

Speleo Chartreuse 2005

Post Expedition Report



**A Combined Service Caving Association
Adventurous Training exercise to the Dent de Crolles
cave system in South East France
June 11-25 2005**

ADVENTUROUS TRAINING POST EXERCISE REPORT SPELEO CHARTREUSE 2005

INTRODUCTION

1. Exercise Name:
SPELEO CHARTREUSE 2005
2. Exercise dates:
11 – 25 June 20005
3. Type of exercise:
Navy sponsored Joint Service Level 3 overseas caving expedition.
4. The expedition team were all members of the Combined Services Caving Association (CSCA). The exercise was organized and lead by a Royal Naval Warrant Officer. Other team members were from the Territorial and Regular Army. Unfortunately the single RAF participant had to withdraw, for service reasons, three day before departure.
5. The expedition was based in the Massif de la Chartreuse. This is a major limestone mountainous region in southeast France directly north of Grenoble. The dramatic bare limestone peaks, containing numerous caves, rise to a height of 1700 to 2200m. The heavily wooded lower slopes are renowned for their high quality construction grade timber and the area is a popular climbing and paragliding area in the summer and ski resorts in the winter. This region has recently gained national park status. The Chartreuse is also famous for it green and yellow liqueur that the local monks have been distilling for over 400 years.
6. The CSCA's 2005 summer caving expedition was entirely based in the extensive Dent de Crolles cave system which is a complex maze of over 50 kilometers interconnecting passages with a total vertical range of over 600m (2000ft). This cave held the world depth record for a brief period in the 1940/50. The Dent de Crolles was also the birthplace of modern vertical caving techniques perfected by Fernand Petzl. Even though there are numerous caves over twice this depth, with the world record being over –2000m (6500ft) the Dent de Crolles is still ranked as one of the worlds classic caves.
7. Expedition leader:
WO1 S Charles Milton.
Faslane Flotilla
Belmore House
HM Naval Base Clyde
HELENSBURGH
G84 8HL

Tel 01436 674321 Ext 7142
Mil: 93255 Ext 7142
FAX 93255 Ext 7111
8. The JSATFA was forwarded to DNPTS for military and political clearance in Feb 05 with formal authorization being received on 17 May. A copy of the JSATFA is enclosed.

EXPEDITION MEMBERS

9. The following personnel participated in the caving expedition:

Name	Rank	Unit	Qualification/Experience	Expedition role
MILTON S C (Charles)	WO1	Faslane Flotilla HM Naval Base Clyde	JS Caving Instructor (17 years) 30 years caving experience with 10 overseas expeditions Technical Adviser to the MOD and SME Caving.	Leader Instructor
WHITLOCK S J (Steve)	Maj	EVP IPT MOD ABBEY WOOD	JS Caving Instructor ML(S) Numerous overseas expeditions	Instructor Photographer Deputy Leader
HAMNETT R T (Toby)	Maj	OP LAW Branch Land Warfare Centre Warminster	SRT competent. Experienced caver with a number of overseas caving expeditions.	Translator
WATT C A (Callum)	Sgt	82(AS)BDE Support Sqn 13 AASR RLC	SRT Cave leader training course	Trainee leader / Navigator
ROWLAND N J (Nickie)	Cpl	63(AS)BDE Support Sqn 13 AASR RLC	Qualified JS Cave Leader Experienced caver with 6 overseas expeditions	Activity leader Equipment officer.
FINNIE A (Amy)	L/Cpl	GISS SQN JARIC RAF Brampton	SRT competent Cave leader training course	Trainee leader / Navigator
HOLMAN E O D (Emma)	PTE	5 TRG REGT 38 SGN RLC	SRT competent.	Bag carrier,



Looking out through the entrance of the Trou du Glaz

AIM

10. Exercise Speleo Chartreuse had the following aims:
 - a. To build team spirit and self-reliance whilst exploring the 2000' deep alpine cave system the "Dent de Crolles", promoting the ethos of true adventure within the constraints of the JSAT scheme.
 - b. To provide the opportunity for participants to develop their personal caving skills.
 - c. To provide invaluable overseas caving experience for potential Joint Services cave leaders and instructors.
 - d. To complete all 7 major through trips through the mountain finishing with the Grand Traverse from P40 on the summit plateau to the resurgence at Guiers Mort.
 - e. To record a large number of digital images for future use in promoting both the CSCA and adventurous training in general

11. Were the aims achieved? With the exception of failing to complete two of the through trips all the aims of the expedition were achieved. The expedition provides an ideal venue for the trainee cave leaders and instructor to practise their skills and broaden their experience. Two participants are now ready to progress to their cave leader assessment JSCL and another demonstrated her ability to lead advanced single rope technique (SRT) trips and has shown the potential to become a cave instructor. Only four out of the seven expedition members were able to completed the full descent from P40 to Guiers Mort, due to a narrow squeeze at the base of the surface shaft, but all come away with a great sense of individual and corporate achievement.



L/Cpl Finnie in the fossil galleries of the Glaz

12. The through trip from P40 to the Trou du Glaz via the Polish route was not attempted because there are two very narrow squeezes of 23cm and neither of the two instructors could get through such a tight constriction. The second failure was the Gouffre Thérèse which had

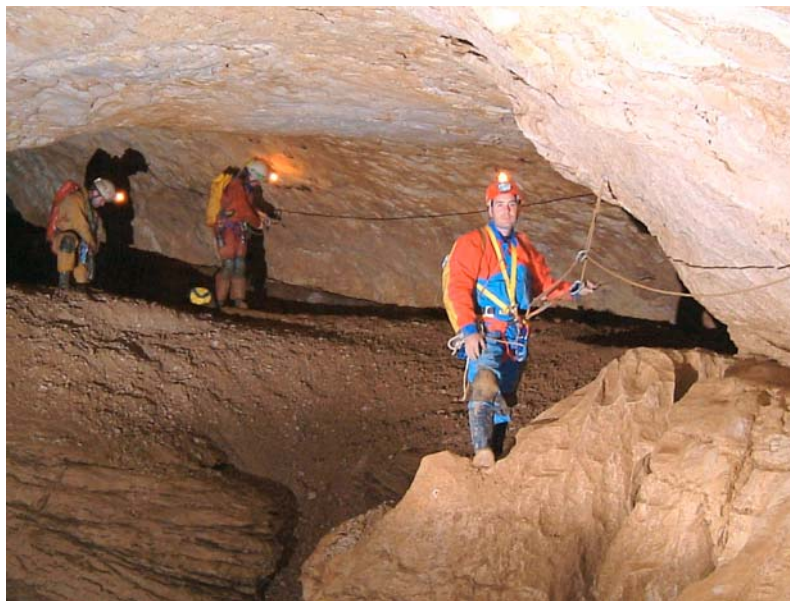
not been descended in a number of years. A descent of the first 4 pitches of this cave revealed the dangerous state of the abseiling anchors it was therefore decided that the risk of equipment failure and injury was unacceptably high and the through trip to Guires Mort was not attempted.

PREPARATORY TRAINING

13. With the exception of Maj. HEMNETT all members of the expedition attended a one week caving seminar run by JSMTW (Ripon) between 25 Apr to 1 May 2005. During this week participants received training and practised the following:

- a. Advanced caving techniques including “pull through”.
- b. SRT self rescue techniques (essential training for both UK and overseas caving as skills fade is a major issue with these activities).
- c. Emergency procedures including underground survival.
- d. Stretcher handling and vertical hoisting methods.

14. The training provided by JSMTW(R) was excellent and negated the requirement for the formal pre expedition training normally organized by the CSCA prior to any overseas caving exercise. It also meant that personnel attending seminar with “On Duty” status. Maj HEMNETT was not able to attend the seminar as he was in Iraq. However his caving ability was well known by the leader and no pre expedition training was deemed necessary.

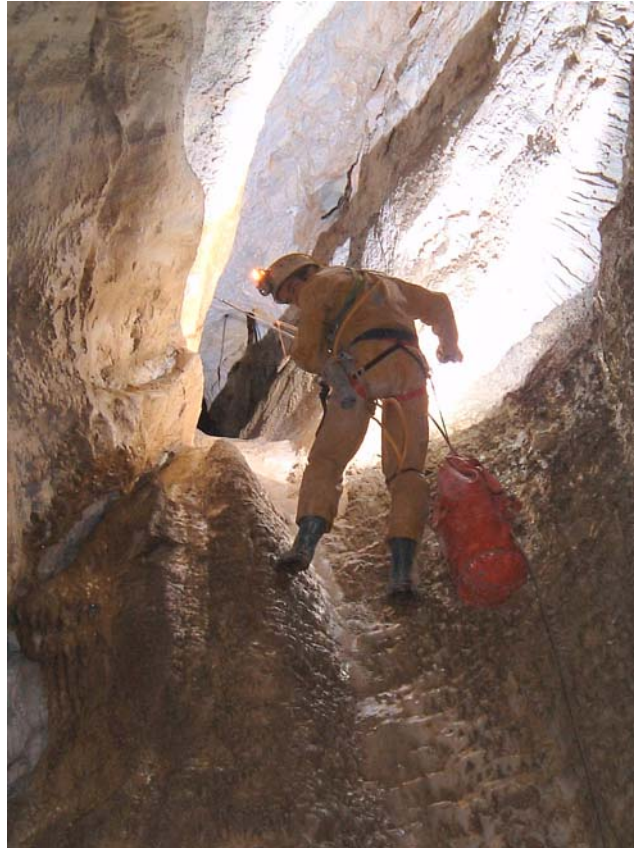


Sgt WATT on the traverse around the Lake Shaft.

EXPEDITION

15. The expedition was based at an excellent campsite “De Martinière” which is just to the south of Saint-Pierre-de-Chartreuse and in a convenient location between the footpaths leading to the upper, middle and lower entrances of the cave.

16. People slept in individual tents with a large dome tent for storing equipment and a gazebo for cooking and eating. The good weather during the expedition made this very pleasant. However, if planning to visit this area out side of the summer season it is probably worth thinking about renting one of the numerous ski lodges or bunk house in the area. The basic daily route was to get up at about 0730 and have breakfast as soon as the bread and croissants arrived at about 0800 and leave for the cave before 0900. The time of return to the campsite depended on the length of the caving trip, but was normally between 1900 and 2000 each evening.



Abseiling down the Lantern Shafts

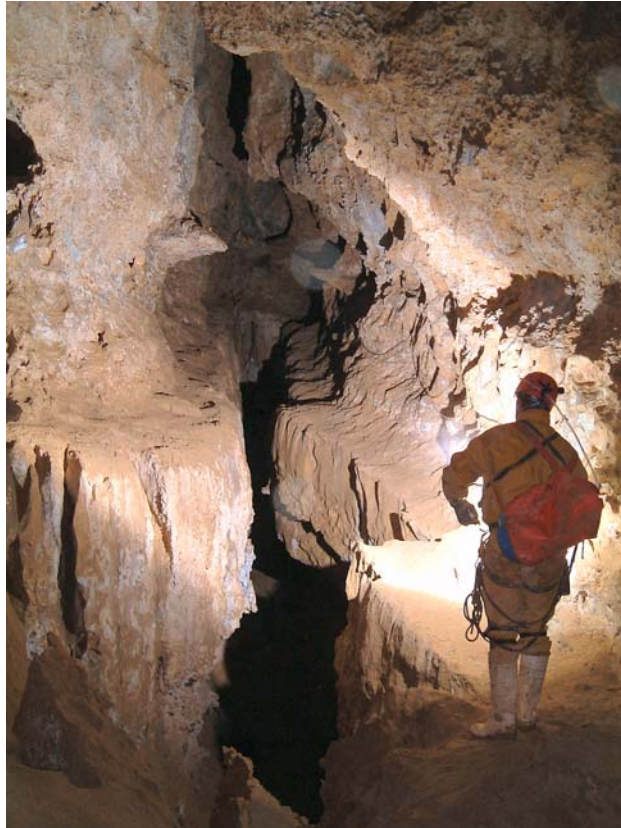
17. **Saturday 11 June:** 2100 hrs: All team members meet at 36 Engineer Regiment Barracks at Maidstone in Kent. Minibus was packed and departed for the 2315 ferry from Dover to Calais. There is not much to report about the all-night journey through France other than the auto routes were almost empty and there were no road works (so different to British motorways).

18. **Sunday 12 June.** (Entrance recce) By late morning the next day we were winding our way up into the mountain of the Massif de Chartreuse and by 1100 we were busy unpacking the vehicle and setting up the tents in the picturesque campsite, “Camping de la Martiniere”. This campsite is a couple of kilometres south of Saint Pierre de Chartreuse surrounded by limestone mountains and equal distance between the two carparks used to access the Dent de Crolles cave system.

19. At 1330 the whole team set off and were making the 20 minuet drive to the Col de Coq, the starting point for the majority of the caving trips we would make during the next two weeks. One team of two went to check the route to and from the Grotte Anette and Grotte Chevalier. This path is potentially dangerous particularly in the dark as it crosses a steep and loose area. The second team entered and explore the entrance galleries of the Trou de Glaz.

Both team were faced with a 45 minute hard climb of over 1000 ft in the full strength of the afternoon sun.

20. The Trou du Glaz team rigged fixed ropes on the first 4 vertical pitches the “Lantern shafts”. All the main pitches in the cave have recently been equipped with stainless steel chains to permit easy and safe abseiling. Because we would be re-ascending the pitches the ropes had to be rigged for ease of climbing. The ropes placed on the lantern shafts were to stay in the cave for the next ten days and would get a considerable amount of use both by us and every other caver visiting this cave. Therefore some of our older and bigger diameter ropes were used so that they could be thrown away after the expedition if necessary.



Maj Hamnett. At the start of the traverses form the base of Fernand shaft

21. **Monday 13 June.** (Trou du Glaz to Grotte Chevalier) The initial plan was for us to split into two groups one to complete the traverse from Trou du Glaz to Grotte Annette and the second to traverse from the Trou du Glaz to the Grotte Chevalier. However advice from a local caver indicated that the route to Annette would probably be blocked by rock fall. We therefore decided that all of us would complete the traverse from the Glaz to Chevalier with one team departing 30 minutes after the other. With the lantern shafts already rigged quick progress was made down into the large mid level phreatic galleries. Thankfully the deep shafts that drop from this passage have rope traverses around them to provide a safe route. Team 2 caught up with team one at the top of the 30m deep Fernand shaft. Whilst waiting to descend this pitch we found an inscription left by the original explorers in the 1940s.

22. At the base of the Fernand shaft was a rising traverse leads over a deep void, requiring a fixed rope for safety. At the far end of this traverse was a narrow passage leading to Annette Diaclase and an abseil down a tight rift. An easy walking sized passage in an awkward traverse around a pit which marks the point where the route to the Grotte Chevalier

route leaves the well marked passage to Grotte Annette. A small hole leads immediately to a narrow meandering passage that proved quite difficult to negotiate with a large rope bag. The meander ended with a short rope climb leading to the head of a 55m pitch "Maurice Pitch". We used our own ropes on this pitch to reduce the wear on the in-situ rope left by the French. More narrow meanders lead to the Oubliette "bottle dungeon" which had an awkward abseil onto a horizontal traverse rope around a nose of rock. One more pitch follows which dropped us in the vast Grotte Chevalier. This pheatic passage is 40m wide and 15 high with a floor covered with rubble. A 700m walk uphill through this massive passage leads to it entrance on the eastern face of the Dent de Crolles mountain. The first team to exit the cave went immediately to check if the Grotte Annette was blocked, but the passage was open and the French caver's warning was ill founded. The second team exited the cave about 40 minutes later.

23. **Tuesday 14 June:** (Trou du Glaz to Grotte Annette) It was decided to depart from the original plan to visit the lower galleries of the Dent de Crolles system and for both groups to complete the through trip from the Trou de Glaz to Grotte Annette. It is normal practice to pull the ropes down after each of the 7 abseils, however there was still the potential that this route could be blocked and therefore ropes were left on each pitch so that we could retreat if necessary. The first half of the route was identical to the to the previous days and rapid progress was made. The two groups remained a short distance apart, only occasionally seeing each other at pitches. Being in two groups allowed a trainee leader in each group to practise navigation and route finding. This section of the cave passes through "Gallery 43", a magnificent pheatic passage that bores through the heart of the mountain. As the passage approaches the eastern face of the mountain the rock becomes highly shattered due to the freezing air that is sucked into the cave during the winter. This cold air causes frost shattering of the cave walls and the passage is frequently blocked by debris. Luckily the passage was open and only required a small amount of rocks to be moved to the side to permit access. The cave exits onto a small platform with a steep drop to the Isère vallaey 4000ft lower and with the French Alps in the distance.

24. During the evening we were visited by Thierry Guerin who was responsible for much of fixed aids and traverse ropes placed in the cave. Using Toby as our translator we gained a lot of valuable information about the routes we intended to explore.



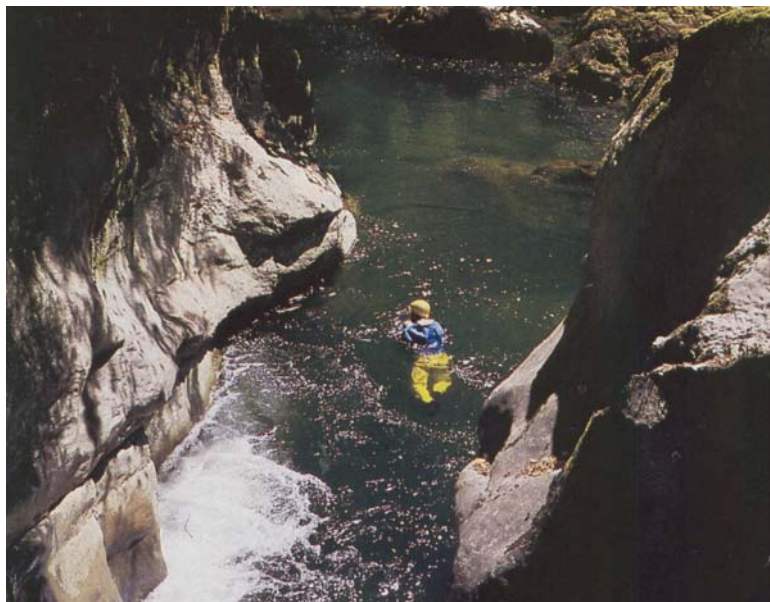
The resurgence: Grotte du Guiers Mort

25. **Wednesday 15 June:** (Tour of the lower galleries from Guiers Mort.) Again we split into two teams with an instructor in charge of each group, this again gave maximum opportunity for the novice cavers and trainee leaders to navigate. The lower galleries are a maze of interconnecting passages with numerous circular routes and detours; it was essential that an accurate cave survey be taken to avoid getting lost. Apart from being an excellent caving trip in its own right exploring the lower passages in the cave system meant that we would be familiar with this part of the cave when we attempted the through trip from the higher entrances latter in the expedition. The entrance to the Guiert Mort is a superb circular resurgence passage with a waterfall cascading out of it.

26. Team one took the clockwise route and entered via a tight crawling passage which after 30 minutes of effort reached the 35m climb “Puits Pierre”. At the top of this climb the character of the cave changed completely and large walking sized passages were entered. The majority of the cave has fixed ropes on the pitches and around exposed climbs, which allows rapid progress to be made. Team one followed the large high level passages as far as the “Galerie des Champignons” (mushroom gallery) where the whole passage was covered with a black deposit tipped with little white nodules. On cutting down to the lower level of passages the second group were met at the Puits du Cerf. (Thankfully it is standard practice to carry about 20m of safety rope and this had to be used to drop down from one cave passage that exited into this large chamber half way up one wall.)

27. Team two took the lower route, which was first explored in the 1940s, it has numerous short climbs and abseils and also requires good navigational skills, particularly to find the bottom entrance to the “Escalier Bia”. The Escalier is a steep Mendip style rift and is the critical link in finding the route between the lower passages and the rest of the cave system. At the top of this rift a splendid walking passage “the passage of the smiling faces” leads to the Puits du Cerf. After exchanging information both teams then exited the cave following similar route taken by the other team on their way in.

28. **Thursday 16 June:** Canyoning After 3½ days caving it was decided that people should be allowed to get a little sunshine. Apparently you shouldn't go back to Britain, having spent two weeks in France, without a sun tan (Well Charlie can).



Swimming in the Gorges de Chailles

29. The water that exits the Dent de Crolles cave system at the Guiers Mort flows through a dramatic gorge and combines with the water from the Guiers Vif. Sections of the gorge below this confluence are an excellent venue for canyoning (also called gorge descending). Canyoning is currently permitted under that JSAT scheme within the caving rules as laid down in JSP432. Canyoning is a combination of scrambling, swimming and abseiling down a river or watercourse and the techniques for descending pitches and the inherent risks are so similar to caving that the JS caving qualifications cover this activity. Canyoning can be likened to caving without a roof and in daylight. (*Charlie Milton would only consider canyoning at night*).

30. Only 5 members of the group were able to go canyoning due to the limited number of bouyancy aids and wetsuits available. It was essential that proper precautions were taken because the trip involved a 400m swim in deep cold water.

31. **Friday 17 June:** (P40 to Trou du Glaz) The day started with a 2000-ft slog up to the summit plateau of the Dent de Crolles, this would normally be a pleasant walk but a large weight of caving kit and ropes made it hard and hot work. The final section of the walk was across baking hot bare limestone under a scorching sun. Most of us were impatient to get underground into the cool friendly environment of the cave.



WO Milton about to descend P40

32. The descent from P40 to the Trou de Glaz is a little over 300m (1000ft) in depth and involves some quite tight sections. The initial plan was for one group to follow the traditional route via the Balcony Shafts and a second group to follow the Polish route to the Dome shaft. On translating a French guidebook and during our conversation with Thierry Guerin it became apparent that the Polish route was not a practical option as it contained to very narrow

section, only 23cm wide, and neither of the two instructors could get through such a small gap.

33. P40 is a 35m deep shaft dropping directly from the surface of the plateau. The connection to the rest of the cave is not at the very bottom of the shaft as one would expect, but is via a very narrow crack at the back of a ledge 3 metres higher. (The French spent days digging at the very bottom of this shaft before finally discovering the connection from the inside on some years later) Unfortunately two members of the team found the fissure to tight, even after removing their harness and equipment, and could not descend the cave. The route from the bottom of P40 to the mid-level galleries of the Trou de Glaz involves two long sections of meanders split by vertical pitches. These meanders involved squeezing sideways through very narrow twisting passages, sometimes at floor level, but frequently having to climb up a few metres to where the passage was wide enough to force your way through. Emma gracefully slipped through most of this passages whilst others had to force their way through accompanied by grunts and expletives.

34. The meanders abruptly stopped at the top of the 85m (280ft) deep Balcony shaft. Luckily this shaft is split by a number of broad ledges which permitted a relatively straightforward descent in four parts. Beneath the Balcony shaft was one final abseil down into the “Salle de Douche” (Shower Chamber). Those who had hoods on their caving suites were fortunate, those that didn’t got cold water down their necks as they abseiled to the bottom. Twenty minuets of simple horizontal caving then led to the exit at the Trou de Glaz.



Maj Whitlock rigging the entrance to Gouffre Thérèse

35. **Saturday 18 June:** Gouffre Thérèse It was planned to spend three days rigging and then completing an abseil through trip from the Gouffre Thérèse to Guiers Mort. This particular route is rarely visited, in fact it had been many years since it had last been descended. Three team members carried a large amount of equipment up onto the plateau in support of another group of three who were to enter the cave. The entrance took about an hour to find and was hidden under rocks high on the side of the mountain. The caving team entered the cave but it became very apparent to them that the abseil anchors were in a very weak and dangerous state. Only four pitches were descended before lack of equipment forced

an early retreat. It would be possible to descend this cave but it would require a great deal of work to completely replace all the anchors. It was decided that it was not worth wasting time and effort in this part of the Dent de Crolles cave system when there was so much more to explore.

36. **Sunday 19 June:** (Trou de Glaz to Guiers Mort) The through trip from the Trou de Glaz to Guiers Mort via P36 is probably the most popular caving trip in this area of France. Expedition members split into two groups and entered the Trou de Glaz within 40 minutes of each other. The first 4 pitches were already rigged and the route well known. Rapid progress was made to the head of P36. The route from P36 to the lower galleries required 6 abseils with the rope being pulled down and retrieved after each descent. At the bottom of the abseils the passage drops into a massive phreatic passages “Les Champs Élysées. There was still 500m of cave we had to negotiate before we found ourselves in the passage we had explored from the lower entrance earlier that week. Once back on familiar ground it was a fairly straightforward exit from the cave.

37. **Monday 20 June:** (De-rigging Day) Monday was a bit of a rest day admin day and the chance to retrieve rope left in various parts of the cave. The two teams went in different directions, one back to Gouffre Thérèse to remove the ropes after the aborted attempt to descend the cave and the second group went back to the Trou de Glaz and repeated the traverse through to the Grotte Annette removing the ropes left in place 6 days earlier.



PTE Holman climbing the 40m Cascade Rocheuse

38. **Tuesday 21 June:** (P40 to Guiers Mort Team1) The full descent is over 600m (2000') with the guide-book quoting 16 hours. The expedition had already completed both halves of this classic caving trip and was therefore confident in the route and knew what equipment was needed to be carried. An early start meant that the climb to the summit of the Dent de Crolles was completed before the sun got too high in the sky and less water was carried to prevent dehydration. The first team completed the through trip in about 11 hours and arrived back at camp as it was getting dark.

39. **Wednesday 22 June:** (P40 to Guiers Mort Team 2) Team 2 also decided that an early start would be advantageous, (a diesel minibus is not the quietest vehicle to make a stealth exit from a campsite). Most of the climb to the P40 entrance was completed in the shade with the sun hidden behind the massive bulk of the Dent de Crolles. On arriving at the

summit plateau we were graced with stunning views of the Alps bathed in bright morning sunshine.

40. Once inside the mountain the two trainee cave leaders did the majority of the navigation and pitch rigging and progress was rapid. The meanders seemed shorter and easier than they had 5 days earlier, that was until Amy got stuck. As Charlie recalls:

(I was leading at this point and had gone on ahead to try and locate the correct route to the top of the next pitch. Once I found the abseil points I sat and waited for the others to catch up. I waited and then waited some more, there were none of the familiar sounds from back up the passage, no scraping of metal on rock nor the occasional cures, it was obvious that no one was following me. I was slightly concerned that they may have missed the turning 15m further back and were going in the wrong direction. I climbed back up through the meanders having to squeeze up through couple of awkward narrow sections and around a couple of corners. There I found the other three cavers. Amy was wedged in a narrow crack. Calum was jammed across the passage pulling Amy whilst Niki was trying to pushing from beneath. With much wriggling and inch by inch Amy was slowly extracted from her stone tomb. Amy was very relieved to be free and the rest of us thankful that we wouldn't have to concrete her corpse into the cave. After a few minutes rest she was ready to carry on caving, but this time with a little more thought of her choose of route.)

After the short delay to free one of the team jammed in the meanders the rest of the descent of the upper half of the route went without incidents.



Cpl Roland in the Boulevard des Tritons

41. We met one of the other expedition members at the top of the lantern shafts where he was removing the ropes we had placed on the first day of the expedition. We exchanged one of our shorter ropes for a longer one that was required for the bigger abseils that are found in the second half of the trip. After a short food stop we set off on the second half of the trip. The second half of the descent went without incident the route was familiar. Two ropes were used, which allowed a leap-frog technique to be adopted to reduce the time delay at each pitch. 9¼ hours after leaving the plateau and entering the cave at P40 we exited the cave through its resurgence at Guiers Mort.

42. **Thursday 23. June:** (Wash kit and tourist cave). All of the ropes that had been used in the Dent de Crolles needed to be washed and checked for defects. The morning was spent

sorting out and washing all the kit in a river near the campsite. Kit was left at the campsite to dry in the afternoon sun while all team members went to visit another local cave. The Guiers Vif is one of the largest cave entrances in the area and has a waterfall cascading down a deep gorge directly beneath it. We took head torches so that we could explore the larger passages near the entrance and spent a pleasant couple of hours relaxing in and around the cave. There was also a convenient bar so that we could have a cold beer before returning to the campsite.

43. **Friday 24 June:** (Pack up and travel home) A late breakfast was followed by packing up the tents and loading the minibus. Before starting the long journey north the opportunity was taken to travel to a local caving shop to purchase some equipment that had either been damaged or lost during the expedition. By mid afternoon we were on the auto route heading north. P&O permitted us to get on a earlier ferry and we were back on UK soil for breakfast

PUBLICITY

44. There was no planned direct publicity associated with this expedition. However photographs and digital images from the expedition will be used for promoting caving within the services and the CSCA in particular. Members of the expedition will all be sent copies of the photographs and will be encouraged to write articles for service and divisional magazines.



A fellow British caver in the Dent de Crolles

FINANCE

NB. All costs in are in pounds using an exchange rate of 1.4 Euros to the pound

Actual Income	
Public Funds	£
Adventurous Training Funds	
Unit allocation up to £75 (RN)	75.00
Additional unit allocation (up to £150 with approval from DNPTS) (RN)	25.00
CILOR * (see note1)	692.00
Total Public Income (a)	792.00
Non-Public Funds	
Personal Contribution (per head x No)	700.00
Unit Funds (CAF/LAF)	0.00
Commercial Sponsorship	0.00
Sports Lottery	0.00
Sailors/Fleet Amenities	0.00
Total Non-Public Income (b)	700.00
Non Naval Personal (see note 3)	
Combination Public/non public 4 participants	400.00
2 participants from 13 AASR RLC received additional £37.50 each (2x 62.50 + 75)	275.00
Non Naval Income (c)	675.00
TOTAL INCOME (a+b+c)	2,167.00
Actual Expenditure	
Travel	£
Vehicles	0.00
Ferry/Shuttle	102.00
Fuel	288.17
Road Tolls	157.11
Berthing Fees	0.00
Misc: (specify)	0.00
Other Expenditure	£
Accommodation	386.00
Food (See Note 2)	703.00
Hire of Instructors	0.00
Hire of Guides	0.00
Equipment Hire	0.00
Equipment Purchase Rope 200m	160.00
Calcium Carbide, Batteries LED bulb.	35.00
misc item to replace items abandoned underground	28.50
Insurance	154.00
Misc: Gazebo (Cook tent) + base camp equipment	28.49
Misc: Photographic equipment Firefly flash batteries etc	45.00
Misc: GAZ bottle refills	17.50
REFUND to 13 AASR RLC (see note 4)	62.23
TOTAL EXPENDITURE	2,167.00
TOTAL INCOME	2,167.00

- Notes 1 CILOR received the 20% AT supplement (party size was less than 20).
2. The financial support for AT is different for each service. This can result in differing levels of funding to individual on a Tri-service exercise. Personal contribution however was maintained at £100 per head.
3. Ref: JSP 456 Vol 2 article 0705 states “No requirement to maintain a messing account.” All money received for CILOR was spent on fresh food.
4. 13 AASR provided a higher level of funding to its personnel therefore £32 23 under-spend will be refunded.

EQUIPMENT.

45. POOL 29 equipment held at JSMTW (Ripon) provided both rope and specialist caving equipment to support this expedition. The CSCA also hold a rope and general caving hardware. The rope placed in the lantern shafts which stayed in the cave for 10 days received a great deal of use, not just by expedition members but by every visiting French and British cavers. These ropes have been retired and new rope purchased to replace CSCA holdings.

46. The Pool 29 ropes came with a logbook so that a record of an individual rope's usage could be maintained. These ropes were brand new and did suffer from shrinkage with some of the longer ropes being up to 4m shorter than their recorded length. It has been recommended to JSMTW(Ripon) that all Pool 29 ropes are re measured before issuing to the next expedition.

PROBLEMS ENCOUNTERED

47. During the preparation stage of the exercise there were very few problems. This was the second visit to this area of France and the CSCA has a lot of experience in organising caving expeditions in Europe. The only problems were associated with it being a Tri service adventurous training exercises rather than one for a single Unit or Service. The minor problems encountered detailed were:

a. The funding regime for each Service is different and this is reflected in the Finance section of the JSATFA (page A-9) which has been subdivided into 3 separate sections. The Navy's rules were applied for this exercise as it was sponsored by DNPTS.

b. Nominal role. It can be difficult enough to get people from a single Unit to commit to an expedition early enough to plan a realistic aim and itinerary, it is even harder when they are from different Units. The current pressure on all military personnel combined with the frequently changing programmes caused over half the team members to withdraw from the expedition. Thankfully sufficient new people joined the team, without them the expedition was in risk of being cancelled There is no current solution to this problem.

c. Casualty notification. The rules for NOTCAS and DELFOR were not particularly clear. However the introduction of the JCCC at RAF Innsworth and the publication of a new JSP has now simplified these procedures.

d. Some Army districts required a second covering JSATFA to be raised for their personnel. This requires additional work for exercise participants.

FUTURE EXPEDITIONS

48. The CSCA will probably not organize another expedition to the Dent de Crolles cave system for another 8 to 10 years. However the large amount of surveys and route descriptions that have been compiled will be placed in the CSCA's library, which will be available for both military and civilian cavers to borrow.

49. A small group of experienced CSCA instructors may return, off duty, and bolt the Gouffre Thérèse as a private project. This will require close cooperation with the local French cavers, as the Massif de la Chartreuse is now a national park.

50. The area around the Massif de la Chartreuse offers enormous potential for caving expeditions at all levels of experience, but it is not just a caver's paradise, it is also an ideal location for the following JSAT scheme activities.

- a. Climbing: There are numerous bolted crags all around the area.
- b. Via Ferrata: This is a very popular activity in this area. With route varying from basic to terrifying. All route have excellent protection are well maintained and guide books are available locally.
- c. Trekking and walking: The surrounding mountains are absolutely stunning. There are well mark paths including a 4 day circular tour of the Massif and the long distance footpath the GR 9 passes through this region.
- d. Canyoning: There are seven major canyons routes in the Chartreuse region. These range from simple novice trips to advanced descents involving 120m free hanging abseils. This area of France, combined with the proximity of the Vercors would be an ideal venue for a two week canyoning expedition.
- e. Paragliding: Another popular activity. A number of the skiing chairlifts remain open during the summer for paragliding.



The Massif de la Chartreuse from P40

51. Additional Information:

- 1). Exchange Rate approximately 1.4 Euros to the Pound.
- 2) Auto Route tolls. Accurate route planning and costs can be found on the following web site: www4.mappy.com
- 3) Campsite web address : www.campingdemartinere.com
- 4) The ferry ticket and travel insurance was booked through the “Service Travel Centre” at RAF Brampton. MOD 95331 7936. They provided a excellent and service. Like most travel agances they can get the best deals if you book early.
- 5) June is an excellent time to visit the high mountains of France. The weather is more settled than latter in the summer resulting in less thunderstorms. It is also before both the French and British school holidays when the area gets inundated with tourists and the prices rise.

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CONCLUSION

52. Alpine caving is a very arduous activity, with attendant risk to life and limb. Not only can the condition underground be extremely harsh, but also large amounts of equipment have firstly to be transported to the top of a mountain before they can be taken into the cave. Once underground it is frequently impossible to transport bags of equipment easily, teamwork, physical strength, perseverance and technique are the only way to succeed, all very good training for Service Life

53. The exploration of this cave was a challenge for all members of the expedition, all participants left with a great feeling of satisfaction in their personal and corporate achievement. Two of the participants are now planning to attend their JS cave Leader assessment courses at JSMTW(Ripon) and a third has been recommended for progression to the Instructor award.

54. It takes a considerable amount of personal time and effort to organize an oversea adventurous training exercise, particularly with the current pressures of Service life. However all that hard work is worth it when the outcome is a successful expedition. (It will somebody else's turn next year).

S C MILTON
WO1 RN
Expedition Leader.

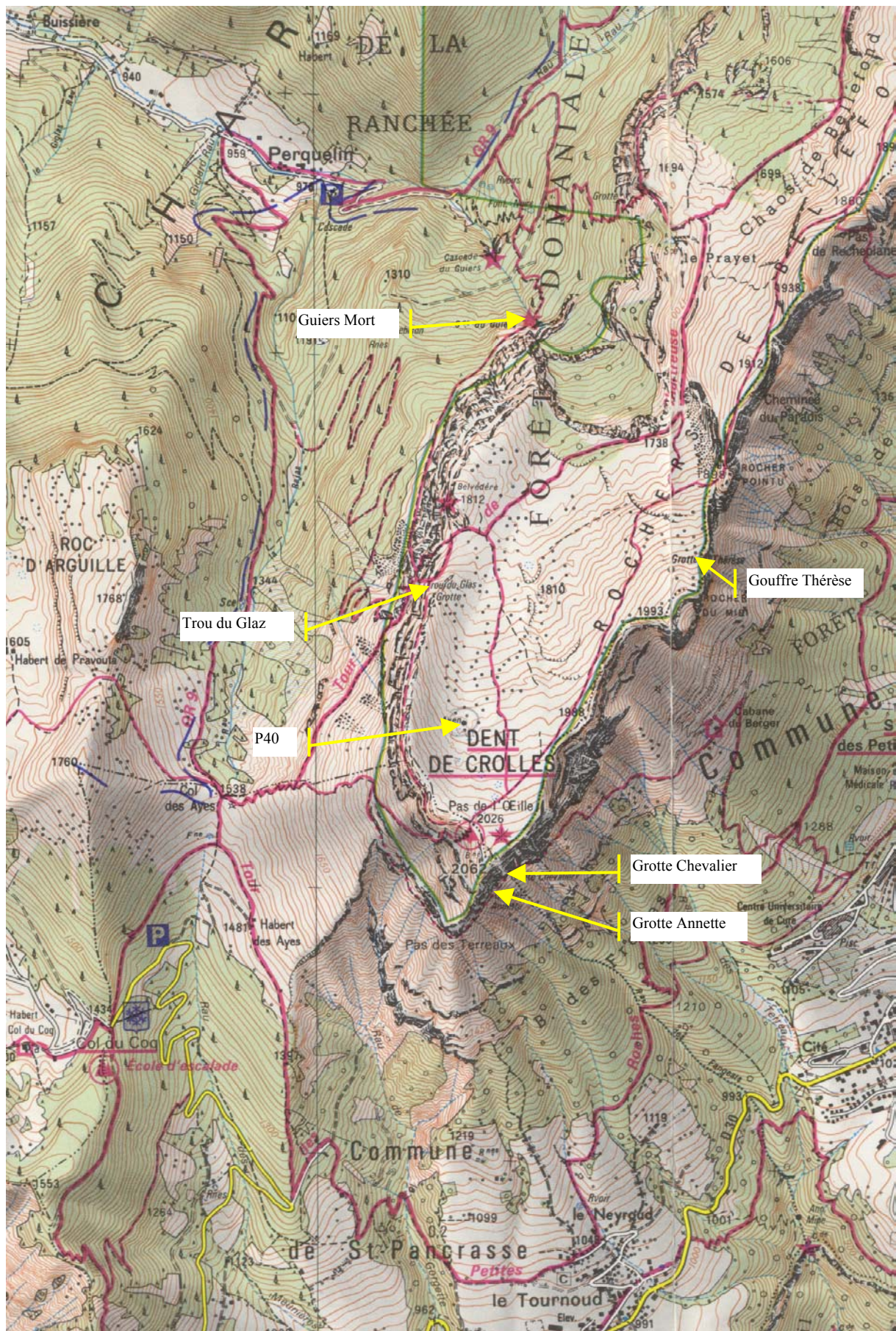
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MAP OF EXPEDITION AREA Scale 1:25000



The Dent de Crolles cave system Plan View

