# BtN: Episode 03 Transcript 17/02/15

#### Coming up:

- No it's not human ten pin bowling it's a demonstration of nuclear power. We'll explain how later.
- We'll also find out if cursive handwriting lessons are on the way out.
- And Rookie Reporter Justice gives us a behind the scenes look at a special event for kids called Heywire.

Hi I'm Nathan, and that's just some of the stuff you'll see a bit later on BtN, but first:

# **Nuclear Industry**

Reporter: Carl Smith

INTRO: Nuclear power. In Australia, it's always been a bit like Voldemort, you don't ever mention its name. Both sides of federal politics have said they're against it and have been for ages. But one Australian state has now decided it wants to investigate the idea. Here's Carl to explain how it works.

Back in the 1930s and 40s, the world was on the hunt for energy. Homes were starting to use more of it, so scientists were on the lookout for new places to get it. And they found exactly what they were looking for somewhere unexpected: inside the tiny particles that make up everything on earth, atoms.

They're too small to see, even with a microscope. But the scientists found that if you fire a tiny part of an atom called a neutron at some bigger, special atoms like uranium, that would split the big uranium atom apart. This process releases a lot of heat energy, and can start a chain reaction releasing even more heat.

That nuclear heat is then used to boil water to make steam, which spins turbines to make electricity. That was how the idea of nuclear power was born. Sounds pretty simple right? Well not entirely.

At the moment Australia is the only G-20 nation not using nuclear energy, and that's despite us having about one third of the world's uranium. But why? Well some people think it's too dangerous, because the process also releases lots of radiation - a type of energy that can hurt people if they're exposed to it.

That's what happened in Chernobyl, Ukraine, in 1986. A nuclear station broke down and massive amounts of radiation leaked out, killing many people over time and making some areas uninhabitable. A similar accident happened in Japan in 2011 after a tsunami hit the Fukushima Nuclear Power Plant.

On top of that, the power released from splitting atoms can also be used to make nuclear bombs, and nuclear power produces radioactive waste which needs to be stored somewhere, not that many people want it stored near them.

But while there are some clear concerns about nuclear energy, there are also some big benefits. It doesn't release greenhouse gases, like fossil fuels do, which is great for the environment. And there's heaps of energy stored away in those tiny uranium atoms, which could provide plenty of power for the future.

So should we jump on board or not? Well that's what South Australia wants to work out. It's set up a royal commission that will look over all of the arguments again, to work out if the state should get involved.

But it's not just power plants they're looking into. It's also other nuclear industries like: mining uranium - something we're already involved in, but could do more of; enrichment, where specialists alter uranium slightly so it can be used to make power; and finally the commission will also look at whether nuclear waste could be stored in South Australia - for a price of course.

So now it's up to the experts to weigh up all those pros and cons, and figure out whether SA should harness the mighty but controversial power of the humble atom.

Presenter: Time for the headlines now. Here's a wrap of the biggest ones from the past week.

#### The Wire

The Australian Human Rights Commission has found that kids held in immigration detention have been put in serious danger.

It says some have become sick while others have developed mental health problems.

It recommends that all kids in detention be released.

Some good news for Aussie journalist Peter Greste who was released from jail in Egypt recently. Now his workmates have also been let out.

Al Jazeera journalist Mohamed Fahmy and cameraman Baher Mohamed were locked up with Greste for more than a year.

The journalists have been let out on bail but they'll have to stay in the country and go back to court later this month.

One of the most popular websites in the world is celebrating its tenth anniversary.

The very first video uploaded to YouTube in 2005 was this super interesting clip.

Since then the content has gotten much better and these days YouTube helps us all waste many many hours.

It's also launched a bunch of careers.

"Hello there friends and welcome to my tutorial on how to trick people into thinking you're really good looking."

On top of that the world's third most visited website has changed the way we look at entertainment.

And it's the biggest, sparkliest, danciest, over-the-top singing contest ever -Eurovision.

And this year Australia will have its chance to shine for the very first time.

We've got a one-off wildcard entry to the final stage of the comp.

That means an Aussie will take to the stage and be in the running to win!

As well as watching it on our screens, Aussies will also get to vote.

The contest will be held in Austria in May.

# **Chinese Migration**

Reporter: Natasha Thiele

INTRO: Now February the 19th is Chinese New Year, which is a big deal to the hundreds of thousands of Chinese Australians that call this country home. So to mark the occasion, we thought we'd take a look at the history of Chinese migration. Many started coming here right back in the 1850s for the gold rush, including the great, great, great grandfather of our Rookie Reporter this week, Anna. Here's their story.

ANNA: Hi, I'm Anna and this is my great, great, great Grandfather Captain John Egge. He came to Australia from China in 1852 and worked as a cabin boy on boats along the Murray River. He eventually got his own paddle-steamer and was heavily involved in the river trade. He started up a heap of businesses in a town called Wentworth in New South Wales and became one of the wealthiest men there!

It would've been pretty hard for him starting a new life, moving to a foreign country and learning a new language. But that was the case for the many Chinese people who came to Australia around the same time.

During the 1850s, tens-of-thousands of Chinese immigrants travelled here by boat. They came to work in Victoria's gold fields so they could make money to send back to their families. After the gold rush many went back to China, others stayed to start up their own businesses or work the land. And today, there are around 865-thousand people of Chinese background living in Australia sharing their culture and talents with all of us!

My relative John Egge was so respected for what he did, there's even a statue of him on the wharf in Wentworth! But we wanted to honour him too, so we built our very own paddle-steamer in his memory.

This is the Evangeline. Come have a look. This is the lounge room and the kitchen and the steering wheel at the front. The bedrooms are upstairs. This is the master bedroom and back this way this is where my sister and I sleep. The boat was named after my Great Grandmother. We started with drawing designs in the dirt and it took around 5 years to build it in our backyard. It was kind of the love-hate relationship like when you wanted to be doing things with your friends and you had to be on the boat helping, but in the long run it's been an amazing journey.

Chinese immigrants like my great, great, great Grandfather have played a big role in Australia's history. They've made our society more multi-cultural and brought their traditions to our country to enjoy. I reckon Captain John Egge would quite proud.

## Quiz 1

Okay let's test your knowledge on China now.

About how many people currently live there?

3.5 million

1.35 billion

or 3.35 billion

Answer: 1.35 billion

That makes China the most populated country on earth by about 100 million people.

#### Time Zones

Reporter: Carl Smith

INTRO: Now, South Australia has announced that it's thinking of changing its time zone to help businesses there deal with people interstate or overseas. In case you didn't know, South Australia is half an hour behind the east and 2 and a half hours ahead of Western Australia. But how can a state just change time zone? Well after this story, you'll realise just how easy it is to mess with something as important as the time. Here's Carl.

Global businesses have a pretty tricky job to do. They have to coordinate offices and stores all around the world that are in completely different time zones. Even if those businesses are in Australia, they still have to deal with different states working on three different times.

But some people in South Australia are getting a bit sick of that. So they've suggested a fix: why not just change the time? But if we can do that, why have time zones at all? Well they're actually really important.

The idea for time zones came at the end of the 1800s, when trade and travel were growing between nations. Back then countries set their own time, based on where the sun was in the sky. But people who moved around a lot found it hard to keep track of the different times the sun was up in different countries - and that made coordinating their schedules pretty tricky.

After missing a train one day Scottish engineer Sir Sandford Flemming came up with the idea that time should be set depending on how far each country is away from one place on earth. And he chose this place, Greenwich. From here, the world was split into segments, with the time changing by an hour in each segment. It meant that times now followed a simple system throughout the world, while still matching when the sun rises and sets in each country too.

Originally Australia had three time zones: Greenwich plus 8 hours, Greenwich plus 9 and Greenwich plus 10 in the East. So there was an hour between each part of the country. But in 1899 they decided to change things up slightly. So the middle moved to be only half an hour behind the East, instead of an hour.

After decades of tinkering like that global time zones don't look like simple segments anymore. They actually now look like a bit of a mess. But the changes fit around national borders and help line up countries who regularly work together.

But those calling for a change in South Australia say their time zone is still a bit off. They say the half hour difference makes it harder to work with people in other states. For example while many offices are closing up in Sydney at 5pm, it's only 4:30pm in South Australia and the doors are still open.

And they say it's even more difficult to coordinate with other countries. On the other hand there are people in SA who don't want the time zone shifted.

Farmers say their cows or other animals could be distressed by a change in schedule, because animals can't understand our clocks and they'd be confused if milking suddenly started at a different time.

And changing to a different time zone could mean the sun is up or down at some pretty odd times of day. But in the mean time, it's not clear yet whether South Australia will change to eastern time, Perth time, its own international time zone, or even if it'll change at all.

But the debate has now started, and the clock is ticking.

### Quiz 2

Let's go to another quiz now.

What time do astronauts follow in space?

Is it Greenwich Mean Time

Cape Canaveral's Time Zone in the US

Or Mission Elapsed Time.

The Answer: Mission Elapsed Time

Because normal time doesn't mean anything in space they go by mission elapsed time or time since blastoff instead. Okay.

# **Hand Writing**

Reporter: Natasha Thiele

INTRO: Learning cursive handwriting in primary school is a big task. But one European country has decided it's a waste of time. Finland is soon going to ditch all cursive lessons and replace them with typing lessons instead. So could Australia follow one day? Here's Tash.

NATASHA THIELE, REPORTER: When I was a kid, getting my pen licence to write in cursive was pretty exciting. But soon, learning how to write cursive might be as dated as my hairstyle! Before we find out why, let's take a closer look at how cursive came to be so important to begin with.

Cursive is a style of writing that's been around for thousands of years. An Italian guy from the 15th century named Niccolo Niccoli is said to have invented the style we use today. Kids had to learn it in the old days using pen and ink and back when, say your grandparents were at school, this is how they learned it.

But something one European country is doing has people talking about whether we still need it! Finland has decided to scrap cursive handwriting classes in all of its schools from next year. Instead, kids will be taught how to type! The country's education experts reckon typing is more useful in everyday life especially considering so many of us use technology to communicate.

Some Aussie experts agree with Finland. They say cursive writing is outdated and doesn't improve the way we read and write. There have also been suggestions that kids should now be doing tests and exams on computers, instead of handwriting them. For example, the NAPLAN test will be all done online from next year which some say could improve results.

But not everyone agrees we should scrap cursive. Some say it's a valuable skill to have especially for things like signatures. It's also a good way of writing neatly and quickly in situations like exams. And some worry replacing cursive with typing lessons might make kids worse at spelling because they can just rely on spell check all the time.

So is the writing on the wall for cursive?

KID 1: I just find it more convenient to message on electronics because you get your message through a lot quicker.

KID 2: I think handwriting is important cause you won't always have access to computers and iPads and things.

KID 3: Some people would be so reliant on computers being able to spell check and correct all your mistakes that they might forget how to spell things and write neatly.

KID 4: Personally I suck at typing, but I also suck at writing. So it's either-either really!

#### Online Poll

Now, we also asked some kids from Finland how they feel about the plan to drop cursive. Their responses might surprise you. You can find them on our website. While you're there, you can also tell us what you think about it too.

Is cursive worth learning?

To vote, just head to our website.

Last week, we asked you if radio has a future. And the results were overwhelming, More than 4000 of you voted. And most said radio will definitely live on. Thanks for voting!

#### The Score

To sport now.

And the Cricket World Cup is underway in Australia and New Zealand. 14 nations from around the world have travelled here to compete.

With both countries putting on big opening ceremonies! Australia beat England by 111-runs in its first match in Melbourne. Going one up courtesy of a big century from Aaron Finch.

"And a leap in the air, a punch of the air and Aaron Finch goes through to 100 on his home ground, what a day."

In another big match India beat Pakistan by 76 runs at the Adelaide Oval but all anyone could talk about was the sunset. Pretty.

To NRL and some of the biggest names in the game have battled it out in the annual All Stars match. It's a night to celebrate the culture of Aboriginal and Torres Strait Islander people. And it takes place every year on the anniversary of the apology to the stolen generations. The Indigenous All Stars beat the NRL All Stars 20 to 6.

A teenager from Perth has broken the world junior outdoor pole vault record! Nina Kennedy made the jump look easy. As she cleared a height of four point five nine metres. And she's pretty excited about the result!

And, world champion canoeist Jessica Fox has been named Aussie Athlete of the Year at the A-I-S Sport Performance Awards. She's the first ever canoe athlete to win world titles in two different classes!

JESS FOX: "To see canoeing up there is fantastic and it's a big honour and I'm really proud to stand here."

# Heywire Kids

Reporter: Emma Davis

INTRO: Okay our last story today is all about an ABC competition called Heywire. It's open to kids from regional areas. And the winners are flown to Canberra to meet some of the most powerful people in the country and to work on ideas that could help make life better for other kids. Justice was one of this year's winners. Here's her report.

JUSTICE: Hi my name's Justice King and I live in Mt Isa, North West Queensland. I live at home with my mum, my dad and my three other sisters. Mount Isa is a good place to grow up, not too big and not too small. Now I have a lot of friends here, but I didn't always feel like I belonged. So when I was younger I felt like I was alone, I felt like there was no way out. But one day I spoke to my dad and my dad, he's an amazing, amazing man and he helped me through all of my struggles. And from then I wanted to be like my dad, I wanted to be able to help people.

So the first time I heard about Heywire was through a lady that came and spoke to our youth council and she said, she spoke about it and she said "you need to go to Canberra" and I was like "oh my gosh, I want to go to Canberra" so later that night I came home and I researched it up and was reading all of the stories and read up how to do it and what to do and what it's for and I thought that's a really good cause, that's so good I really want to do it so I just wrote my story. The next thing I know is, I won!

Bye Dad, bye Justice!

Canberra, here we come!

As soon as I met all the other Heywire winners, I knew this was where I was meant to be. Everyone was cool and nice and interested in the same stuff that I am so we clicked straight away! But we weren't there just to have fun. The main part of being a Heywire winner is working together to make a difference for other young people. So we brainstormed problems and issues that we really wanted to focus on back home. That wasn't too hard for me because I was already super keen to focus on youth mental health.

The 'get nuts' campaign is about educating people on the signs and symptoms of mental illnesses. I hope that one day I'll make sure that no-one feels alone like I did. The whole idea was that we'd have to pitch this campaign to government partners and sponsors that could make our dreams a reality! We worked on our campaign for the next couple of days, trying to make it better. Then we got to practice our pitches and chat to politicians and other important people about them too.

Alright so I'm about to go in, I'm so excited fingers crossed everything's going to go ok. Alright!

So I think we did pretty well, I forgot some of my lines, wasn't very good but we pulled through in the end. Improvisation!

After the big pitch we got to celebrate and on the last night we got to get all fancy and celebrate our week at a gala dinner. I even got to open the event with the traditional acknowledgement.

Let us together acknowledge and pay our respects to the elders past, present and future.

Heywire was a really good experience and I'm so glad I went. I got a lot of life skills that I'll use in the future and I made so many friends. It's taught me a lot of things and one key thing I learnt is that if you put your mind to it you can do anything, all you need is a little bit of faith.

#### Closer

And that's the end of our show. Now, we'd like to thank all of you who filled in our kids' opinion poll last week. We've already got more than 2000 different kids' opinions but we'd love even more. So if you haven't filled it in yet, please head to our website click the link on the main page. Thanks and see you next week!