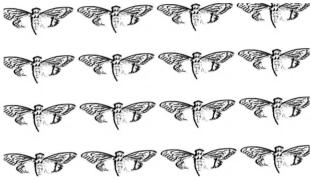
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11-25-14

### Inside The Cicada 3301 Cabal

A teenager says he solved the Internet's most enigmatic mystery, and was granted access to the online headquarters. Here's what he found.



[LOGO: VIA WIKIPEDIA]

#### BY MICHAEL GROTHAUS

LONG READ

This story contains interviews with Tekknolagi, the student who solved the Cicada 3301 puzzle.

In January I wrote a story about the one person who is known to have made it further down the Cicada 3301 rabbit hole than anyone else-and my inbox has never been the same since.



Cicada's welcome message.

For those that don't know, Cicada 3301 is a mysterious Internet puzzle that appears online every January. It consists of a highly complex series of riddles and enigmas that stretch from the digital world out into the real world. To solve these riddles you need have expert skills in a varying range of disciplines including steganography, cryptography, and ancient Mayan numerology, as we as detailed understandings of 18th century European literature and even cyberpunk speculative fiction. And that was just for last year's puzzle.

Thousands of cybersleuths try to solve Cicada each January (there have been three annual puzzles since 2012) but none are known to have solved it completely. And in this case, it's not the journey that matters. The makers of Cicada promise "enlightenment" to those who can make it to the end. But what's more baffling than each riddle, or what "enlightenment" awaits those who solve them all, are the people behind Cicada.

#### THE CICADA CABAL

No one knows if Cicada is a single person or a group of individuals, though evidence from the puzzle points to Cicada being more than one brilliant individual. The speer scale of the riddles transcends cyberspace and requires participants to call dummy phone.

Ne updated our Privacy Policy as of February 24, 2020. Learn about our personal information Collection practices hereen physically tape X telephone poles. This suggests Cicada is indeed a global network of individuals—a cabal no one knows anything about.

Which brings me back to my inbox...

Since writing my original story about Joel Eriksson, a cryptosecurity researcher from Sweden who was, until now, the only known person to make it further than any other in solving the Cicada 3301 puzzle, I get a few emails each week from people alleging they have information on who Cicada are.

Some emails are obviously fake. They're from fantasists that want to pretend they hold the hidden knowledge everyone desires. Some emails are downright strange, like the email I received a few weeks ago from a person who said he worked "for a component of the Intelligence Community of a 5-eyes country" and that this intelligence agency had reason to believe Cicada "may be the same group that was behind the 2007 cyberattacks in the Baltics." Then there are the emails that say Cicada are aliens, terrorists, Barack Obama.

But every once in a while I'll get an email that has the air of believability about it. These emails give me enough of a kick to look into not only the claims they make, but to investigate the person who's made them.

I received just such an email last week from a person alleging they made it past the point Joel Eriksson did and were actually invited into Cicada's online layer on the dark net. I began exchanging emails with this person who was more than willing to give me his personal details provided I don't reveal his true name or contact information. After several follow-up emails and then speaking to him on Skype to get his story, I was able to verify credible details about his life: who he was, where he went to school, that he had the skills needed to solve Cicada 3301.

It is for this reason that I bring you his story now with the caveat that while I believe he is who he claims, and I believe he certainly has the skills to solve Cicada, I have no way of verifying if what he says about Cicada's inner sanctum is true—though I will say his story is certainly plausible.

#### THE GROUP EFFECT

Before exploring the story this person told me it's important to take a moment to highlight that Cicada says they are looking for talented individuals who have the skills required to join them. The key word there is "individuals." Individuality and individual skill seem to be a highly desired quality for Cicada—and it's the reason, through no fault of his own, that Joel Eriksson was shut out from entering Cicada's inner sanctum.

While Eriksson apparently solved all of Cicada's riddles, the accomplishment was bittersweet. Eriksson only found out about the puzzle's existence three weeks after other participants had already started their journeys and by the time he solved it, arriving at the ultimate destination—an anonymous website on the TOR network—Cicada had put up a notice announcing that they weren't permitting people in anymore because they were disappointed that participants had been sharing the solutions to the riddles online. Ironically, Cicada was shutting out the very person they sought: someone who could solve the puzzle on his own, as Eriksson did.



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A list of GPS coordinates posted on a screenshot taking the game to a whole new level: the real world.

And with that it seemed like what lay beyond the curtains of that anonymous TOR site would forever remain a mystery. That is, if it wasn't for a 16-year-old student who, with the help of his friends, made it past before Cicada shut its doors. This student, now 18, would email me two years later telling me he wanted to talk about what it's like to hang out in Cicada 3301's inner sanctum and just what the group's ultimate goals are.

#### **GETTING BEHIND THE CURTAIN**

"When I'm competitive, I'm very competitive and this really was interesting," says Tekknolagi when I call him up over Skype and ask what motivated him to try to solve the Cicada 3301 puzzle. In the background I hear him clacking away at his keyboard. "It's a race against the clock and other people to solve puzzles that involve cryptography and whatnot and that was just really interesting for me, and then also the fact that it was distraction from school work which is kind of nice."

Tekknolagi, of course, is not his real name but a handle he goes by and one that he asked me to call him for this article in order to protect his privacy. At 18 he's just begun his freshman year as a Computer Science major at a major research university in the Northeast. The university records office confirmed his enrollment to me. His course of study is probably of little surprise to anyone who knows him because he's been coding since he was 9. But it was at 16 that he first heard of Cicada.





Just one of 14 Cicada-marked QR codes spread across the globe. This one was found in Warsaw, Poland. PHOTO: VIA WIKIPEDIA

"I was just in a robotics class in my high school and a buddy of mine came up and said, 'Hey there's this weird thing on 4chan'," Tekknolagi says. "I said, 'Why are you doing on 4chan at school? It's ridiculous.' He said, 'I don't know, but check it out.' So I took a look and we both just sat down and messed with it for a couple of hours and eventually found some people and that group of people transformed over time into the group that I finished with."

It's the formation of the IRC group that Tekknolagi joined to solve the puzzle that is probably the reason that he managed to succeed where Joel Eriksson was stopped. Where Eriksson was working alone, Tekknolagi's group consisted of about 12 people, most of them Internet strangers, working together to solve parts of the puzzle and share their findings. This success was in direct opposition to the directive from Cicada organizers that they are looking for talented *individuals* who can solve the puzzle. It's also the reason Cicada gave for shutting out people like Eriksson who arrived at the site on their own after teams working together had already found it.

But it is this teamwork that enabled the 16-year-old Tekknolagi past the point where Eriksson was shut out. What Tekknolagi found on that site, instead of a message telling him to go away, was a congratulatory letter for getting that far. It also asked him to set up a new email address from a public, free email service and enter it in a field below. The note on the site said Tekknolagi would receive instructions in a few days with how to progress further into the TOR site.



A painting containing a riddle to be solved.

The next day the message was removed from the TOR site, but then discovered in the source code of the former website was binary code which referenced file names of previous clues in the puzzle. It was evident that the test was not over. From the file names of previous clues a new TOR network URL was found that led to a site with another image. The image, a painting, referenced the 1793 book *The Marriage of Heaven and Hell* by William Blake. Tekknolagi wrote custom code to decipher another hidden TOR URL from the text. From there more puzzles followed, including the ultimate one, which was a MIDI file that needed to be decoded. Doing so resulted in an ASCII armored message which members of Tekknolagi's group were instructed to send to a Gmail address. A few days later Tekknolagi received an email saying there would be no more puzzles. The email contained a final TOR URL and a username and password for him to log in with.

Tekknolagi had made it past the curtain.

#### THE INNER SANCTUM

"There were a bunch of people on it. Some were from my group, some were existing members or part of some ... I don't know how they described it, but it felt like the board of this weird organization," says Tekknolagi when I ask him what Cicada's home on the dark web is like.

Tekknolagi says the site consisted of part message board, part chat room, with a private messaging feature as well. On the message board part of the site were a list of different topics including a welcome section as well as sections listing the goals and current projects of Cicada. In the chat room section of the site Tekknolagi saw about 20 members.

"They wanted to further the use of cryptography in the world so people could have privacy and anonymity and stuff like that," says Tekknolagi when I ask what the "current projects" message board contained. "Those were some big ended goals, very broad obviously. There was some end-to-end encryption thing that I was interested in working on."

Tekknolagi's reports match an email that has since been leaked that is alleged to be from members of Cicada. In the email the organization states:

oppression of any kind must end that censorship is wrong and that privacy is an inalienable right...

You are undoubtedly wondering what it is that we do we are much like a \*think tank\* in that our primary focus is on researching and developing techniques to aid the ideas we advocate liberty privacy security you have undoubtedly heard of a few of our past projects and if you choose to accept membership we are happy to have you on-board to help with future projects.

But Tekknolagi found that the benign nature of their message did not mesh with some of the things Cicada's leaders revealed in online chats.

#### A NETWORK OF INFILTRATORS?

Tekknolagi's claims of Cicada's goal being to create altruistic open source software for the benefit of mankind may disappoint—or be unbelievable to—people who think Cicada is a front for a terrorist or anarchist organization or a recruitment tool for the NSA, GCHQ, or another Five Eyes member. But just because their stated aims were benevolent, Tekknolagi says, doesn't mean he didn't find the Cicada organizers on the other end of the chat room unnerving.



"They wanted to make it seem like they were this network of people that had 'infiltrated,' if that's the right word, various private and public organizations," Tekknolagi says, going on to liken Cicada to the Freemasons and revealing that a Cicada member in the chat room stated that Cicada members had infiltrated major magazine publisher Conde Nast.

Tekknolagi says that during an online chat with one of Cicada's leaders he told him that he wanted to write a blog post about his experience in solving the puzzle. The leader was open to Tekknolagi's idea as long as he agreed to leave some pertinent details out, and in return he made him a better offer.



"I don't think generally people at Wired are involved but [Cicada] made it seem like they had someone or multiple people inside Wired."



A page of runes from Carl Jung's book Liber Primus was found to have hidden clues.

As for other organizations Cicada say they've infiltrated?

"I think they wanted to have the feel that they had these 'in' positions in some government whatever," says Tekknolagi, "but I don't recall a specific instance of hearing that like I did for *Wired*."

Infiltrating organizations, of course, are the stuff of spy movies and conspiracy theories. I ask Tekknolagi if he believes what the Cicada leader said or if it's possible the people who organize Cicada are nothing more than a group of random hackers sitting in their basements who want people to believe they are more omnipresent than they actually are.

"I don't know who would have the time to set up," Tekknolagi says. "The thing about this puzzle is that each step leads to something else and it's the kind of thing that because it's time stamped can't be changed after the fact. The signature wouldn't work out, so every step had to be planned out beforehand and worked out perfectly. Otherwise, the whole thing would just fall apart. That's a lot of hours all at once for a puzzle to work out nearly perfectly. My inclination is to think that it's not just random people."

When I run through some theories of who Cicada might be (aliens, NSA, terrorists) Tekknolagi says "I have no idea" but says one of the most popular theories—that Cicada is a front for a government security agency recruiting people—is unlikely ("I feel like the NSA has better ways of recruiting.") Tekknolagi says Cicada could consist of some security researchers at major companies or universities, but then there were things he saw on their TOR site which also suggests to him that's unlikely as well.

"It was too informal," he says. "There were some spelling mistakes and grammar mistakes. Too many of those I think to be, like GHCQ, or something like that."

And as for the theory—as some of the emails I get—that suggest Cicada is a cyberterrorist organization?

"There was really nothing ever said to the tune of disruption or virus creation or whatever," he says. "All of it was like, 'Oh yeah; we're going to release some public open source software."

#### WHERE'S THE ENLIGHTENMENT?

In the end, Tekknolagi still doesn't know who is behind Cicada or what kind of enlightenment—as its creators promise—there is to be had. And though Tekknolagi says he has no reason to believe Cicada is any type of "evil" organization, he says his experience on the inside "was just weird and creepy."

"Creepy because, we [still] have no idea who they are [and] it was just so well thought out. It was weird. Across the globe, fourteen different QR codes were placed just on lamp posts and mailboxes and whatever and I have no idea how long it took them to place those there but they obviously got there somehow," he says, citing just one example of the way the puzzle breaks from the digital to the real world. "Someone had to do it so they have some kinds of resources at their disposal."

But while many who obsess over the mystery that is Cicada might have stuck around to find out more, Tekknolagi only logged into the anonymous site for a few weeks before leaving.

As for the others in his IRC group, Tekknolagi says none of them who he is still in contact with say they stayed for much longer and after a while the Cicada site on the TOR network became hidden again.

Over Skype I still hear Tekknolagi tapping away at his keyboard, working on some project he's been working on the whole time while we've been speaking, only taking breaks to reply to me or to the instant messages this 18-year-old college freshman gets every few minutes. He tells me he has a headache and a lot of work left to do for the night. But before I let him go, I ask him one more thing: "After your experience of getting farther than anyone else has known to have gotten with Cicada, who would you say Cicada are and, regardless of what they claim, what do you believe their ultimate goal is?"

"I don't know and I don't know," Tekknolagi says. "That's the truth. I think that's the only thing that I can truthfully say."

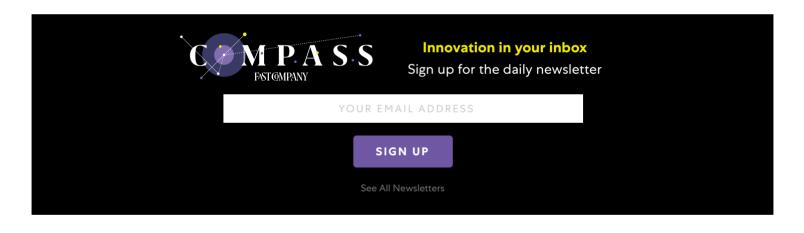
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Michael Grothaus is a novelist, journalist, and former screenwriter. His debut novel EPIPHANY JONES is out now from Orenda Books. You can read more about him at Michael Grothaus.com More

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