

MALPASSET

December 2, 1959: Rupture of the Fréjus dam

IT WAS A TERRORIST ATTACK !

On 2nd of December 1959, the Malpasset Dam in the South of France burst. It was one of the most modern of its time and the disaster happened only 5 years after being completed, on the very day that it was finally filled. A tidal wave, 40 meters high poured into the valley, burying the little town of Fréjus, and sweeping away trees and houses.

423 people died that day in what was one of the greatest French civil disasters of the 20th century.

In a sequence lasting barely a minute during an Arte documentary on the subject of the difficult Franco-German rapprochement, broadcast on January 22nd, 2013, it was mentioned - resumed to barely a sentence. The cause of the rupture of the Malpasset dam was no longer classed as a natural disaster, as it has been affirmed for decades, but an attack committed by Algerians terrorists. *Activists of the National Liberation Front (F.L.N.)* reportedly blew up the dam!

What a shock! What a terrible thesis!

And yet this thesis seemed instantly credible to me; as if I finally realised that I had always known that we had been lied to.

More than sixty years after the disaster, and despite the combined efforts of the future Algerian government, and the French government to conceal the terrorist act, traces of this attack, documents dating back to that time, were discovered by historians in the German secret services archives.

Until that moment, the denial had been such that it was impossible to face. Then, all of a sudden, the mental construction that I had unconsciously built collapsed. I was free to face up to the facts of the event. And make others see it as it really was.

The disaster as I experienced it

I was fourteen when the tragedy happened. That night in our house in Cannes, we were waiting for my father to return from delivering parcels of perfume from **Brun et Barbier** a family business, situated in the Var, on the other side of the Estérel.

At that time the motorway was still under construction, and one had to take the very windy Estérel road, situated just after the Fréjus toll and still used today, that twists its way to Mandelieu.

1My father was late. He should have been home no later than 8pm, and it was already eleven o'clock! We had started to worry when he eventually arrived around midnight in a state of

excitement and gave us all the updated news. He had been rerouted due to an extraordinary event. The national 7 road had been blocked by the army! Many military vehicles were converging on Frejus. To reach Cannes, he'd had to backtrack, return to Le Muy, and take the road to Draguignan, and go through Grasse.

Huddled around our TSF radio, we waited to find out more. Listening to **Radio Monte-Carlo**, we learnt the nature and the scale of the terrible disaster. The plight of the victims and the organisation of relief monopolized both listeners and the press which was covering the incident full scale.

From that moment on, despite my young age, after hearing all the tragic stories, each worse than the other, I have always been waiting to find out who was responsible, and for them to be brought to justice. That such a disaster could be the result of a natural unpredictable cause seemed inconceivable to me. I found out later that I was not the only one to have instinctively rejected this idea...

The years passed...

For me, the questions, if they were latent, had never disappeared. I have no memory of any report of the trial which had barely interested the press, and which, in any case, had concluded as a "*trap of nature*" with an absence of any human responsibility...

The thesis broadcast by the Arte documentary not only caused a shock to all my family ; countless people wondered if this could be the truth, they needed clarification and evidence. The French press remained cautious: an article by Emmanuel Berretta in *Le Point* and a page in *Nice Matin*. Arte withdrew the documentary... until further notice...

We first wanted to "*check*". Silence settled in and the wave of indignation died down.

But I was convinced to have finally found the explanation of this catastrophe. I continued my own research to confirm this thesis...

One of the reasons I felt the need to break the conspiracy of silence surrounding the Malpasset disaster is that I myself was a victim of terrorist acts

Between 1975 and 1990, when I was still a pharmacist in Corsica, in Petreto-Bicchisano, my pharmacy was bombed several times. I participated in the creation of the ***Association of Victims of Terrorism in Corsica (A.S.A.V.T.)***. The President of this association, the veterinarian ***Jean-Paul Lafay***, was assassinated on the night of the 16th - June 17, 1987 when leaving the studios of **France 3 Corse** where he had just defended the cause of the victims during the very popular programme "**Confronti**".

Already, in 1984 faced with an examining magistrate who opposed me to reason of State when I tried to file a complaint, then to the anti-terrorism judge who lost the file concerning ***Jean-Paul Lafay***, I very quickly had reason to doubt the integrity of the judiciary confronted with terrorism. I was also very much aware of the risks to which I exposed myself by speaking up. I left Corsica in 1990.

TERRORISME

Corse : l'histoire d'un chantage

Le Dr Jean-Paul Lafay, qui a été assassiné le 17 juin dernier à Ajaccio, était une cible symbolique : il présidait l'Association d'aide aux victimes du terrorisme en Corse. Celle-ci vient d'élire son nouveau président, le patron d'une entreprise de déménagement, Vincent de Petriconi, un Corse. « Il fallait que l'association s'ouvre, que des non-continentaux y participent plus activement », explique Thierry Cazon, l'ancien bras droit de Jean-

Paul Lafay, toujours vice-président de l'association. Cazon, père de deux enfants, pharmacien depuis onze ans à Petreto-Bicchisano, est l'un de ces continentaux qui refusent de quitter l'île. Malgré les plastiquages dont il a été victime. Malgré les chantages. Malgré les menaces de mort. Il explique à L'Express pourquoi il veut continuer à se battre : « Si je n'ouvre pas la bouche quand il y a mort d'homme, quand parlerai-je ? »



Thierry Cazon (à droite) portant le cercueil de Jean-Paul Lafay.

L'Express : *Votre association est-elle dirigée contre les « nationalistes » ?*
Thierry Cazon : C'est ridicule. Nous sommes là pour aider les victimes. Un point, c'est tout. Le nationalisme, c'est un problème politique. Et l'association ne fait pas de politique. Dire que nous serions antinationalistes ou d'extrême droite serait pure calomnie. Mais ce n'est pas un hasard : toutes les victimes ont été calomniées. Cela fait partie de la technique des terroristes et de ceux qui les légitiment. On laisse planer un doute sur la moralité des gens. Puis on les plastique. Et on les pousse au départ. Je respecte les

idées des indépendantistes. Qu'ils respectent les nôtres. Qu'ils cessent d'imposer la loi de leur minorité par la violence !

— *Combien d'adhérents votre association regroupe-t-elle ?*

— Une centaine. Je le sais, c'est peu au regard des 5 000 attentats qui ont eu lieu sur l'île depuis dix ans. Mais les gens ont peur. On ne sait pas combien de personnes ont accepté, pour avoir la paix, de payer ce que l'ex-F.I.n.c. appelle l'« impôt révolutionnaire ». On connaît, en revanche, ceux qui refusent de payer : ils sont plastiqués. Sans compter qu'une cin-

quantaine de nos adhérents ont déjà rejoint le continent. Nous les aidons à partir quand ils le souhaitent. Nous les aidons aussi à rester. Mais que faire lorsqu'on reçoit un jour une lettre signée « F.I.n.c. » et libellée en ces termes : « Notre patience n'étant pas infinie, nous avons pris la décision de vous laisser un délai de deux mois pour quitter l'île. Passé ce délai, vous aurez le privilège d'être placé en tête de liste de nos éliminations physiques. » Que faire ? Des enseignants, des fonctionnaires demandent, alors, leur mutation...

— *Si vous étiez enseignant, seriez-vous encore en Corse ?*

— Probablement pas. Il faut être fou pour rester. Ce n'est pas normal de vivre en état de menace permanent. Mais je suis ici chez moi. Le village me soutient. Si je pars, je perds tout. J'aime la Corse. Ils ont pourtant tout fait pour m'obliger à fuir. Avant de me plastiquer, ils m'ont proposé de vendre et de partir sans bruit. J'ai refusé. Le chantage a commencé. A la pharmacie, j'ai pris une associée corse. Six semaines après, elle m'a fait dire : « Foutez le camp. Vous n'êtes plus chez vous. » Devant mon refus d'obtempérer, elle est partie. En me traînant devant les tribunaux. L'ex-F.I.n.c. est très fort : il bénéficie de relais dans toute l'administration. Des fonctionnaires sont complices. D'autres sont morts de trouille. Vous ne savez pas ce que c'est que le terrorisme ! Quand on a voulu me taxer de 50 000 Francs, j'ai tenté de porter plainte. Le juge a répondu à mon avocat : « Au nom de la raison d'Etat, je vous interdis de porter plainte. » Chaque fois que j'ai été plastiqué, j'ai subi un contrôle de l'Urssaf, comme pour aggraver la situation. Lafay aussi, lorsqu'il était à l'hôpital, à la suite d'une première agression, a été l'objet d'un contrôle fiscal. Je suis allé à Ajaccio voir l'inspecteur des pharmacies pour lui demander assistance. Il a insisté : « Partez, monsieur Cazon. Des gens très importants veulent votre départ. » J'ai parfois senti une peur viscérale. Au point qu'un jour je n'ai pas osé assister à l'enterrement d'un ami assassiné. Le matin même, j'avais reçu un coup de téléphone : « Tiens-toi tranquille. Ça pourrait arriver. »

— *Diriez-vous que la situation empire ?*

— L'Etat semble réagir. Avec dix ans de retard. Les élus paraissent se réveiller, après avoir laissé l'île s'engluier dans un clanisme hypertrophié. Mais quand sortira-t-on vraiment du double langage ?

Propos recueillis par Jacqueline Remy.

Visiting the Malpasset site again at the start of my research, I came across a flagrant contradiction, the first of a long series:

- I discovered, along the current tourist route, recent information plaques that praised **André Coyne**, the French engineer of *Ponts et Chaussées*, who had designed a dam whose failure, given as accidental, had caused more than four hundred deaths!

If the disaster had resulted from the wrong choice of site, as has been argued, this should have brought full liability to the engineer who designed the barrage. Responsibility that he had also claimed before the disaster had even happened. The presence of these information plates would have been highly inappropriate!

On the contrary, these information plaques could be seen as an attempt at posthumous rehabilitation of a man prevented by reason of state from defending his professional reputation. His death, less than eight months after the tragedy, is perhaps the reason for his inability to do so, both before Justice and before the inhabitants of Fréjus.

In order to verify the merits of the questions raised, I sought documents and books relating the tragedy of Malpasset. In particular, I got both books on the life of **Richard Christmann**, alias "**Markus**", the spy of the **B.N.D.**, *the German Federal Intelligence Service*, mentioned in the programme broadcast by Arte.

Let us first quote the book "*Im Schatten des Dritten Reiches*" (*In the shadow of the Third Reich*) by **Matthias Ritzl and Erich Schmidt-Eenboom**, Ch. Links 2011, the two historians who were at the origin of the programme broadcast by Arte

"Two other variants of terrorism by explosives were implemented: First, five fuel depots and refineries were blown up in the south of France. These brutal fires, which caused a worldwide sensation at the time, are still remembered. The BND was always informed in advance of the preparations, plans, etc., Christmann notes in retrospect.

The fact that not only was the president of the B.N.D. aware of the plans for the attack, but that he also informed the Pullach leadership, is proven by the message that Christmann sent to Giskes (his superior) on 25 August 1958: 'As soon as a certain lull has occurred, the hydroelectric power station and dam projects will be discussed. Furthermore, in a few months the water level will be more favourable'.

We note that the Malpasset disaster occurred on the most favourable day for an attack. The rain helped the situation, causing the water level to rise rapidly until it reached the top of the structure, an ideal height to facilitate the logistics of an attack.

Moreover, the A.L.N. envisaged the destruction of dams by means of explosive devices [with detonators] activated by compressed air...

*"After an attack on a small dam in the south of France which was only partially successful, but caused many casualties, all terror measures were stopped on the orders of the group organised by **Ben Bella**, who was still imprisoned at the time," wrote **Christmann** to describe the end of the series of attacks [...] This attack probably refers to the bursting of a dam near Fréjus, in the south of France, on December 2, 1959, which killed 423 people but is still considered as a disaster rather than an act of terrorism. After this attack, **Ben Bella** was of the opinion that all acts of terrorism should be stopped believing that they were more harmful to the Algerian cause than helpful.. However, his directive, conveyed through his Parisian lawyer, did not meet with the approval of the radical wing of the **F.L.N.** organised by **Boumediene and Chabou** (ref. 194, documents from the archives in **Roger Faligot's** possession).*

Reference note 194: Cf; **Christmann, Richard**; Programm der Sabotageaktionen der "**A.L.N./F.L.N.**". (1959/1961), Francfort-sur-le-Main, without the year". (**Ritzi, Eenboom**: pages 185/186, translation by the author).

Then there is "*Markus, German spy*" by **Roger Faligot**, Éditions Messidor 1984. **Roger Faligot's** book recounts, among other things, the relationship of **Christmann, alias "Markus"**, with the *F.L.N.* and the *A.L.N.* in Tunis:

*The support given by Markus to the Algerians diversifies [...] then, the day after the battle of Algiers, according to the dispatches of the time at the request of **Boumendjel**, he envisages the development of a plan of sabotage and terror on a large scale. [...] It is this kind of programme that in 1959, the technical services and the sabotage section of the **B.N.D** studied on behalf of **Markus**. In brief, he recalls his activities in the Saarland five years earlier.*

The German handed over to the Algerians a detailed file with the following main points:

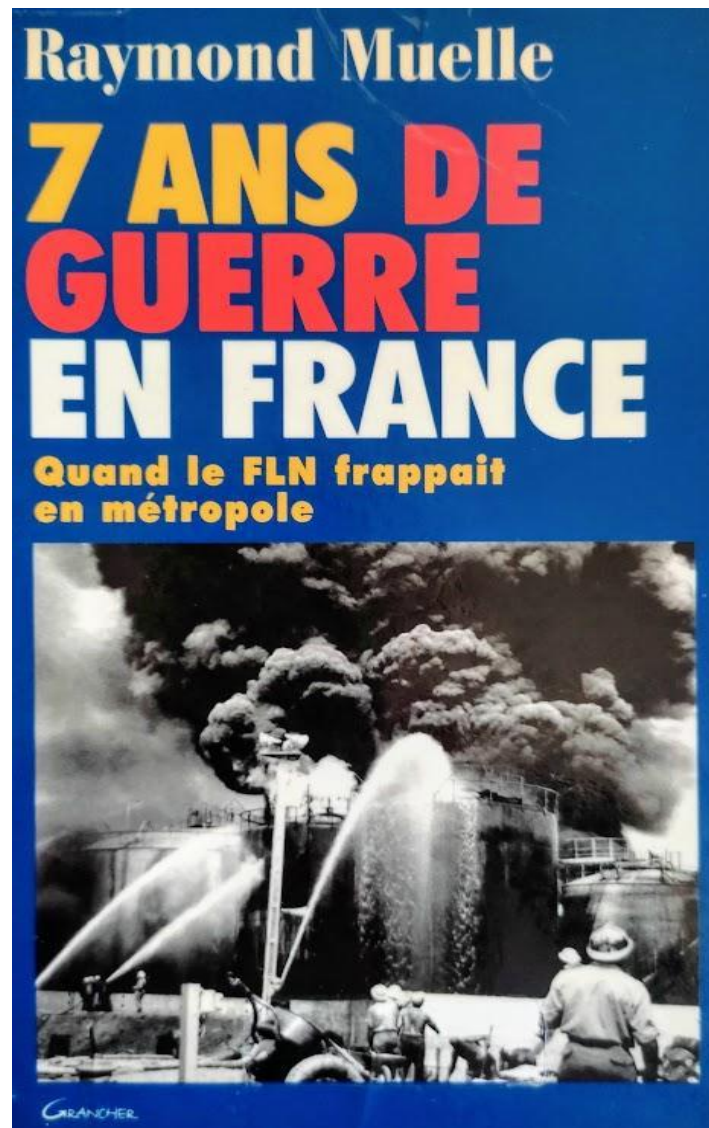
- 1. Making and using Molotov cocktails in accordance with the stated needs.*
- 2. Destruction of fuel and refineries.*
- 3. Demolition of dams by explosives.*
- 4. Intelligence work to establish in which cities it is easier to destroy water pipes.*
- 5. Destruction of water supply lines in large cities.*

*Nota bene: these operations have the merit of terrorising the population as a whole without hitting civilian victims by military means. [...]In the south of France, five specific targets would have a considerable impact. The **Markus** project is accompanied by multiple practical methods, particularly in the manufacture and use of explosives[...] Fortunately, this plan remained a work in progress. Many leaders of the **F.L.N./A.L.N.** leaders, notably **Slimane, Hoffmann, Chabou, Boumediene** - while the Franco-Algerian talks were taking shape - did*

not wish to encumber the French population with the burdens of a war that was soon to end with the independence of their country" (Faligot, pages 186- 187).

What followed showed that the hard line prevailed with the implementation of attacks against refineries in the south of France, against the Malpasset dam and the continuation of the continuation of the war in Algeria (and in France).

Let's give an overview of **Raymond Muelle's** book "7 years of war in France" (Éditions Grancher, October 1994) and its 4th back cover.



***F.L.N.* leaders have rightly declared that their war was won in France. However, the events of the metropolis during the Algerian war seem to have disappeared from our collective memory. However, the period between 1955 and 1962 were particularly bloody, rich in facts and dramatic events whose consequences, far from being erased, are brought to light with insistence by recent events**

Open door to implacable terrorism, metropolitan France accounted for this period, 6,000 North Africans and 400 French killed due to the *F.L.N.* Added to this are thousands of wounded, destruction and considerable sabotage. (*Raymond Muelle's* book does not talk about Malpasset)

Another book speaks incidentally of ***Richard Christmann: Annette, an epic by Anne Weber.*** These are the memoirs of a communist resistant, who became "a suitcase carrier" for the *F.L.N.*. She contributed a number of memories of the period when, after her stay in Tunisia, she took Algerian nationality.

At the Ministry of Health ***Annette*** was in charge of everything concerning teaching and research. "Her" minister was ***Nekkache***, who she had already met in Tunisia. He had been entrusted with the assistance of the very many wounded and sick of the Algerian army known as the borders. When she met ***Ben Bella*** on returning to ***Nekkache***, ***Annette*** had the feeling that this man, a doctor who was known for treating certain patients for free, was not a bad person. Besides, she could see he did the best he could to achieve the result wanted: that everyone recovered. He didn't seem to be out for the money or prestige. He yearned for something called "*a better world*". This implied, among other things, that less children die. This anyway was her impression of the man. And probably she didn't know, no, she couldn't have known, that during World War II ***Nekkache*** had been recruited by the *German intelligence services* in France, and that even in the fifties, he remained in contact with ***Richard Christmann*** who was in the *Abwehr* during the Nazi era and worked after the war as an agent for the ***B.N.D.***, *counterintelligence service West-German*. From all we know now and that ***Anette*** was unaware of then, ***Adenauer*** and therefore the ***F.R.A*** while ostensibly celebrating the new Franco-German friendship, supported secretly the *F.L.N.* people considered terrorists by France. (Pages 206/207)

On the Internet you can find the reproduction of the original documents that the author from the ***Bab el Oued Story*** blog obtained from ***Mr. Erich Schmidt-Eenboom***, himself one of the main actors of the ***Arte*** documentary and co-author of the book on ***Richard Christmann***. These documents come from the archives of the East German *General Intelligence* (the "***STASI***"), from the archives of the *West German intelligence (the B.N.D.)* as well as typescripts of the memoirs of the agent ***Richard Christmann*** alias "***Markus***". They served as the basis for the documentary broadcast by ***Arte***.

These documents are the indisputable, definitive proof that support the statements of ***Richard Christmann***, recounting his role in the project of the Malpasset attack.

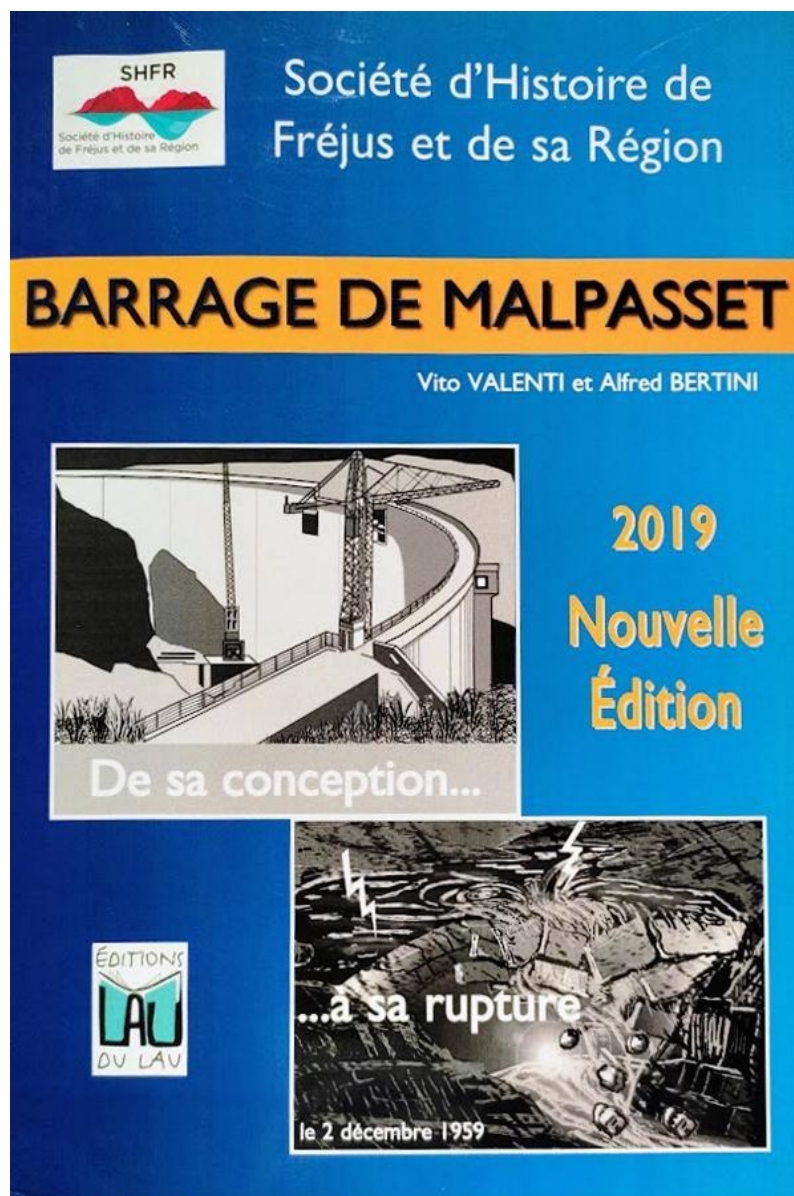
The following two photos were taken from *Jean-Paul Vieu's* book. "*Let's remember...*", The Malpasset Dam, December 2, 1959



Let us now talk about the book by *Vito Valenti and Alfred Bertini*, the work of reference, which I finally managed to obtain after its reissue by the *Éditions du Lau* in 2019: **THE DAM OF MALPASSET**, *The historical Society of Fréjus and its region*.

This book is the result of all the available documents and expertise gathered after more than two years of research by *Vito Valenti*, hydraulic engineer, and *Alfred Bertini* territorial administrator.

My work consists of quotations from this work and comments intended to emphasize important points and highlight inconsistencies in official documents. What the authors did not allow themselves to do.



As we will see, the scenario was made possible by a sequence of factors where human error and nature each played their part. Here are the main chapters, which follow the long history of the project.

THE GEOLOGIST'S OPINIONS

Page 29. The geological study of the dam site by **Professor Corroy** states (in the report of 13 November 1946): "*The reservoir has excellent geological conditions from the point of view of its watertightness*".

Page 31. *In conclusion, Professor Corroy again recommends a certain caution : "The dam will require waterproofing work that must be carried out with great care ...The stability of the supporting slopes is defined, it is nevertheless useful to examine their internal constitution as soon as possible by excavation and small galleries. . The sound rock will therefore be located everywhere, even in the river bed, to avoid surprises when anchoring"*.

The geologist concludes by saying that he would specify the position of this research work in the field, as soon as they been decided on.

This geological study was resumed in November 1949, but we have not found any trace of it in the municipal and departmental archives.

It is nevertheless important to know that the location of the dam was shifted by 200 metres shortly before its construction, without any further geological study, it seems. (**Valenti and Bertini**).

Page 32. The **Coyne et Bellier** firm, before fixing the location of the dam contacted **Professor Corroy** in October 1950 to visit the site.. This is the only time that contact between these two men occurred.

As a matter of fact, **Professor Corroy** found that **Coyne and Bellier** accepted his suggestions but only took them into account to a limited extent.

In the end, it was **Coyne** who decided on the location of the dam. He chose it 200 metres downstream from the one recommended by **Professor Corroy** at the end of November 1950. When consulted, **Professor Corroy** gave a favourable opinion on this move. to the relocation.

The **Coyne et Bellier** firm was officially entrusted with the Malpasset dam project. A contract entrusted them with the mission of helping the department in this construction. Qualified as a technical assistant, **Coyne** was a specialist in this field since he had built many dams in France and abroad.(**Valenti and Bertini**).

Among the hundred or so dams built by **Coyne**, Malpasset was one of the smallest

On 4 July 1952, the prefect was authorised to entrust the Rural Engineering Department with the control and supervision of the construction works of the dam on behalf of the account of the department. (**Valenti and Bertini**).

Page 33. Thus, the organisation of studies and controls of the construction of the

dam construction was set up. The only problem was that the geologist's control mission had not been defined. (*Valenti and Bertini*)

CHARACTERISTICS OF THE STRUCTURE

Page 33. The thickness of 1.50 metres at the top of the building made it at the time the thinnest dam in Europe!

Page 40. Work began on 1 April 1952. [...] It was completed [...] in October 1954.

Prior to the construction of the dam, *Professor Corroy* had planned geological research work in galleries. However, only one core sample was carried out at the site of the dam. From the outset, it appears *Professor Corroy's* role became blurred. Coyne considered it unnecessary to dig exploration galleries and had only two galleries completed in 1951 and 1952.

With the possibility of a credit of 27 million Francs provided by the department to carry out this research work, he estimated that for this type of dam 8 million Francs would be sufficient.

On 9 December 1952, the *Génie Rural* informed *Professor Corroy* that work on the excavations had given rise to some misconceptions, the rock was not as compact as had been expected and asked him if he wanted to attend *Coyne's* visit which was to take place on 17 December 1952. *Professor Corroy* did not assist at the meeting and, by early 1953, considered his role to be over.

It was in this astonishing setting that construction work on the dam continued for two years. The company, with its experience, did what it wanted and considered the geologist's collaboration unnecessary. The crucial importance of the quality of the dam's supports was thus underestimated. (*Valenti and Bertini*).

(This is a very personal assessment by the authors, the contradiction with the following passage is fundamental because it shows the precautions that were taken by the builder to compensate for the poor quality of the left bank support rock).

Page 41. Compared to the quantities initially provided for in the contract, certain exceedances were justified for by the Rural Engineering Department. For example, the base of the dam had to be deepened by 4 metres and filled with additional concrete, stretch the arches of the vault to increase their thrust under the action of the water and include steel to avoid the risk of the "buckling" of the upper arches. The excavations on the left bank were deepened by 8 to 10 metres in order to install an abutment that could be supported by its own weight and pinned by 2 tons of steel. All these measures resulted in 10,000 m³ of additional reinforced concrete

(Valenti and Bertini) (Emphasis added by the author).

ACCEPTANCE OF THE WORK

Page 41. The provisional acceptance of the dam construction work took place on 9 February 1955 and 1 August 1956.

There was no real final acceptance. In fact the filling of the dam was very slow. At the beginning of 1957, three years after the completion, the water level was blocked at +85 metres. This situation was by nature going to create some hesitation, and it was known that, for administrative reasons relating to land not expropriated upstream, it would not be possible to fill it in any time soon...

The report on the final acceptance of all the work was finally signed by the secretary general of the prefecture, the prefect being absent. It referred to the visit to the dam on 1st of February 1957 by the by the *Hydraulic Commission of the General Council*, whose agenda was: "*Visit of the General Council before final acceptance*".

Page 43. In mid-November 1959, the water level was still only 7 metres below the level of the crest, while the first seepages appeared on the right bank of the structure. Torrential rains fell continuously on the whole canton. The first filling, a critical phase in the life of a dam, took place without any control. On reaching the normal level of 98.5 metres, the lake accumulated a volume of 47 million m³.

The disaster occurred on the evening of 2nd of December 1959 at 9.11 p.m., when the water from the dam reached the top of the building for the first time at an altitude of +102 metres".

The rapid filling of the last 4 metres in less than 24 hours had just caused a real shock effect on the dam structure.

Source: report by *J.B. Gaignebet*. The Malpasset tragedy by *Donat Olivier*.

(This is another gratuitous assertion! The dam being of course designed to support its maximum water level, it was equipped with an overflow spillway in the upper part.)

THE POLIEMIC

Let us leave *Valenti and Bertini's* work for a moment to recall that the controversy surrounding the Malpasset dam was much earlier. In fact, suspicions of malpractice had been circulating among the local population ever since the construction of the dam. Already, the Mayor of Fréjus had replied to an opponent who had expressed himself in the *Nice-Matin* of 5th of February 1957 (i.e. two years before the tragedy!).

*"Jean de la Vanne, I think I can guess who you are; not a philanthropist of course, and you should not inspire such articles, nor should they be written by those whose task it is to inform readers; yet you lie, writing that the impounding of the Malpasset dam at its normal level was not ordered because the pressure of the water could have serious consequences on the structure". (Source: *Le Provençal* of February 1960 in a dossier "L'Affaire Malpasset".*

This was a dispute over the amount of land expropriated upstream, by

the owner of the mine which was to be drowned. This dispute lasted four years and delayed the full impoundment of the dam.

This untimely controversy, which could have had no consequences, worried the public and undermined its confidence in the solidity of the structure. The delay in launching was for legal reasons only, but added weight to the rumour that there was something wrong with the construction, which would prepare public opinion to accept the thesis of the inevitability of the dam's failure due to natural causes.

THE RUPTURE OF THE DAM

Page 63: "A few moments earlier, the guard *André Ferro*, having noticed that the level had dropped by a few centimetres (following the opening of the valve) returned to his house located 1,500 metres downstream from the dam. He only escaped the floods by a miracle and later recounted having heard "like the roar of a wild beast, then two thuds". He heard successive cracks and felt a violent blast opening doors and windows;

A **great glow** was visible and then the electricity went out.

The author gives his interpretation: "*The dam was broken in an instant! The huge concrete arch was torn from the ground. It rotated on its base and destroyed its anchorage on the left bank of the Reyran. This is undoubtedly the origin of the roar that **André Ferro** heard.*

(For me, who has lived through several explosions, I have exactly the same recollection of the dull noise produced by an explosive attack!)

The gendarmes' report also has its own interpretation...

Page 67: "*21h30 : The Malpasset dam, situated on the Reyran, 10 kilometres west of Fréjus, gives way under the pressure of the water...*"

Page 70: "*The day before, a catastrophe was feared.*

In the hours preceding the disaster, certain noises testified to a deep concern on the part of the locals.

*The afternoon before, technicians, accompanied by local personalities, carried out a check to determine whether there was really a danger. After having gone along the bed of the Reyran to observe the breaches and floods, and having flown over the whole region in a helicopter, **Mr. Dufour**, engineer of the Ponts et Chaussées, concluded that it was necessary to recreate the safety margin in the filling of the Malpasset dam.*

In effect, the dam was about to reach the level of the overflow and, consequently, no longer had the safety reserve likely to ensure an effective retention in the event of a new storm. It was essential to rapidly recreate this safety margin. After this visit, it was hoped that the worst could be avoided."

(The opening of the drain valve made it possible to recreate the retention function of the Reyran flood and not the safety of the dam)

Page 77. On 10 December 1959, *Louis-Eugène Joly*, the former Mayor of Fréjus, addressed a memorandum to *André Léotard*, the Mayor of Fréjus at the time of the tragedy:

Of the various contradictory or complementary hypotheses submitted to the *Commission of Inquiry*, a certain number of them are technically implausible, such as the blasting of the building sites next to the motorway and those required at Font-Sante for the extraction of *Spath-Fluor*: such a mass and by definition relatively monolithic, does not break up from an explosion whose underground range is always limited by the "wadding" of the ground.

Nor is the hypothesis of a shock wave and a suction phenomenon resulting from the opening of the overflow valves very serious; If it did exist, the effects could only have been limited and remain within the usual margin of safety in the use of concrete and its failure rate. Moreover, the valves were apparently opened 4 hours before the dislocation and it is difficult to understand why such a "water hammer" would have occurred so late. The idea of a localised seismic tremor is implausible and even without a seismograph seismograph, the neighbourhood would have perceived it.

Finally, the idea of an attack can hardly be considered with any probability.

(On the contrary, the revelations of the Arte programme validate this hypothesis, which was evoked at the time).

Page 78: *"As for the examination of the 'stepped' remains, which intrigue certain technicians who detect either faulty work of the companies, or frequent interruptions of the work, when the poured concrete was poorly welded to the previous, or the nature and diversity of the mixes, I, for my part, can see absolutely nothing unusual to explain this."*

(We do! This staircase rupture is more consistent with the result of one or more strong explosions that would shatter the dam).

ALGERIA IN SOLIDARITY

As soon as the tragedy that plunged Fréjus into mourning was announced, collections were immediately organised both in Algiers and in other Algerian cities (*100 million old francs collected*)

In a letter dated 11th of December 1959, the Mayor of Fréjus replied:

"I am deeply touched by the sponsorship that the city of Algiers wants to grant us and I think I speak for all our people when I say thank you with all my heart" "What a lesson you are giving us! Be convinced that we consider France and Algeria to be the same country, the same land, a perfect marriage where we unite for better and for worse."

Strange solidarity... As if the *pieds-noirs*, faced with their own anxieties about their future, felt intuitively responsible and wanted to show their solidarity with the victims of the misfortunes that struck Fréjus...

We notice that the authors, voluntarily or not, link the drama of Malpasset to the Algerian context...

THE EXPERT REPORTS AND INVESTIGATIONS

Page 123. The experts submitted their report on 10th of February 1961 and put forward three hypotheses on the mechanism of the rupture, after ruling out any influence of the blasting required for the construction of the neighbouring motorway:

- 1st hypothesis: the prior sliding of the abutment;
- 2nd hypothesis: the rock gave way under the pressure exerted by the vault;
- 3rd hypothesis: the action of the water's underpressure.

It appeared to them that the dam would not have failed if it had been built on a soil, sufficiently homogeneous and not faulted, and that the cause of the failure necessarily lay in the foundation soil, which was affected by faults filled with clay and sand. Surveys and excavation tunnels should have been carried out beforehand. The building was constructed without a systematic study of the foundation soil.

For these experts, there is a fault and responsibility due to human error.

First of all, the builder who, during his lifetime, had said: *"I'm the one responsible"*.

Secondly, the engineer of the *Rural Engineering Department*, because of his *'carelessness'*.

Page 125. A counter-expertise was ordered on 7th of May 1962. In October 1962, the counter-assessment report came to substantially different conclusions:

"it would not have been possible to discover the culprit crack, which was, moreover, unforeseeable.... It is therefore a trap prepared by nature."

In conclusion, for those experts who had carried out more detailed work, there were underpressures under the dam that caused the failure. It was nobody's fault, it was unforeseeable. It was a case of force majeure.

(This conclusion omits only one thing: to ask the necessary questions about the two-metre setback of the abutment, which is as unnatural and unlikely as possible, and which is underlined by the following expert report).

GEOLOGICAL EXPERT REPORT BY PROFESSOR MARCEL ROUBAULT

Page 126. Circumstances of the rupture

During the weeks that preceded, torrential rains did not cease to fall on the Var region; at the Fréjus/Saint Raphaël weather station 490 mm of water were recorded in the fortnight from 19th of November to 2nd of December, of which 128 mm in the last 24 hours.

Towards mid-November, when the water level was about 7 metres below the crest, seepage appeared **on the right bank**. They rapidly increased to the point of becoming real springs as the water level rose and rapidly approached the top of the structure. This was the first filling, the most critical phase in the life of a dam.

The situation had become worrying. Following a conference held at the site, attended by representatives of the *Rural Engineering and Roads and Ponts et Chaussées*, on 2nd of December at 6 p.m., orders were given to open the drain valve.

At around 9.10 p.m., the level having fallen by a few centimetres, the watchman on returning to his house located about 1,500 m downstream from the dam, heard successive cracking sounds, and a violent blast opened doors and windows, **a large light was visible** and the electricity went off. The dam broke in an instant.

Page 127. After the disaster, it is noted:

- 1. That the left bank half of the dam had completely disappeared; Only a part of the abutment remained. The enormous detached blocks had been transported downstream over considerable distances;*
- 2. That the right bank section had held up, but along and at the upstream foot of the remaining wall there was a gaping crack showing that the wall had become detached from the rock;*
- 3. That in place of the disappeared left bank dam appeared two fractured planes forming a dihedral angle between them, thus testifying the existence of two geological accidents above which the structure had been built and which had not been observed at the time of construction;*
- 4. That the left bank abutment, the only remnant of this part of the structure, had retreated by about 2 metres.*

Page 128. A subsequent study attempted to demonstrate that the cause of the tragedy was the existence of a hitherto unknown type of underpressure under the foundations of an arch dam.

*(In fact this phenomenon caused the detachment of the base on the right of the dam, visible today on the side opposite the rupture, but this detachment could have been the consequence of the sudden emptying of the dam **following** its rupture).*

Page 129. The absence of a sufficient geological study is thus clearly established, it cannot be said that the disaster was foreseeable at a given moment, although the first filling always represents a defining event for a dam; any investigation made, on a more or less short term basis, it was inevitable and this is unfortunately what happened.

NOTE BY CLAUDE MONNIES

Page 133. Blocks are still found 1,500 metres downstream:
Note the good quality of the concrete still attached to the torn off blocks.

Various causes such as earthquakes, sabotage, and motorway blasts have been rejected as explanations for this failure.

This last remark is justified by the very close proximity of the A8 motorway, which was under construction at the same time as the Malpasset dam: the motorway was advancing through the mountain, explosives were necessarily present on this site in order to blow up the rock all along the route. In short, it was easy enough to help oneself to this civil construction site, run by workers who were mainly Algerian, where the *F.L.N.* could easily find accomplices. As for the concrete blocks found far downstream, it is difficult to consider that they could have been scattered by the mere flow of water. Here again, they were probably thrown more than a kilometre by a violent explosion.

THE WHITE PAPER BY MALPASSET

Pages 134/135. Twelve years after the disaster, the experts gave their verdict.
(*Science et vie* n° 652 of January 1972).

We can "*regret*" that there was no overall geological study rather than the definitive installation of the dam. The experts were unanimous in recognizing that the rock mass in question did not lend itself well to the construction of an arch - dam.

THE BREAKDOWN EXPLAINED IN 1985

Page 137. Not being able to suspect any particular properties of the rocks of Malpasset, engineers and geologists cannot today be held responsible for the catastrophe...

Who then? A difficult question to answer.

THE CLOSURE OF THE LITIGATION

Page 141. It is important to note that all the judgments that have been handed down ... have completely exonerated the builders, including the engineer *Coyne* and his collaborators.

Unfortunately, Engineer *Coyne* died before the closure.

The memory of this great engineer, in every respect honourable and even remarkable, is therefore cleared of all suspicion.

Here is the conclusion of *Vito Valenti and Alfred Bertini*.

All the judgements that have been passed on the Malpasset dam failure:

- *Tribunal de Grande Instance de Draguignan*, judgement of 25th of November 1964 and 17th of November 1965;
- *Court of Appeal of Aix-en-Provence*, judgment of 26th of April 1966;
- *Tribunal Administratif de Nice*, judgment of 13th of June 1968;
- *Conseil d'Etat*, judgment of 22nd of October 1971,

The Council of State completely exonerated the builders; no fault therefore is established on their part, which implies the absence of liability.

Since France's highest administrative court ruled as a last resort, it was necessary to respect this decision which was taken following conclusions filed by two colleges of experts and a long investigation, which, from judicial order court to administrative order court, lasted almost 7 years, even though many Frejussians (especially those families who have suffered from family loss and loss of property) continue to ask themselves questions.

The reluctance of the authors is perceptible, and it is with reluctance that they close the file.

Let us quote the conclusion of the tribute book by the photographer and journalist *Jean-Paul Vieu*, published by the heritage department of the town of Fréjus:

THE MALPASSET DAM 2nd of December 1959.

The greatest civil disaster of the 20th century in France.

From then on, engineers, scientists, technicians, experts and counter-experts unanimously agreed on this conclusion: **the Malpasset tragedy was nobody's fault!**

A conclusion that most of the population of Fréjus had implicitly accepted long before the justice system, and this despite the procrastination and the efforts made here and there to shed light on this tragedy.

Here again, the author's reticence is noticeable.

(It should be remembered that this book, as well as the one by *Vito Valenti and Alfred Bertini*, were written long before the contents of the German secret service archives were revealed during the programme broadcast on *Arte*, only the reprinting without modification of the book by *Vito Valenti and Alfred Bertini* appeared later).

My conclusions

The hypothesis of an explosive attack put forward by the Arte programme sweeps aside all the weaknesses of the various expert reports. Let us emphasise the flash of light before the thud, the staircase rupture, the 2-metre retreat of the abutment, the projection of huge concrete blocks at a great distance from each other.

In addition, the presence near an explosive depot used on the construction site of the highway could greatly simplify the logistics of a terrorist action. These explosives were available in large quantities (at hand, if I may dare say), on this construction site, which was mainly run by Algerians.

Malpasset is an attack that worked too well, it exceeded the intentions of its perpetrators: it can no longer be claimed in the logic of the terrorists, its claim risking to have the opposite effect to the one expected, an outburst of anger of an entire people, (not desired either by the *F.L.N.* or by the French government). This attack, carried out in order to influence the peace negotiations in progress risked on the contrary to amplify the engagement of France in the war.

Should the German government have warned the French authorities? This was not the decision taken (The human toll was unpredictable), and it would have been difficult to explain how this information came into the hands of the *B.N.D.* without admitting their department's involvement in aiding the *F.L.N.*

Perhaps the memory of the Allied raid on the Ruhr dams during the Second World War also played a role...

The concealment of this crime is above all a political error.

The experts and the judiciary did not have the easy role.

The victims' right to the truth is still being ignored after more than sixty years.

We continue to pay collectively for the consequences of the terrorists impunity, those who carried out the attack and terrorism as a means of political action.

Thierry Cazon