Should the situation at Hermitage improve we will certainly consider returning there in future years.

### Branch Treasurer

After over 8 years as Treasurer, Ted Davies has decided to stand down from the Committee. Ted has given brilliant service, and his experience has greatly helped in the running, not just of the accounts, but the Branch as a whole.

Many Thanks to you, Ted, your efforts have been greatly appreciated!

A volunteer is therefore required to take on the role of Treasurer and to take over from Ted. The accounts are not run along the old AF B397 system so no previous accounting experience is necessary. Living in the Newbury area (and therefore close to the Chairman and Secretary) is an advantage but not essential. Ted has kindly offered to assist the new Treasurer with advice and guidance as necessary.

Any person wishing to volunteer is asked to contact the Secretary, Ian Thurgate, at [REA-MILSVY-Sec@outlook.com](mailto:REA-MILSVY-Sec@outlook.com) as soon as possible. Thank you.

### Advance Notice - Branch Accounting - Switch to REA Central Bank.

In a move to bring Branch Accounts and Accounting Procedures in-line with modern methods, REA HQ have offered Branches the opportunity to have their accounts and banking needs met by a Central Bank operated by a qualified Fund Manager, employed by REA HQ.

Branches will still have authority and control over their funds and making decisions on expenditure etc. The Fund Manager will be responsible for producing and distributing bank statements, providing account information for Committee and General Meetings, and Returns to REA HQ. Payments will be made by Bank Transfer, authorised by Branch Treasurers, negating the need for cheques with two signatures (Many businesses, now, will not accept payment by cheque).

As will be appreciated, this greatly reduces the workload of Treasurers and will streamline accounting for Branches.

The Committee has agreed, unanimously, that the Branch should switch to the REA Central Bank scheme.

Members should notice no difference to the running of the Branch, BUT Subscriptions and other payments into the Branch will have to be made to a different account. To provide plenty of time for members to make changes to their Subscription Standing Orders/Direct Debits/Bank Transfer Arrangements, the switch will not take place until the middle of 2024 - date TBC. To prevent confusion, the new account details will not be notified to members until after the due date for 2024 subscriptions - end-Feb 2024.

Members with any queries are asked to pass them to the Secretary at "[REA-MILSVY-Sec@outlook.com](mailto:REA-MILSVY-Sec@outlook.com)"

### The Royal Engineers Corps History - Vol XIII

The next volume of the History of the Corps is nearing completion, and the writing is all but complete. The editorial team, led by Major General Mungo Melvin, is now refining the maps, figures, and appendices of the book prior to it being sent to the printers in January 2024.

Volume XIII will be launched on 17 April 2024 at the National Army Museum with a price tag of £25.

Members of the Institution, can pre-order a discounted copy of the book at £20 before 1 January 2024 via the Sapper Shop. Your name will be added to a list of subscribers to the Corps History project that will be placed in the Royal Engineers archive and published in the Supplement unless you opt out.

The volume covers the period from 2000 to 2019 and should be on the reading list of all members of the Corps who aspire to be professional military engineers and soldiers.

Place your order at the Sapper Shop quoting the reference JAN24 to secure the pre-order price.

Contact the Sapper Shop at: [www.sappershop.com](http://www.sappershop.com) or [sales@sappershop.com](mailto:sales@sappershop.com) or Tel: 01634 814138

### Notices of Deaths

#### **Major (Retd) Brian Frost**



Posted on FB by Ian Parr

Whilst on holiday in Jersey I was informed by Colin Gardiner of the passing of our dear friend Brian Frost. I purposely did not comment on the post as I knew I had several photos of Brian from our Print/Photo reunion evenings which I wanted to post in his memory. Brian was a great leader, mentor, troop commander and to me a fine officer i/c of the regimental football team. The photos include several of the other members of the Print/Photo who I know also held Brian in much respect, I hope they don't mind me including their photos. Sadly the last photo shows Brian with Kevin Hindle who sadly also passed away this year.

Rest in Peace Brian



Tributes to Brian from colleagues and friends.:-

- [Paul Smith](#)

My first boss in the RSMS, an absolutely great boss and a genuinely nice guy to boot. RIP Brian

- [John Burnett](#)

Very sad to hear this news, Brian was a real gentleman. He was the S.I. Repro and Print at SMS, my last posting before leaving the Army, he was a great boss, again very sad news.

- [Alistair Smith](#)

Sad news, Great boss at SMS. Always remember his great car, also VW Corrado VR6. RIP

- [Janet Braund](#)

John here ... we visited his house in Kintbury just outside Newbury with a group of repro families ... first Few months of 1980. Definitely a gentleman RIP Brian

- [Annette Mark Huish](#)

Sad news RIP Brian

- [Peter F Wood](#)

A lovely guy who I knew very well. RIP.

- [Colin C Penley](#)

RIP Brian!

- [Michael Jacob](#)

Brian was one of the best. Very proud to serve with him Rest in Peace Brian.



- [Bryan Osborne](#)

Sad news indeed. Fond memories RIP.

- [Alan Wagstaff](#)

You're on the last train Brian. God bless you. RIP brother.

- [Derek Bowden](#)

Very sad news, a lovely man, RIP Brian

- [Andy Brown](#)

RIP Brian, Sad to lose another of the old guard surveyors.

- [Frank Johnstone](#)

Very sad news. RIP Brian

- [Michael Phillips](#)

So surprised and saddened at this news. Brian will leave a gap in quite a few people's lives. He touched and influenced many military careers. Rest well. RIP.

- [Colin Bohan](#)

So so sad a wonderful person. RIP Brian

- [Derek Roberts](#)

Sad news RIP Brian

- [David Claringbull](#)

RIP Brian.

- [Steve Brown](#)

RIP Brian and condolences to the family.

- [Barry Hughes](#)

Sad news R I P Brian

- [Stephen Mumford](#)

A real gentleman and quietly inspirational. Rest well Brian.

- [Pete Fassam](#)

RIP Brian. Our thoughts are with your family.

- [Dave Jordan](#)

Saddened to hear of Brian's departure, fond memories of a lovely guy. R.I.P

- [Diane Brimson](#)

Duncan Brimson

Pleasure to have known Brian

- [Dick Whittington](#)

Very sad. A lovely man. I remember when he oversaw the setting up and running of the Bumpers Club when I was on the committee. REspect, RIP.

- [Grahame Farquhar](#)

Grahame Farquhar

RIP Brian.

May GOD be with you and yours.

- [James Hoyland](#)

So very sad, RIP Brian and condolences to your family. Another Gentleman lost

- [Tony Harder](#)

RIP Brian. Condolences to his family.

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### **Roy Billingham**

The Summer Newsletter recorded the death of Roy Billingham. The notice, based on our Branch records, said that Roy served between 1947 and 1955. Roy's wife has been in touch to say that Roy served 12 years rather than 8 years as the piece implied. Roy therefore will have served until 1959.

Our apologies for any confusion or upset the error may have caused".



## Dicky Dows Funeral

Mike Payne posted on FB 19/09/2023.

What an amazing send off for our friend Dicky Dows at the Royal Hospital Chelsea yesterday 18/09/2023.

A lovely service in the chapel where family and friends were joined by the CO and RSM of 42, the CO and RSM of 1 RSME, the CEO of the REA, staff of the RHC and 6 former Mil. Svy. guys (including IP Mike Bunce) and 70 (yes, 70!) 'in' Pensioners to pay their respects and say farewell to Dicky. (Mike B said that there were more IPs there than for any other!).

I sincerely hope, no, I know, we did him proud.

RIP Dicky, thank you for your friendship.



**Lt Col (Retd) Mike Richards**

The Branch was saddened to hear of the passing of Michael (Mike) Richards. The Branch had few details about him but thanks to information from our members, we believe that he was Lt Col Mike Richards, who served from 1950 till 1978.

Mike was OC 84 Svy Sqn from November 1969 to April 1970 when he assumed the appointment of AD Svy FARELF Singapore and then Hong Kong from 1971 - 73. It is thought he was AD Svy 1 in late 1974 and may well have spent the latter part of his service with OS.



**Col (Retd) Reg Gibson**

Iain Whittington informs us of the death of Reg Gibson:

“I have become aware of the death, after a long illness, of Col Reg Gibson - his funeral took place at Woking Crematorium at 11:00 on Thursday 19 October 2023”.

“I served with Reg at the Ordnance Survey in the 1980's and later at Feltham, where he was CO TSG, Richmond Building, and latterly in NATO appointments before he retired to Camberley in the 1990's. He is survived by his wife Sandra and two children”.

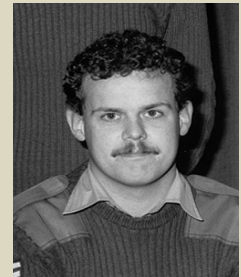


**Gary Merritt**

Phil Paul has advised us of the death of Gary Merritt who was out for his morning cycle in the mountains of South-West France when he had a terrible accident and sustained very serious injuries which, sadly, proved fatal.

Gary Merritt's funeral was held on Friday 20 October at the Artix Crematorium, just outside Pau in France.

It is planned to publish an Obituary for Gary in the Winter Edition of the Newsletter.



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