Nancekuke: the things we buried - and what the cliff might return

Written by Andy Owen

When you stand on the cliffs between Portreath and Porthtowan, the wind does most of the talking.

Gorse lean and kittiwakes hang, like musical notes on a staff.

A stone’s throw away, is Nancekuke Common. Dominated by the great white ‘golf ball’ that sits on the skyline.

Nothing goes unnoticed, here. *Nothing*.

The watchers, watch. Continuously.

Protecting us.

But it wasn’t always so. This is a place with a murky history.

Remote Radar Head Portreath or RRH Portreath as it is known now, is an air defence radar station operated by the Royal Air Force.

Its radar (housed in a fibre glass or *golf ball* protective dome) provides long-range coverage of the South Western Approaches to the United Kingdom.

But, before it took its new name and new role, this same headland wore another name: CDE Nancekuke.

Nancekuke is one of those Cornish places where rumours stick like salt spray, because what actually happened here, was secret by design.

Mysterious. Sinister.

To a certain degree, it is STILL all of those things. Because the whispers won’t go away.

The story starts in 1940–41 with RAF Portreath - a Fighter Command station cut into the heath, to guard the Western Approaches.

263 Squadron came first with Westland Whirlwind Mk I fighters, soon relieved by the Spitfires of 152 Squadron, as the field settled into a hard, urgent rhythm.

It was an odd airfield: four tarmac runways, though only one was really up to more than single-seater fighters.

Bristol Blenheims soon arrived - and the station doubled as an advanced base for raids into France.

The main runway, just long enough for a heavy Blenheim, earned its keep, handling one creaking take-off at a time.

Geography made Portreath more than a fighter strip.

Pointed at the Atlantic, it became a springboard for the long haul south.

In October 1942, it was used for Operation Cackle, feeding aircraft, crews and kit into the USAAF's 12th Air Force, for *'Operation Torch',* the Anglo-American invasion of French North Africa.

As the war turned, Portreath's work changed with it. Coastal strike and anti-fighter missions over the Bay of Biscay took centre stage. In the run-up to D-Day, 248 Squadron and their Mosquito VI's flew separate missions from here.

After 6th June 1944, Biscay sorties fell away - and on 7th September 1944, the last of that coastal work stood down. Units shifted north to Banff. What remained on the Cornish headland, were the Air-Sea Rescue squadrons and No. 1 Overseas Air Despatch Unit - the quiet, necessary endings of a busy station.

By February 1945, the ASR squadrons had gone; by May 1945 the last flying unit lifted off and did not return. The base slid into Care and Maintenance that December, then across to Technical Training Command in May 1946 for the 7 (Polish) Resettlement Unit.

And when that chapter closed, the runways fell silent. The airfield was abandoned**.**

And this is where this story really starts…

The United Kingdom’s investigations into the military possibilities of chemicals in warfare, was greatly influenced by the stockpile of captured German nerve agents, Tabun and Sarin - and the research documents that came with them.

Sarin was quickly identified as the most suitable agent - and by 1950, development was sufficiently advanced for limited production to begin.

The Chemical Defence Establishment at Porton Down was the obvious place for this work, but it was decided that it was unsuitable, due to its proximity to large centres of population and industry.

So, a new, remote location was sought. The abandoned coastal airfield at Portreath fitted the bill perfectly. After all, it was situated in the sparsely populated area of the Cornish peninsula.

It ticked all the boxes.

Very quickly, the site was taken over by the Ministry of Supply and renamed CDE Nancekuke. Added security was introduced, with a new 9' high wire mesh perimeter fence. The approach roads were all closed.

The public were not informed of what was to be produced at the site. In addition, many of the workers employed to build the plant, were not told of its intended use.

From the outset, those several hundred acres at Nancekuke were meant to start small and think big: a pilot line for Sarin (GB) to nail the chemistry and the workflows - while, on the drawing boards, engineers were already sketching a vast, fully automated production and weapon-filling plant that could scale, the moment the process proved itself.

CDE Nancekuke opened in 1951 as a compact production and research outstation, laid out as three zones - North, Central and South Sites.

The North Site held the pilot plant, built to support the research, development and manufacture of GB. Very quickly, Nancekuke became Britain's primary centre for Sarin work and storage.

Actual production ran from 1954 to 1956: enough time to demonstrate the process end-to-end - and to supply assessment trials and the testing of defensive equipment, then under development at Porton Down.

It was suggested by a local MP, that chemical weapons produced at Nancekuke were used offensively by the United States until 1964.

This was never confirmed. Or denied.

But, subsequently, international tension relaxed to the point where it was not judged necessary to proceed with a production plant - and production ceased in 1956, by which time, a stockpile of some 20 tons had been accumulated.

That's a hell of a lot of deadly poison.

And, remember, it was located literally a stone's throw from the people living in West Cornwall, plus tourists and holiday makers that were increasingly discovering the many delights of this beautiful part of the world.

From 1956 onwards, the brief narrowed to defensive support: small-scale runs of high-hazard compounds and related agents, directed, as always, from Porton Down.

Across the 1960's and into the late 1970's, Nancekuke also turned to riot-control production, with CS Gas produced on an industrial scale.

The plant worked by batch process at roughly 30 kg a day, delivering a total output in the region of 33–35 tons.

Not nice.

And not a place you want over your left shoulder when you set up your deck chair on a lovely Cornish beach in July and August.

In 1976, a defence review recommended the transfer of any remaining work to CDE Porton Down - and the decision to begin decommissioning CDE Nancekuke was taken.

A team of international inspectors oversaw the decommissioning process.

The official line on this decommissioning process, was a simple statement, that all remaining stocks of chemical agents were destroyed or transferred to Porton Down between 1976 and 1978.

The truth was a little different.

Some chemicals were either ‘neutralised’ on site or returned to the commercial chemical industry, but a considerable volume of this dreadful stuff, was buried on site along with debris from contaminated dismantled plant and buildings.

In the 70’s, this ‘out of sight, out of mind’ approach, seemed to be an environmentally acceptable procedure.

In actual fact, it was a ticking time bomb.

Material was dumped in five clearly defined and widely separated locations within the boundary of the Nancekuke site - in long-abandoned mine shafts within the perimeter, the most cited of these, the shaft at Sally’s Bottom (Wheal Sally).

One site was an old quarry some 40 or 50 feet in depth, this was filled with all kinds of building rubble, waste chemicals and quantities of asbestos from demolished buildings.

Then, there’s the cliff and the grille. Walkers and urban explorers swap stories about a grilled opening on the seaward side – *‘The Portreath tunnel’* - and videos were taken of the effluent shaft and sea cave along this coast.

It is said that the site was ‘cleaned up’ under something called the *‘Nancekuke Remediation Project’*. Many people felt at the time – and many still do today, that this clean-up was nothing more than cosmetic.

Anyway, the CDE moved out in 1978 and the station was handed back to the Ministry of Defence.

A new radar station was quickly established. Number 1 Air Control Centre arrived from Wattisham in July 1979 - and the new station came on line early in 1980.

RAF Portreath is still operational as a Reporting Post with a remote radar head within the UK Surveillance and Control System (UK ASACS), which provides up-to-date information on air activity required to defend the UK and NATO.

So, the RAF are there now, keeping us all safe.

But the RAF cannot put right, the clearly dubious and very worrying disposal process of the dumping of the deadly and very nasty CDE Nancekuke waste.

Stories travel differently along this coastline. They're told over hedges and harbour walls - and sometimes they get written down. Locals have told many stories – and continue to do so.

One oft-repeated claim is about "five miles of tunnels" and an underground cavern that is "huge." Old mine workings are everywhere here; the FOI and technical reports point to specific shafts used for dumping rather than an integrated bunker complex.

The myth persists, because it fits the landscape so well.

And then there are the health stories - emphysema in a non-smoker; cancers and auto-immune illnesses; talk of chemicals "tipped into the sea."

Candy Atherton, an MP at the time of the closure, reported that 41 men died - nine during employment - and 32 after leaving the establishment, between 1950 and 1969.

There seems little doubt that there was an outfall to the sea from the Nancekuke site, called the *'mystery pipe'* which has been the focus of many stories over the years, especially from local fisherman, whose nets when hauled up, regularly contained tons of dead fish, crabs and lobsters.

At much the same time, a large number of seals on the north coast were found dead.

Decontaminants were apparently flushed out through a cave into the sea. Those chemicals, rather than nerve gas, may well be responsible.

We shall probably never know.

Along the way, there are many other stories: the farm lost in a hurry; the worker who didn't know what the concrete pads were for; the quiet signings of the Official Secrets Act that kept mouths shut, while the wind did the talking.

It isn't just the chemicals that make the story potent. It's the method. Nancekuke epitomises a very British way of doing dangerous things:

Choose a remote, windy cliff far from 'large centres of population'. Call it defensive. Do it small-scale until you've proved you can scale. When the policy changes, fold it away. Bury what you can't easily move; write a memorandum; tell lie after lie; hand the land back to another arm of government.

"Out of sight, out of mind…"

The land at the location was perfect. Full of rabbit runs and old engine houses, pocked with shafts and adits from two centuries of hard rock mining.

If you wanted to hide a twentieth-century secret, you could do worse than drop it into the nineteenth.

A lot of the records have been declassified now, but it is worth noting that quite a lot have not.

The MOD released the 1980 'Closure of CDE Nancekuke' technical memorandum under FOI, but certain elements - a photographic record and a detailed site map referenced in the memo - were *not* released in full, implying parts remain withheld/redacted.

I'll leave you to draw your own conclusions as to why this is…

When the site closed, the official 'final clearance' task list included "Make safe effluent shaft and adit at North Site" and "Fill in effluent pits not dealt with by CDE."

Interesting…

So, the outfall/shaft wasn't a rumour – they <u>were</u> pumping nasty stuff into the sea.

And by listing it on the MOD's own jobs-to-do list, they actually confirmed it.

The last time I went up there, a kestrel hung over the edge and a pair of hikers were arguing about whether the 'golf ball' moves. *(Actually, it does. Well, the dish inside, anyway. The outside shell keeps the weather out.)*

It's still a rather weird place. There is a strange, uncomfortable feel to it.

What Nancekuke gave to Cornwall should be of great concern.

Without any doubt, there is some very nasty stuff bubbling away under the ground up there.

Old mine workings aren't neat vertical shafts in a textbook; they are veins and stopes and adits, hiding unexpected conversations between rock and rainfall.

This is not a static coast. The North Cornwall cliffs are eroding, not in a Hollywood collapse, but in quiet, patient bites - storm by storm, winter by winter.

There is a serious risk factor that its proximity to an eroding coastline, may present significant future transmission risks, should the remediation become compromised by landslides in the future, accelerated by climate change.

And that, as we know, is already starting to happen everywhere.

If you want the shape of the concern, it's simple:

Unknowns in the map. We have summaries and memoranda; we do not have a complete, public, shaft-by-shaft accounting of everything that went underground. Even when files are 'released', attachments go missing, photos are withheld, diagrams are sanitised. Secrets rarely die cleanly.

Hydrology beats reassurance. Buried waste behaves while your groundwater table behaves. After a wet year, after a storm sequence, after a small collapse you never see, the pathways change. You won't know until a test well tells you - or a fisherman does.

The cliff is a conveyor. Those shallow pits near the edge? The raised valley trending seaward? Time and gravity work in one direction. You can seed reassurance in committee papers, but you can't argue with an undercut.

Let's face it, there is a very realistic chance that some of this stuff is going to appear again. Technical assessments would have us believe that the risks are known and managed.

I doubt that very much.

The problem with landfill is obvious. Geology has its own policy.

'That which goes under the ground, inevitably comes out in the water. '

It's a proven fact.

That's why monitoring and transparency, matter here more than reassurance.

So, there you have it. You pay your money and you take your choice. Make your own mind up. Walk it. Read the files. Trade stories in the car park.

But, if you go up there when the wind drops, you'll notice the quieter sound: the sea testing the cliff, atom by atom, the long patience that will, eventually, tell us everything.

Currently, not only in the UK, but worldwide, the problems of serious ground and water contamination from buried military waste, are starting to give great cause for concern.

The only safe solution is to recover these contaminants and treat them by chemical or physical means, to ensure that their future environmental impact will be neutralised.

But you know as well as I do, that it won't happen.

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