

# A Christmas nightmare

How can this happen? That's the question we first asked ourselves at the HVAC&R Nation office when we received an email last month from one of our avid readers. He'd just returned from working on Christmas Island in what he described as "the trip from hell".

Whether it's the tyranny of distance, or a simple case of "out of sight, out of mind", what Perth-based electrical and refrigeration/air conditioning contractor Dave Glossop came across during his trip to Christmas Island recently should never be allowed to occur.

But before we detail Dave's "adventures", it's worth taking a moment to recount the island's rather colourful history.

Christmas Island, as most would be aware, is home to Australia's most well known detention centre for asylum seekers. Located 2600km north-west of Perth yet just 360km south of the Indonesian capital Jakarta, it was originally a British colony before coming under the occupation of the Japanese during the Second World War, with its vast phosphate deposits much sought after.

The British reoccupied the island towards the end of the war, coming under the new British colony of Singapore, before the UK transferred sovereignty to Australia in 1958, with the island's phosphate deposits continuing to be mined.

It was not until the 1980s and 1990s, however, that Christmas Island truly entered Australia's consciousness, when boats carrying asylum seekers arrived on the island from nearby Indonesian islands.

As numbers grew at around the turn of the millennium, the Howard government responded by excising the island from Australia's migration zone following the *Tampa* controversy, meaning asylum



*Different copper pipe sizing just slotted into each other and welded.*



*Resort facilities.*

seekers arriving there could not automatically apply for refugee status. This saw their relocation to other nearby countries, including Nauru, as part of the Pacific Solution.

In 2006, a \$400 million, 800-bed detention centre was built on Christmas Island to replace a temporary centre built five years earlier, and after the subsequent Rudd government decommissioned the centres on Nauru and Manus Island, Christmas Island's detention centre became the country's main off-shore processing centre for asylum seekers. This continues today.

Before becoming known for its detention centre, Christmas Island was the playground of Indonesia's rich and (in)famous when a Keating government-supported casino opened there in 1993 during the reign of the Suharto regime of Indonesia.

It became an immediate success, reportedly turning over more than \$12 billion in its first two years before it was closed just five years later under controversial circumstances amid Suharto's spectacular political demise.

Attached to the casino was the Christmas Island Resort – a once lavish, luxury resort accommodating the casino's high rollers who would fly in by private jet, just 50 minutes from Jakarta.

But when the casino closed in 1997 as the Indonesian money dried up, so too did the tourists, and the resort has remained relatively dormant ever since. This is where Dave Glossop's story begins.

With the island's detention centre now bursting at the seams, the Australian government has turned to the aging resort to accommodate non-resident staff on the island, including processing staff and Australian Federal Police.

But with the resort in various states of disrepair, and few skilled hands residing on the island, a call went out across the country for tradespeople to travel to the island to work on updating the resort's wilting infrastructure.

"Earlier this year there was an advertisement in the paper calling for electrical contractors to work at Christmas Island Resort doing maintenance," recalls Glossop. "I thought, 'OK, that sounds interesting'. I'm always up for looking at different jobs, so I put my application in expecting to find out more information about it, but I heard nothing for months."

"I'd basically written it off, only to receive a phone call at 4 o'clock one Saturday afternoon. 'We need you at Christmas Island on Tuesday. Can you go?' I was on holiday spending time with the family."

After organising himself, and not being about to travel until the Thursday due to limited flights, Glossop finally landed on Christmas Island.

Although he had consulted with the resort's owners on the works required, and had taken with him 116kg of luggage including dozens of junction boxes, lengths of cable and conduit along with tools, Glossop could not have expected the enormity of the task that confronted him.

**Timeline: Christmas Island**

- 1888** The discovery of phosphate and lime leads to the incorporation of the island into the British Crown.
- 1942** Christmas Island comes under the occupation of Japan during the Second World War.
- 1945** The island is reoccupied towards the end of the war by the British, coming under the new British colony of Singapore.
- 1958** The UK transfers sovereignty of Christmas Island to Australia.
- 1980s -1990s** Boats carrying asylum seekers and mainly departing from Indonesia land on the island.
- Aug 2001** Christmas Island is thrust into the national spotlight amid the *Tampa* controversy, in which the Australian Howard-led government stops a Norwegian ship, the *Tampa*, from disembarking 438 rescued asylum seekers at Christmas Island.
- Sep 2001** In September, the Australian government excises Christmas Island from Australia's migration zone, meaning that asylum seekers arriving on the island could not automatically apply to the Australian government for refugee status.
- Sep -Oct 2001** The Royal Australian Navy relocates the refugees to other countries (Papua New Guinea's Manus Island, and Nauru) as part of the Pacific Solution.
- 2006** An immigration detention centre, containing approximately 800 beds, is constructed on the island for the Department of Immigration.
- 2007** The Rudd government announces plans to decommission the Manus Island and Nauru centres, processing occurs on Christmas Island itself.



*Exposed wiring.*



*Corroded hot water units.*



*Sub-standard wiring.*

"For the last 12 years, this resort has sat there doing absolutely nothing," he explains. "Most of the buildings are metres away from the sea, and the whole place is just completely dilapidated. There are 200 and 300 kilowatt chillers there that are just falling apart."

Yet these chillers were not why Glossop was there. Rather, he had been contracted to repair unsafe and faulty wiring to some 100 split-system air conditioning units, which had been inspected and reported as being unsatisfactory.

According to Dave Glossop, among some of the breaches in electrical and refrigeration regulations were:

- Crushed wires against chassis
- Live wires with no junction box or cover
- Earth, neutral and active wires incorrectly coloured
- Single insulated wires in ceiling spaces with no junction boxes
- Cables not terminated correctly, but rather twisted together
- Insulation not replaced at junctions
- Cables and junction boxes not weather proofed
- No pressure tests of dry nitrogen (done with R410a apparently)
- Copper rated to R22 only, not R410a
- Different copper pipe sizes (ie 3/8" into 1/2") slotted into each other and welded
- Some units had leaked all their refrigerant
- Some old refrigerant cylinders were full and some 10 years out of date
- No isolators installed.

Incredibly, these split systems had been installed in the month or two prior to Glossop arriving, probably as a result of that initial advertisement.

“Had the inspectors written out an order, there would have been two or three orders on every single unit, but because it was just so far-reaching, they did a generic blanket order demanding items be repaired,” he says.

“As I gradually went through the place, I discovered every single air conditioner, inside and outside, breached so many rules and regulations. It was clear that whoever did that work didn’t have a clue about air conditioning or electrical work – it was just grossly under-standard.”

Pictures tell a thousand words, and those taken by Glossop during his eight-day stay illustrate some of the grossly sub-standard work that confronted him as he set about making right what others had obviously spent little time completing.

And while he knows the name of the refrigeration contractor responsible for the work, and ultimately blames them for the sub-standard installation, Glossop says his experience at Christmas Island is sadly just a glaring example of what he sees in his day-to-day work in Perth.

“You can have three things: cheap, quality and on time. If you get the quality on time, you can’t be cheap. If you get cheap, something has to give, and most of the time it is quality. And unfortunately

people just want the cheap price and don’t care about the quality,” he says.

“I’m sure the owners of the resort had no idea these air conditioners were being installed so poorly. There needs to be a message sent out to fridgies that you can’t do sub-standard work and get away with it. And if you do, the book should be thrown at you.”

Glossop says one of the major issues at Christmas Island is its isolation from the mainland, resulting in equipment and parts being days, if not weeks, away.

But as he points out, most mining sites are also remote, yet wouldn’t accept workmanship of such poor standard.

“There’s no way they [the installer] didn’t know this work was sub-standard, and perhaps it has come about because he didn’t have junction boxes, and didn’t have connectors,” he says, “but you don’t just twist cables and put a bit of tape around them.

“Why don’t you just cut the cable and re-terminate it? It’s so simple – that’s what I did. Why get a tiny bit of extension lead to join up the air conditioner 250mm when you just pull the cable through 250mm and terminate it straight into the air conditioner. Whoever it was just didn’t have a clue.”

He says another issue is that contractors don’t always stand up to employers, even when they are confronted with unsafe working conditions and a lack of resources.

“There’s too much work out there to do crap work, so if employers want to go down this line of not supplying the right tools and equipment to do the job, then see you later!”

Along with being confronted with over 100 unsafe air conditioner installations to repair, Glossop also became extremely ill just a day into his stay and was subsequently hospitalised, which he puts down to the conditions on the island.

After being at Christmas Island for eight days, and only being able to complete works on one 16-room block, Glossop was happy to be leaving.

“I could not wait to get out of there,” he says, able to laugh about it now.

“When it comes to safety, once you tick enough boxes, you say, ‘Get me the hell out of here,’ and that was one of those places.” ■

Christmas Island, although closest to Western Australia, is a non-self governing territory of Australia, and is currently administered by the Attorney-General’s Department. The Electricity Regulations of Western Australia apply.