

The “Making of” documentary

1. Beginnings

I started work on this ATH in January 2008, soon after the closure of the 2007/08 ATH, which was Pablo's last masterpiece. Having seen all of the ATHs over the years, and entered most of them, I'd long had a nagging feeling that I ought to "give something back" in return for all the hours of pleasure that I'd had trying to solve other folks' puzzles. However, I'm not the world's most creative person, and the other ATHs had all been so good, so the thought of trying to create one was pretty daunting. I started jotting down a few possible themes and ideas.

One of them was to base an ATH around the life and works of Alan Turing. I first came across his work at university, when I was doing what would nowadays be called computer science. Early in my career, in the late 1970s, I worked on a project at the National Physical Laboratory (NPL) in Teddington, where I met a few people who had actually worked with Turing during the brief period that he was there. At that time, I wasn't aware of his work at Bletchley Park, but I was fully aware of his pivotal role in the history of computation and computing. So when I asked one of the NPL men what it was like to work with Turing, I wasn't really expecting the blustering reply "Absolutely disgusting!! Letting a homosexual like that work in the Civil Service...".

Anyway, I thought about an ATH based around Turing, maybe hiding the treasure in Bushy Park next door to NPL, and maybe even somehow involving Hampton Court, which is on the other side of Bushy Park from NPL. However, it occurred to me that since Bushy Park is a Royal Park, not a piece of untended countryside, they might take a dim view of treasure being buried and dug up there. In addition, when I looked at <http://www.turing.org.uk/>, the excellent Turing website maintained by his biographer Andrew Hodges, I saw that it was too easy to find out the sort of detailed information about Turing that one would want to conceal in an ATH.

I had also been thinking about other places associated with Turing – such as Bletchley Park. And I had discovered an online Turing Machine simulator, and also Dirk Rijmenants' superb crypto simulators, especially the Enigma simulator.

The idea of using real ciphers and codes grew stronger. I dug out Neal Stephenson's *Cryptonomicon*, which I knew contained Schneier's *Solitaire* cipher. Either from there, or from re-reading Hodges' biography, I was reacquainted with the story of Turing hiding a couple of silver bars in woods near his digs during WW2, and being unable to find them again.

It occurred to me that in Turing we had two of the most fundamental components of the ATH - codes *and* hidden treasure – coming together. In addition, we in the IT business owe something to him for our livelihood. I also found that Turing, at Princeton and elsewhere, used to organise treasure hunts. I had hid the jackpot!

A little more thought gave me the idea of making "lost treasure" or "hidden treasure" a theme of the ATH. Not treasure that had been recovered or found, like, say, the contents of Tutankamun's grave or of Sutton Hoo, but treasure that may or may not exist, or which had never been recovered, like Turing's silver bars.

I then thought of trying to include codebreaking as another theme. There wasn't any way of linking the two themes of lost treasures and codebreaking until they came together in Turing, but I thought that was OK.

2 Finding a location

The obvious thing to do was to hide the ATH treasure near where Turing buried his silver. There isn't any definitive information as to *which* wood Turing buried his silver in, so I had a look at the map. For most of WW2, Turing stayed at the Crown Inn, in Shenley Brook End, now part of Milton Keynes. Shenley Wood, nearby, seemed an ideal spot, although it did have houses round it, and it wasn't as remote as most of the past ATH treasure locations.

So one fine day in February 2008, my wife Nancy and I set off on a reconnaissance trip. I wondered if Milton Keynes was too far away from London to be a suitable location. But I told myself not to be so London-centric – although I couldn't encourage people based in Birmingham and Reading to have a go, without giving away a big clue! I consoled myself by thinking of previous treasure locations like Cambridge and Steeple Aston, and by reasoning that, for me, driving round to somewhere south of London would have been a big trip.

We found the house "Green View" – formerly the Crown Inn - in Shenley Brook End. I had thought about leading everyone there, and then providing directions to the treasure in Shenley Wood. However, it is quite a distance, and there was also the privacy of the owners of "Green View" to respect. Nevertheless, I hope you went and had a look at it while you were there.

We wandered through Shenley Wood – which thankfully didn't seem to be too busy, despite being surrounded by houses – and found a good spot. The only doubt was whether the spot would continue to exist as it was for a few years, until the ATH actually ran. However, we were sure we'd be able to find another location nearby, if necessary.

After that, it was just a case of finding out about suitable lost treasures, cryptographers, codes, and working out how to hide all the information....

Having made some progress with the design of the ATH, in December 2008 I "confessed" to one of the ATH "elders" that I was working on an ATH, and suggested that I could have it ready for Christmas 2010. (Paul Barden was already in place for 2009)

3 Site test #1

In December 2008, we hid a "treasure box" at the location. This contained an Enigma fridge magnet, and the customary note asking anyone who discovered it to leave it as they found it. The note gave the impression that this was a live Armchair Treasure Hunt – I didn't bother explaining that this was a test. The idea was that if anyone malicious did find the box, the temptation to spoil a competition and to take the Enigma "prize" would be irresistible. Another fear was that someone might find it and report it to a local newspaper, with the report ending up on the Internet, thus ruling out the use of the site, and very possibly leading to the abandonment of further development of the Hunt.

Our fears were misplaced. Something much, much worse happened!

Five weeks later, in January 2009, we went back to retrieve the box. Only to stop, astonished and horrified, outside the end of the wood in which the box was hidden. What had been a beautiful, thick wood, with tall, mature trees and plenty of concealment, was now a thinned-out apology for a wood, with clear sightlines from one side to another, and not enough cover to conceal anything more than six inches high, never mind a bunch of people hunting for treasure. Approximately 80% of the trees in that part of the wood had been felled – in fact, judging by the fresh-looking stumps they had been felled only the week before. The ground was littered with tree trunks and branches, and every few feet a pathetic, sawn-off tree stump raised itself a foot or two above ground level.

MOST SECRET ULTRA ATH EYES ONLY

We had hidden the treasure in the hollow base of a distinctive multi-trunked tree. We located what was now an unremarkable multi-trunked stump, to find our treasure apparently untouched. Quite amazing, really, because the chainsaw had been within inches of the treasure, yet, in its dark green bag, it hadn't been spotted. Either that, or the lumberjack had found it and left it as it was. We'll never know.

“Before” and **“after”** pictures



The original hiding place was the distinctive multi-trunked tree in the centre of the picture above left. The picture above right is taken from roughly the same spot, and shows the devastation that we found.



The original hiding place at the base of the tree, before and after “trimming”.

This had been a wonderful hiding spot – a distinctive tree, an easy-to-follow route to it (using other trees which were now just stumps), and plenty of concealment. But we couldn't use it any more – the cover was gone, one stump looked pretty much like another, and who knew whether the stumps would be left or would be removed?

So instead of simply picking up the box and returning home, we found ourselves searching through the rest of Shenley Wood for another suitable spot. Eventually we found another location – perhaps not quite as good as the first, but useable nonetheless. So we put our treasure in there, for another test, and left.

Of course, it could all have been much worse. Suppose the tree-felling had happened during an actual ATH?

A few weeks later, we went back and retrieved our treasure. It had apparently been undisturbed, save for a few nibbles at the plastic bag in which the box had been placed. However, back home, I found that a small corner of the Enigma fridge magnet had been chipped off – and the missing fragment certainly wasn't in the box and envelope in which we had hidden it. Had it always been missing? I think I would have noticed. Or had someone found it, chipped off a corner as a subtle way of saying “I found this”, and then repackaged it? Another enigma, indeed.

4 Setting a date

Once Tim North's 2008/2009 ATH had ended, it was back to work on this one. Unfortunately, I was insanely busy at work, and the only prospect was that things would get worse over the next couple of years, not better. The project I was working on was for the March 2011 Census, and it became clear that Christmas/New Year 2010/2011 – i.e. not long before the Census - might NOT be a good time for me to be running an ATH. So, very reluctantly, in April 2009 I told the ATH organisers to take me off the list for 2010. I would continue to work on the ATH as and when

MOST SECRET ULTRA ATH EYES ONLY

possible, but I didn't feel I could commit to 2010, and I wanted to give them plenty of time to find someone else.

Tim took a while to publish the solution and results of his ATH, but, when he did, I was very glad that I was not basing my ATH around a treasure location in Bushy Park!

At the same time, the ATH elders were ensuring that they had a pipeline of ATH setters for the next few years, so I indicated that I would be happy to set and run the ATH for any year from 2011 onwards. A little while later, they sent a note to Mike Wood (a Burghfield Burgher) and me, saying that they couldn't decide between us for 2011 and 2012, so could we please discuss it.

By this time I had realised that 2012 was the centenary of Turing's birth, and had learned that it was going to be designated "Alan Turing Year". So I sent a note to Mike saying that I had become aware of something that did not materially affect my ATH, but which would make it good if it were run in 2011. In reality, of course, I meant "at the start of Alan Turing Year", though I couldn't say that.

Mike, very gracefully, said that he didn't mind, although we both wanted to run our ATHs as soon as we could, and so I was slotted in for 2011 and Mike for 2012.

Nancy and I went along to the ATH prize-giving in 2009. There was a good turn-out of people – new faces and old – and the pub ran out of beer! I picked the brains of past setters such as Steve Hames, Dave Kee, and the most recent, Tim. To advice such as "Check out your treasure location in winter", we could say "Yes, we've done that." In response to "Remember that fallen trees may be moved by other folk", we could only think of what had already happened, try to keep straight faces, and say "Yes, thanks - we'll tell you more in 2012!".

Well it *is* 2012 now. So thank you for the advice, guys, but none of you mentioned the possibility of the whole forest being levelled!

5 Questions, questions

In late 2009, having designed a number of the visual and cryptographic puzzles, I thought I'd better develop some questions. At the time, you could have solved the ATH and found the treasure without answering a single question. (In fact, in the end, you still could have done that!)

I used a few specific sources of questions, and also had a notebook with me at all times, because in any situation – reading, watching TV, just talking to someone – something might come up which would trigger the thought "**That** could make a good ATH question!".

I tried to manipulate each question to make it less easy to google and to make you think a bit more. For example, the straightforward questions asked on *Mastermind* and *University Challenge* (neither of which I used as a source, by the way) are too easy for the ATH, but just a few minutes' thought and some twisting and obfuscation could often make a simple question into a mind-bender.

By early December 2009 I had a list of nearly 70 questions which could probably be used, with another list of as many again which were potential candidates for twisting and obfuscation. With two years to go I was confident that by ATH time I would have a good set of questions, including more contemporary ones which I would pick up during 2011.

My ideas for the questions were to try to make them interesting – either to solve, or in what they told you. Some were timeless, in that they referred to historical events, and could have been used in any year – some were contemporary and could only have been used in 2011. I was conscious

of my age, so I tried to ensure that I didn't pose too many questions which would be easy for a 50+ year old, but totally incomprehensible to someone thirty years younger. I also tried to include a few references to winter, Christmas and New Year (the ATH season) and to characters or themes that had appeared in past ATHs.

The development of the questions was, for me, one of the most enjoyable parts of creating the ATH. As December 2009 came around, I still had to work out how to use the answers. It was time to set aside my development work for a while, as the annual madness descended on us once again, and the 2009 ATH was published. But first, there was one more thing to do.

6 Site test #2

So we went back up to Shenley Wood – and couldn't find the hiding place that we had used the year before! We knew that we were very close, but I hadn't taken any detailed notes last time, and I hadn't looked at my photographs to refresh my memory. Eventually we found another spot, and left our box there.

When we returned home, I looked at my photographs from last time. Nancy was convinced that she had looked at the tree which was our hiding place last time, and that “it didn't look like that any more!”. I also discovered that last time I had found, and photographed, the hiding place that we were using this time.

The episode brought home to me the possibility that we might not know the exact hiding place until we actually went to hide the box in 2011. Trees fall (or are felled), holes fill up, the land changes. This worried me, because my plan was use Enigma to encipher the detailed instructions on how to find the treasure - and I wanted them to be in German. Nancy and I didn't know German: translation was to be done by colleagues and friends, but if the hiding place changed at the last minute, there would not be time for a new translation.

Anyway, the lesson was learned – check out the hiding spot a few days before the ATH was due to start, in case a new location had to be found.

The 2009 ATH – Dorothy L Sayers and Witham - came and went. As part of Team Norway, I was very pleased that we were first to the treasure, in less than four days – and I was also very determined that my treasure would not be found so quickly! I didn't succeed ☹

For one reason or another, it was early February in 2010 before we were able to go back up to Shenley Wood to collect our test box. Driving up the M1 I was horrified to come across the roadworks between junctions 10 and 13 which were just starting, and which were scheduled to last until Spring 2013. My deepest apologies to all of you who had to drive through them.

Our box was still there, in perfect condition, with just a few holes in the plastic bag in which we had wrapped it. Inside, the letter we had left was in perfect condition, and the Enigma fridge magnet was still there. Considering the weather that there had been since we hid it – the worst snow for 30 years – this was excellent.

The snow worried me, though. I wondered how much snow fell on this spot. Probably quite a lot, since the wood wasn't especially thick. What were the chances of the location being rendered unrecognisable by a heavy fall of snow? Just how *did* athmmix know to hide their treasure above ground, halfway up a tree?

7 Drifting...

I didn't spend much time on the ATH in 2010. I always meant to work on it – in fact at one point I had intended to complete it by mid-2010 – but for some reason the motivation had gone. However, it did mean that on the occasions that I looked at it, I was coming to it with relatively fresh eyes, helping me assess what still needed to be done to it.

On BBC TV's "Mastermind" on 1st October 2010, one of the contestants took Bletchley Park as his specialist subject. He scored 15 points. I didn't consider myself to be an expert, and was pleased that I would have scored 10 or 11. And I "knew" the other answers when I heard them.

A specific thing which worried me was www.tineye.com, which many of you will know and will have used. It's an image search engine – you give it an image and it finds other locations on the Internet where that image is posted. It was originally designed to help graphic artists and photographers find illegal use of their images, but for an ATH it means that you can give it an image that you don't recognise, and then, from the information that it returns, you can quickly work out who or what the image is.

My worst fears were realised in mid-2010 when I selected an image from the PDF file, saved it as a jpeg, submitted it to Tineye – and received several correct matches. It really does intelligent image comparison – it's not doing dumb bitwise comparison. It's not that easy to fool either – it's designed to allow for differences in colour between the images, and for distortion of the image. So I tested every image in the ATH, to see what Tineye made of them. There are ways of making it more difficult for Tineye, so I made use of them, and made a note to check again before going live.

8 Site test #3

In December 2010, we went back to Shenley Wood for the final winter tests. The first thing we saw when we went into the wood was a team felling more trees, and we could see quite a large area which had already been done. We found our hiding place from the previous winter, and I noticed another possibility close by, which would be easier to describe in the detailed instructions. So we left the box there.

And then it was 15th December. Time to set aside this ATH for a month or so, and see what Chris Baker had prepared for us....

Well, it turned out that Chris was too clever for us. We didn't get very far with his hunt – we never had a clue where the treasure was (East Hagbourne, near Didcot.)

Those of you from south of London must be cursing me for giving you a long journey for the third ATH in a row. Sorry, but that's just the way it happens. There's no way I would have been able to wait until the previous ATH finished before starting to create the very next one.

Again, it was the first weekend in February before we were able to travel up to Shenley Wood to retrieve our box. Despite the snow and ice that had caused chaos since we left the box, there were actually a few daffodils in bloom – well ahead of us further south in St Albans.

First comment from Nancy was "This is the most aggressively managed wood I have ever seen!". This time we didn't even have to get out of the car to see what had been done – they had been clearing the bushes and trees round the car park itself. And in the wood itself there had been quite a lot of work done since early December.

MOST SECRET ULTRA ATH EYES ONLY

I was going to have you count the trees down one side of the path in the wood. However, they had felled one of the trees that would have been counted. So I decided not to have you count trees, but count your steps – which of course were different for everyone – instead.

We retrieved the box from the log pile which we eventually used in the real ATH, and returned home. I updated the detailed instructions on locating the treasure, and added a few more words to this saga.

9 ATH year

Things drifted again for the first part of 2011. For a couple of months I was in scope for “realignment” (aka redundancy) from Logica. I didn’t feel motivated to work on the ATH – if they’d made me redundant then you would never have seen it.

Then, just at the time that it became clear that I still had a job, I moved onto a project which could have taken up all my waking hours and more. Most of what little free time I had was spent on the ATH, and this is as good a time as any to apologise to Nancy for the garden not tended, the bedrooms not redecorated, and the weekends when she had to amuse herself.

Three days a week I drove to and from Birmingham – 90 minutes each way. Driving up and down the M1 to Birmingham, I noticed that every bridge over the M1 in the roadworks section had a temporary name sign on it, e.g. “Manor Farm”, “Lodge Farm”. I thought of using some of them, but then I realised that not everyone would be driving up the M1. I then thought of describing the routes from the two main motorways to the treasure location, and so the Polo mints maps were created.

It was only in June 2011 that I realised that if a theme was codebreaking then I could include other types of code, such as the genetic code and the Highway Code. This opened up so many new avenues for me that I wished I could start again!

One day in mid-summer, Nancy and I had been out for some retail therapy at Bicester Village, and had then carried on to see Capability Brown’s astonishing landscaping at Stowe. This enabled us to check the route between the M40 and Shenley Wood. Whilst we were at Shenley Wood, we went to check out the chosen location – and learned how important it was to check out and choose your spot in winter time! The vegetation in the wood was so thick that it was difficult to see and find the nesting box, and when standing under it I couldn’t get my bearings and see the log pile where the treasure would be hidden. Eventually I worked it out, but had to take a roundabout route and fight my way to it, through dense vegetation. So let me repeat this - check out and choose your spot in winter time.

10 The Final Stretch

So the final few months had arrived, and I still had a list of things to do which was as long as my arm.

One of the important ones was to request funding from the Logica Sports and Social Club. This was agreed very quickly, and I am very grateful to the LSSC for their continuing support of the ATH through these troubled economic times.

Towards the end of October, we made up some laminated numbered tickets, and placed them, together with the Enigma fridge magnet, into the box which we intended to use for the real treasure. This went out into the garden, and we prayed for rain and foul weather. After four weeks

MOST SECRET ULTRA ATH EYES ONLY

MOST SECRET ULTRA ATH EYES ONLY

of all sorts of weather – though not winter frost, ice and snow – we retrieved the box and found that everything inside it was in perfect condition.

One thing that had been on my list for a long time was to write to the two people whose websites I was relying on, for the Turing Machine simulator and the Enigma simulator. So I sent them each a note describing the ATH, giving them links to the ATH website, explaining a little about this particular Hunt, asking if it was OK to reference their website, and asking if they had any planned website downtime during the period of the Hunt.

Right from the start, I had intended to use a particular TM sim. However, the website owner didn't reply to me, and after a couple of weeks I was quite nervous. So in early November, I searched for another one, and found Anthony Morphett's. It didn't take long to convert the TM program to run on Anthony's sim, and it worked well, so I dropped him a note. Anthony was very enthusiastic about it, and even suggested that we tell the organisers of the Alan Turing Year (ATY), who run a mailing list with news and events associated with the ATY. Unfortunately I couldn't see any way of doing that without giving away too much information.

I had a great response from Dirk Rijmenants, the creator of the Enigma sim. He was very enthusiastic about the idea – even though I hadn't told him the whole story about the TM sim, Turing's silver bars, and about the treasure being hidden close to Bletchley Park. His response gave me a great lift at a time when I was feeling a bit low about the whole thing. Dirk also volunteered to check my Enigma settings, and to check the German text of the detailed instructions for locating the treasure in Shenley Wood.

Earlier in the year, the text had been translated into German by one of my wife's colleagues, who is German. I now sent it across to an old friend who has been working in Germany for many years. Knowing only that it was instructions for finding a treasure box in a wood, he translated it back into English. I then gave him the original English text and explained what the more obscure references ("three yellows and three blacks") were, and he made some suggestions for changes.

Dirk later confirmed that the text was clear and well-written German. You'll have found that Google or Yahoo make a decent stab at translating the German, but don't quite get it all right. It was up to you whether you took the risk, or took the time to find a fluent German speaker.

At the start of November, Nancy and I went back up to Shenley Wood, for the final reconnaissance before the Hunt went live. Once again there was evidence of recent tree-thinning work, with fresh logs and stumps alongside the paths. However the area in which the treasure was to be hidden looked OK. The vegetation in the wood was thinning out nicely, so once again it was easy to see the birdhouse if you were in the vicinity but hadn't followed the instructions precisely, and it was relatively easy to reach the treasure location. A shiny (and empty) Carlsberg can was a disappointing find at the treasure spot, but there was only one, and there was no way of knowing how recent it was, so I wasn't too bothered.

Nancy painted the Logica L on the back of the green-coloured tree which was just off the path. We'd touch it up again when we came back up in December.

Towards the end of November – Saturday the 26th – I finally uploaded the ATH poster to the website, and sent emails to past team captains and to the LSSC. Within an hour, this was announced on the Quest4treasure forum, and by the Sunday evening I had received a number of responses. I was hoping to see some feedback on the poster – this might give me some last minute information about what would or would not work in the actual ATH.

MOST SECRET ULTRA ATH EYES ONLY

11 Up and Running

28 November 2011

On the wiki of one of the teams who were allowing me to follow their progress, I was intrigued to see that an in-depth analysis of the poster had already been done, uncovering all sorts of things about it that even I didn't know. The fact that the initial letters of **MOST SECRET ATH EYES ONLY PRIORITY HIGHEST** spell out MAP. Pure coincidence. The fact that Jon Lord played in Deep Purple, and that a Japanese WW2 cipher was codenamed "Purple". Pure coincidence.

Another team had also been discussing the poster, and their representative told me that they were looking forward to digging up the gardens of Bletchley Park!!

Had I made it too easy? It was too late for major changes now.

03 December

I said earlier that I had tested the images against Tineye. But that was a year and half ago. What I hadn't appreciated was that, in the interim, Google Images had matured, and it outperformed Tineye just about every time. I was dismayed to discover this less than a couple of weeks before going live. So that weekend saw a lot of time spent with three photo-editing programs, manipulating images to try to outfox Google Images and Tineye. Future ATH setters are either going to have to use their own images, or accept that it is now trivial to find images which have been re-used from elsewhere. In the latter case, the ATH puzzle should be not **what** the image is, but **why** it has been included.

08 December

Dirk's Enigma sim hadn't changed for years. So a week before going live, I was horrified to see that he had released a new, updated version. A quick test – in the office, hoping that no-one was looking over my shoulder – re-assured me that nothing had changed that affected the settings of the Enigma. No surprise really – after all, Dirk's sim is an accurate reproduction of the machine, so he couldn't go back and rewrite history. The only change that did affect me was that, as a result of further research, Dirk had now included a 5-letter Buchstabenkenngruppe in the first example in his manual / helpfile, so I had to add one to the Enigma message in the ATH.

12 December

A lovely day for hiding treasure!

MOST SECRET ULTRA

ATH EYES ONLY



The two trees on the left, just off the right of the path, are the two that you had to look out for. Someone appears to be touching up the paintwork on the back of the "large green-coloured tree".



The Logica L on the back of the tree - and "vogelhaus sieben".

MOST SECRET ULTRA

ATH EYES ONLY



The small pile of logs where the treasure was hidden – under the mossy piece of bark in the centre of the picture.

14 December

So on the 14th, I had to remember to stay up until midnight. Uploading the puzzle to the ATH site and to my own backup site went OK, although I understand that some people were worried when it hadn't been uploaded by five minutes past midnight. I hung around for about half-an-hour in case I'd screwed it up, but no complaints came in, so I took myself off to bed and left you all to it.

15 December

The first error was reported by two people before 0930 on the 15th. This was where I'd referred to the Scottish "Premiership" instead of the Scottish Premier League. Clearly I have lived in England for too long!

I found that a UK member of the Twelevepack team, who are based in California, had been up most of the night working with them. And then at 2pm UK time I received a note from Dave in California saying that he was just going to bed – at what I reckoned was 6am California time!

Six teams had given me access to their wikis and forums, and I was encouraged by what I saw – lots of right answers, lots of misconceptions, no big breakthroughs.

16 December

On a couple of the team sites, I saw reports of Turing's silver being buried at "Shenley"! Near St Albans, where I live, is a small village called Shenley, and I had been hoping to misdirect you there, exploiting the confusion between Shenley and "the Shenleys" (Shenley Bourne End and Shenley Church End) near Milton Keynes. It looked as though someone had created my red herrings for me.

A little ferreting found that the website run by Turing's biographer Alan Hodges said that Turing had buried the treasure at "Shenley", although if you clicked on the map link you'd have been

MOST SECRET ULTRA ATH EYES ONLY

taken directly to Shenley Brook End, with Shenley Wood a couple of inches to the left of the Streetmap arrow.

So this didn't help me at all, because it made you think that that area is called Shenley. It isn't!

18 December

As the sun went down on Sunday 18th December, I said to Nancy that it looked as though I had survived the first weekend. As usual, I was wrong. A little later I received a note from Alcoholus Lubricatum – not one of the teams that I was monitoring - saying that they had found the treasure earlier that afternoon. A fantastic achievement, of course, and all credit and congratulations to them. For me, relief that the puzzle was solvable was mixed with disappointment that I hadn't made it through the weekend.

22 December

It was fascinating watching the six teams' progress. They included some of the teams that I expected to do well, and they seem to be progressing at just the right sort of speed.

I had to publish what I hoped was a clarification about James Bond, and the position of a moonraker sail on a ship. Online references were split between saying "above a skyscraper sail" or "above a skysail". A skyscraper is a triangular sail, as is a moonraker. When I thought about this, I couldn't envisage two triangular sails at the top of a mast. Online references didn't help – I even went to a Solihull library to access some their resources, but 200 years of newspapers online didn't help either. The National Maritime Museum was moving, and was not answering queries. So the clarification was intended to cater for both possibilities – that the moonraker sail was mounted atop a skyscraper sail, or that it was mounted above the (four-sided) skysail, where you might also have mounted a skyscraper.

Around lunchtime on the 22nd, the Q4T Logicals told me that they were second to the treasure. Just over a week – that's pretty good, I thought, but almost twice as long as it took Alcoholus Lubricatum.

26 December

Dave Kee's team came in at number 3. They were one of the teams that I had been monitoring, so I had been following their steady progress towards it. However, they hadn't actually worked out the clues which definitively pointed to Shenley Wood, which I had thought would be solved first.

30 December

I expect to be lynched for "**my batch of x-wired plugs**" – the Enigma plugboard combinations. I guess you either see it straight away, or you don't see it at all. Two of the teams that I was watching had agonised over this at length – "why **batch**?", "why **x-wired**?", etc.

One of the teams had all the other Enigma settings, and was thinking of a brute force attack on the plug combinations, looking for "the" in the output. But there are around 150 million million plugboard combinations, and "the" doesn't appear in the plaintext, which is in German. I **am** going to be lynched...

04 January

One of these teams, Apopheniacs Anonymous, had had their breakthrough on the previous evening, and wisely decided to go to Shenley Wood as soon as possible. They picked up ticket number 4.

05 January

In clear proof of the existence of morphic resonance, the Psychologicals, the other team who had been stuck on the steckers, had **their** breakthrough 24 hours after the Apopheniacs, and picked up number 5 on the 5th.

MOST SECRET ULTRA ATH EYES ONLY

MOST SECRET ULTRA ATH EYES ONLY

It must have been a busy day at Shenley Wood, because in the evening Paul Barden told me that he had collected number 7.

09 January – number 8.

10 January – number 9.

12th – number 10, at around lunchtime.

13th – number 11, at 2238 hours, i.e. in the pitch-dark night. I couldn't really tell you that there was a maximum security prison (Woodhill, "Britain's Alcatraz") just across the road, so I hope the nocturnal collectors didn't attract any unwanted attention.

14th – number 12, picked up by another member of the team that picked up #11. No bonus points for that, but nothing deducted for poor co-ordination either ☺

15th – number 13 (really number 12) at around midday, and number 14 (really 13) in the late afternoon.

16th – entries start flooding (well, trickling) in.

At 9.25 pm, the Famous Five eventually decipher the Enigma message. Can they make it up to Milton Keynes **and** find the treasure in the dark, in 2.5 hours? It's good to have a cliff-hanger to end on, even if I can't share it with you all.

And at just after 11 pm, they report that they had uncovered it within an hour. Fantastic job!

Midnight – 27 entries! Now the really hard work begins.....

MOST SECRET ULTRA ATH EYES ONLY

The Out-takes

For one reason or another, quite a few ideas never made the final cut of the ATH. Here are some of them.

Noel's knee

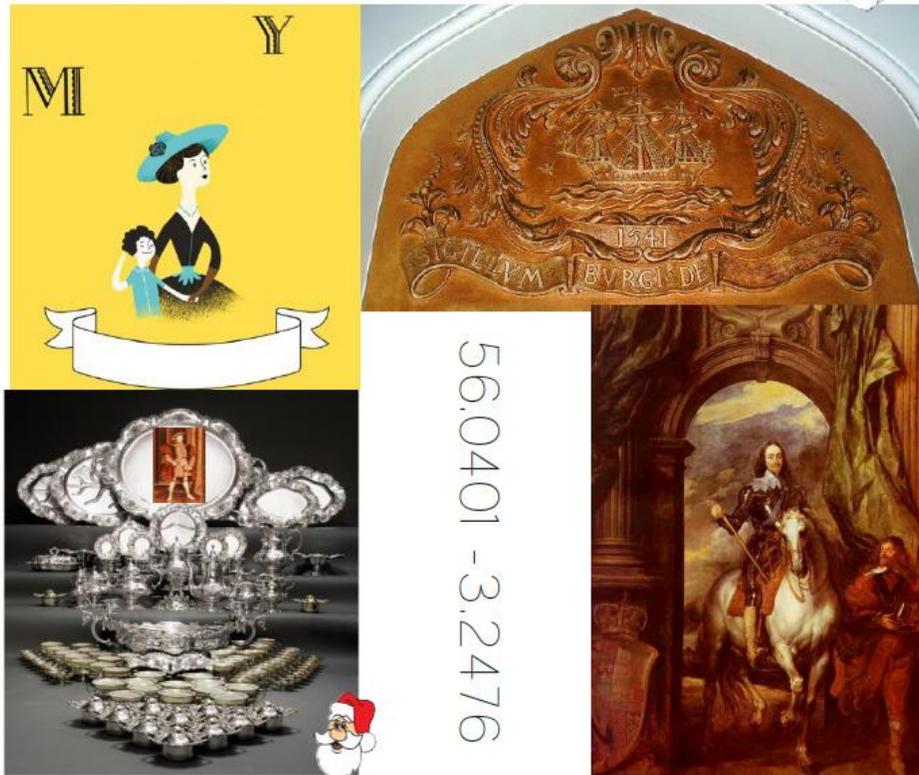
Early on, I spent a little while finding anagrams of Shenley Brook End. One that I particularly liked was "Noel Hebden Yorks". "Noel" neatly fits in with the Christmas timing of the ATH, and there is, of course, a place called Hebden in Yorkshire.

Amusement turned to sheer joy when I googled "Noel Hebden", to find only 1 hit (a googlewhack!). This was a reference to the splendidly-named Noel Hebden Knee, born 25 Dec 1913 and died 2006, who had been chairman of the H J Knee department store in Trowbridge, Wiltshire. I had ideas of indicating that "Noel Hebden Yorks" was an anagram by referring to a "crooked knee" (the name of a golf club in the USA) or "broken knee".

Alas, when I checked up on Noel Hebden a few months later, Mr Knee had disappeared from Google, and that was the end of that idea. (Although nowadays you'll get about 40 hits.)

An unused lost treasure

You should be able to work this one out, especially since I haven't processed the pictures to fool the search engines. (Ignore the Santa.) Answers follow in a couple of pages.



Unused questions

Just a few of the questions which I was unable to use. Answers in a couple of pages.

- 1) Day 25: a King, a Dame and a Duke were born today. What is their common profession?
- 2) Which pretty messenger is emblazoned with six locations (five unique)?
- 3) What is the next in the series? 23y 11m, 3y 3m, 1y 4m, 6m, 1y 3m (or possibly 1y 6m)...
- 4) Where was the man in black when he heard of the demise of the man of steel?
- 5) Which head of state is sometimes compared, on his travels, to the band that played alongside I and I and I?
- 6) Complete this list, with two more members: YB, SM, CB, JC, RV...
- 7) Where will an outstanding feature of a great babe always have ambulatory company?

The following questions all come from a planned section called "Since the Last Time", and refer to events that happened after the publication of the previous ATH. In the end, I simply incorporated a number of these questions into the ATH itself, usually with an indication that they referred to recent events.

- 8) Who played the wealth-redistributing hero of a family show that was found to violate international standards for treatment of victims of war?
- 9) What tasty porkers did police find in a hot pot raid on a Bradford garage?
- 10) Who repeated line 2 instead of line 4, in front of 111 million?
- 11) Where was Juliet's lover discovered on top of a piano piece?
- 12) Who took up their post at No 10 exactly 40 years after D Day?
- 13) In April, whose likeness was considered off the wall by some occupants of a small cowardly house?
- 14) What is constantly proposed by those who want a double helping of pie?

An unused lost treasure

The treasure here was Charles I's treasure, lost in 1633 when the boat carrying it south across the Firth of Forth sank shortly after setting out from Burntisland in Fife. Although he had been king since 1625, Charles only came to Scotland for his coronation there in 1633, with some sources saying that he was accompanied by 20 carts of treasure and luxury goods. The treasure included a silver dinner service said to have been created for Henry VIII by Holbein. All of this was lost when the boat – *The Blessing* – sunk in rough seas.

The clues are:

- cover of the novel *The Blessing* by Nancy Mitford
- coat of arms of the burgh of Burntisland
- a silver dinner service, with a portrait of Henry VIII superimposed
- the latitude and longitude of what is thought to be the wreck, discovered some years ago
- the famous Van Dyck portrait of Charles I.

I didn't use this because there wasn't a specific name for the treasure, and because I already had something similar – King John losing the Crown Jewels in the Wash.

Unused questions

no.	question	answer
1	Day 25: a King, a Dame and a Duke were born today. What is their common profession?	singing
	Day 25 of the ATH was 8 th January. Elvis Presley ("The King") born 08/01/35, Dame Shirley Bassey born 08/01/37, David Bowie (sometime known as "The Thin White Duke") born 08/01/45.	
2	Which pretty messenger is emblazoned with six locations (five unique)?	Angelina Jolie
	<p>Angelina is the female version of the name Angel, which means "messenger" or "messenger of God". <i>Jolie</i> is French for "pretty".</p> <p>AJ has very many tattoos. On her upper left arm, she has tattooed, in degrees, minutes and seconds, the locations where she either adopted or gave birth to her children.</p> <p>The locations are:</p> <ul style="list-style-type: none"> • the location in Cambodia where she adopted son Maddox • the location in Ethiopia where she adopted daughter Zahara • the place in Namibia where she gave birth to daughter Shiloh • the place in Vietnam where she adopted son Pax Thien • the place in France (Nice) where she gave birth to twins Vivienne and Knox – she has this location tattooed twice on her arm. 	
3	What is the next in the series? 23y 11m, 3y 3m, 1y 4m, 6m, 1y 3m (or possibly 1y 6m)...	3y 6m
	<p>The lengths, in years and months completed, of the marriages of Henry VIII.</p> <ul style="list-style-type: none"> - Catherine of Aragon: married 11/06/1509, annulled 23/05/33 - Anne Boleyn: married 25/01/33, annulled 15/05/36 (beheaded two days later) - Jane Seymour: married 30/05/36, died 24/10/37 - Anne of Cleves: married 06/01/40, annulled 09/07/40 - Kathryn Howard: married 28/07/40. She was imprisoned and stripped of her title of Queen on 23/11/41 (i.e. after 1y 3m completed) but it is not clear if the marriage was annulled at that time. She was beheaded on 13/02/42 (1y 6m). <p>Finally, Katherine Parr married Henry on 12/07/43, and Henry died 3y 6m later on 28/01/47.</p>	
4	Where was the man in black when he heard of the demise of the man of steel?	Landsberg
	<p>The "Man in Black" was a name given to the American singer, Johnny Cash, because of his habit of dressing all in black when performing. In 1971 he wrote a song with that title, to explain his reasons for eschewing the rhinestone suits and boots of other country music stars. Earlier, when he was in the Air Force, he was stationed in Landsberg in Germany as a radio intercept operator, monitoring Soviet transmissions, and that is where and how he became one of the first Westerners to hear of Stalin's death. (I wasn't able to confirm the location with enough certainty to use it.)</p> <p>Incidentally, when he was born he was given the name "J R Cash" because his parents could not agree on a name, and he only changed his name to John when he joined the Air Force, who would not accept initials as a name. An earlier version of this question started "Where was JR...", but I guess not many of you remember <i>Dallas</i>.</p>	

MOST SECRET ULTRA ATH EYES ONLY

5	<p>Which head of state is sometimes compared, on his travels, to the band that played alongside I and I and I?</p>	<p>Robert Mugabe</p>
	<p>His propensity for travelling in a large motorcade with sirens screaming has earned Mugabe the nickname "Bob and the Wailers". The female backing singers who accompanied Bob Marley and the Wailers – namely Rita Marley, Judy Mowatt and Marcia Griffiths – called themselves the "I Threes", a play on the Rastafarian concept of "I and I".</p>	
6	<p>Complete this list, with two more members: YB, SM, CB, JC, RV...</p>	<p>BD, HB</p>
	<p>The Magnificent Seven – needing two more sets of initials to complete. Yul Brynner, Steve McQueen, Charles Bronson, James Coburn, Robert Vaughn, Brad Dexter, Horst Buchholz.</p> <p>Note that it is a list, not a sequence. Although if it was the order in which they joined up, that would have been a sequence. HB is the first to try to join, but is rejected by YB for being too hot-headed. He trails the other six when they ride south, and is eventually allowed to join. So I never figured out which order they should have been in.</p>	
7	<p>Where will an outstanding feature of a great babe always have ambulatory company?</p>	<p>Anfield Stadium</p>
	<p>Isambard Kingdom Brunel referred to his ship <i>SS Great Eastern</i> as the "Great Babe". (Surprisingly, if you Google for "great babe", even with SafeSearch turned off, a few hits for the <i>Great Eastern</i> come out near the top of the search results.)</p> <p>After about 20 years of service, it was broken up at Rock Ferry, near Liverpool. In 1928, when extensive re-building was taking place at Anfield, the home of Liverpool FC, a topmast (an "outstanding feature") from the <i>Great Eastern</i> was dragged up the Everton Valley by a team of horses, and was installed as a flagpole, next to the famous Kop end of the ground.</p> <p>The Rodgers & Hammerstein song "You'll Never Walk Alone" was adopted as an anthem by Liverpool supporters shortly after its release in 1963 as a single by Liverpool group Gerry & the Pacemakers. The phrase appears on the club crest and above the Bill Shankly memorial gates at the stadium.</p>	
8	<p>Who played the wealth-redistributing hero of a family show that was found to violate international standards for treatment of victims of war?</p>	<p>Jim Davidson</p>
	<p>In 2010-11, Jim Davidson played the title role in <i>The Magical Adventures of Robin Hood</i>, a pantomime at the Pavilion Theatre in Glasgow. The show was informed by the British Red Cross that the uniform worn by Nurse Poltis in the show violated the Geneva Conventions Act of 1957, by featuring red crosses on the tunic and cap. The British Red Cross said that they weren't spoilsports, but did have a serious obligation to protect the Red Cross emblem. The crosses were quickly changed to green, and everyone lived happily ever after.</p>	
9	<p>What toasty porkers did police find in a hot pot raid on a Bradford garage?</p>	<p>Guinea pigs</p>
	<p>In early January 2011, as a result of their helicopter having detected a hotspot on the roof of the garage of a house in Odsal, West Yorkshire police swooped on what they suspected was a cannabis factory. They found that the hotspot had been caused by a heater placed in the garage for two guinea pigs who were kept there. Their owner was a 42 year old "learning mentor" at a local primary school who lived with her Mum.</p>	

MOST SECRET ULTRA ATH EYES ONLY

10	Who repeated line 2 instead of line 4, in front of 111 million?	Christina Aguilera
	In February 2011, Xtina delivered a star-mangled banner when she fluffed the National Anthem at Super Bowl XLV, which was watched by a record 111 million viewers. Instead of singing the fourth line of the first verse, she repeated, with a small variation, the second line.	
11	Where was Juliet's lover discovered on top of a piano piece?	The Shard
	In February 2011, a fox, which was given the name Romeo, was discovered living on the top (72 nd) floor of the under-construction Shard skyscraper – designed by Renzo Piano - beside London Bridge.	
12	Who took up their post at No 10 exactly 40 years after D Day?	Larry the cat
	On 15 February 2011, exactly 40 years after Decimalisation Day (or D Day) in the UK and Ireland, a four year old tabby cat called Larry was driven to Downing Street from Battersea Dogs and Cats Home to take up his new role, known unofficially as <i>Chief Mouser to the Cabinet Office</i> . This was after a rat – a real rodent, not a politician – had been seen live on BBC News scuttling across the doorstep of No 10.	
13	In April, whose likeness was considered off the wall by some occupants of a small cowardly house?	Michael Jackson's
	At the start of April 2011, Mohammed Al Fayed, chairman of Fulham FC, unveiled a statue of the late singer outside Fulham's ground, Craven Cottage ("small cowardly house"). Most Fulham fans who were interviewed thought that it was silly, irrelevant, and turned the club into a laughing stock. <i>Off The Wall</i> was the title of a Michael Jackson album, released in 1979.	
14	What is constantly proposed by those who want a double helping of pie?	tau
	There is a group of mathematicians and others who want the mathematical constant π (π , 3.14159...) replaced by a constant called <i>tau</i> (τ), whose value would be 2π . π is the ratio of the circumference of a circle to its diameter. Critics argue that a circle is not defined by its diameter, but by its centre position and its radius. With the length of the radius being half that of the diameter, the ratio of the circumference to the radius is thus 2π , a term which appears in many mathematical equations. Many establishments celebrate <i>pi</i> Day on 14 March (3.14 in month.day order), and some celebrated <i>tau</i> Day on 28 June (6.28) in 2011.	

The Credits

The ATH itself was put together using the Scribus open source desktop publishing tool - <http://www.scribus.net> .

Other tools used included an old version of Photoshop Elements, GIMP (the GNU Image Manipulation Program - <http://www.gimp.org/>), and an old version of Arcsoft PhotoStudio.

My thanks go to all of the following people, whose assistance, help and encouragement was invaluable:

- the chairman and committee members of the **Logica Sports and Social Club**, for continuing to support the ATH and fund the prizes through difficult economic times
- **Anja Walser**, for translating the detailed instructions into German. Very polite and formal German, as one team said. Anja was quite concerned that lots of people would be lost in a forest, following her directions – so she is very pleased that you all came out safely!
- **Doug Smith** (no relation), for translating the instructions back into English, and for making suggestions for improvement to the German
- **Judith Reuter-Gill**, a colleague of Doug's, also for making suggestions for improvement
- **Anthony Morphett**, for the Turing Machine simulator, for his enthusiasm and encouragement, and for agreeing to deny all knowledge of the ATH if any of you contacted him about it
- **Dirk Rijmenants**, for the Enigma simulator, for checking the Enigma settings and the German text, for his enthusiasm and encouragement, and also for agreeing to deny all knowledge...
- **Nancy**, my wife, for all her help in creating the ATH, but mostly for putting up with my ATH madness on an annual basis since 1985, and on a more-or-less permanent basis since 2008.
