

The Last Equation

A Scenario for *Delta Green: The Role-Playing Game*

Written by Dennis Detwiler

Published by Arc Dream Publishing in arrangement with the Delta Green Partnership. The intellectual property known as Delta Green is ™ and © the Delta Green Partnership, which has licensed its use here. The contents of this scenario are © 2018 by Dennis Detwiler, excepting those elements that are components of the Delta Green intellectual property. Illustrated by Dennis Detwiler, © 2018. This is a work of fiction. Dedicated to Mark McFadden, the Lizard King.

Introduction

Brussels-born mathematician, sage and astronomer Fascius Claudan (1535–1561) was responsible for many minor breakthroughs in science and technology during his short but broadly travelled life. Between journeys to Egypt, Persia, central Asia and more exotic locales, Claudan published six books on astronomy and mathematics. His last book was on cosmology, a book which is considered dangerous by some who know

of such things: the *Libri Plures Admiratio* (“Book of Many Wonders”).

Claudan is fleetingly remembered as a minor inventor or various knots, pulley systems, cogworks and early machines for pumping water, but he has vanished almost entirely from known science. One legacy of Claudan remains: the Laqueus Equation. This short code was rendered just days before his death. It is regarded in the small circles that know of it as either an epiphany or complete gibberish. To date, no one has publicly claimed to understand it, much less to have solved it.

For over 500 years, the world’s most brilliant mathematicians and cryptographers tried in vain to solve the equation. It holds a place in the annals of cryptography as one of the few cryptograms to resist modern attempts at cracking. It is used as an example in many cryptography tomes as a “clean” cypher, because it has remained untranslatable.

Until now.



Columbia University

On October 12, Michael Wei, a graduate student in mathematics at the prestigious Columbia University Department of Mathematics, successfully cracked the Laqueus Equation.

Using a computer program of his own design, Wei examined all seven of Fascius Claudan's books and discovered a cypher embedded in imperfections on the pages on the last one. That dictated the proper way to decipher Claudan's last equation.

What Wei discovered was a complex formula, which rendered the world at every level down to a mathematical simplicity never before seen. It was literally a reduction of the entirety of existence through prime numbers unlocked in a particular calculation of a sequence of sixteen digits. It revealed a vast and roiling reality dancing just behind modern mathematics.

Elated, Wei forwarded this discovery to a very select few on a privately maintained mathematics mailing list. The list consisted of twelve mathematicians known to one another through academia or friendship, mathgeeks@listbrain.com.

Wei did this before the true horror of the Laqueus Equation had settled in his consciousness.

Four hours later, Wei drove out of New York City to Teaneck, New Jersey, and purchased ammunition for a stolen shotgun. He drove 10 km to Alliance, New Jersey. At 2:28:13 P.M., he entered the home of Dinah and Malcolm Ridgeway and their six children. Wei, who had no criminal history, slaughtered the Ridgeway family one by one. He chased the last, 18-year-old Michael Ridgeway, out onto Highway Six and shot him in the back in front of eyewitnesses.

Before police arrived, Wei spray-painted a number sequence on the pavement as witnesses understandably kept their distance. He then shot himself in the face with the shotgun, removing almost all of his head in one blast. When the police arrived, they had an interstate murder-suicide with nine bodies and no apparent connection between the victims and assailant.

No clues, no leads, no motive. All they had was a dead mathematician, the corpses of eight slaughtered innocents, and a spray-painted number.

As usual, that's where Delta Green comes in.

The Program Makes the Call

When the report reached the national crime database, the numbers spray-painted on the pavement in front of the Ridgeway murder scene triggered a troubling alert in the Program's intelligence office. It was flagged as a possible paranormal event. (If your Agents are part of the Outlaw conspiracy and not the Program, then an unnamed Friendly recognized the dire import of the numbers.)

The numbers have been seen at various times and in various dangerous books known to the conspiracy, once at the death scene of a Delta Green agent. It is high on the containment protocol list as a dangerous, infectious meme.

The numbers are: 9 9 2 0 .2 2 9 9 8 9 2 1 2 .3 3 3.

Within an hour, a team is being assembled through secure channels to get to the Ridgeway murder scene. Wherever they live, tickets are waiting to fly them to Newark Liberty International Airport, about 30 minutes' drive from Alliance, New Jersey.

Odd Questions

Reaching out to each Agent in turn, the Agents' case officer or primary contact asks strange questions before informing them of the assignment: things like "Do you have any experience in theoretical mathematics?" and "On a scale of 1 to 10, how well would you say you understand physics?"

Any Agent who has any skill in **Science (Mathematics)** or **Science (Physics)**—unless the skill is unknown to the Program—is told that the case is not for them, and then the contact hangs up. The player should take a temporary replacement character. (As Handler, you can facilitate this by having a couple of spares ready. *Delta Green: Agent Dossiers* may be useful.) The Program is looking for people to identify and contain the meme, not spread it.

Some Agents might answer "No" to the above questions while the true answer is a resounding "Yes!" Don't worry. Having such a character join the operation won't ruin the scenario, but it might derail things—in a fun way.

Operation IAPETUS Briefing Summary

You are to investigate the murders of MALCOLM RIDGEWAY (age 44), DINAH RIDGEWAY (43), MICHAEL RIDGEWAY (18), CLARK RIDGEWAY (16), DEAN RIDGEWAY (14), MARY RIDGEWAY (13), ALICE RIDGEWAY (12), and CLAIRE RIDGEWAY (10) in Alliance, New Jersey, on October 12.

The murderer was MICHAEL WEI (26, deceased). Wei was a mathemats student at Columbia University, New York. At the scene, Wei wrote a series of numbers which are known to possess dangerous, paranormal properties.

Instructions

- » Determine if WEI distributed the number in any manner besides the crime scene (such as phone, text, social media, or email).
- » Locate WEI's notes and other works on the number and destroy them.
- » Destroy the numbers written at the scene and all photographic evidence of them in the hands of the authorities.
- » Locate any individuals who have been exposed to the numbers and have mathematics experience and report them to your case officer.
- » To establish a cover story for WEI's actions, link WEI romantically to DINAH RIDGEWAY. Create whatever documents are necessary to make an affair between the two seem likely.
- » Once these actions are complete, contact your case officer for further instructions.

Possible Friendly Contact

- » Trooper Thomas Blanet, New Jersey State Police

Joining the Investigation

The Agents' case officer assumes that they will join the interstate murder investigation in an official capacity. The Program is well suited for arranging that, and sends the Agents under the aegis of the FBI as special agents or as consultants under an FBI contract. An official tie to the investigation has many advantages, including easy access to crime scenes, witnesses and evidence.

Of course, it also brings the Agents under the close scrutiny of the commander of the investigation and has a chance of exposing their real purpose. The Agents may wish to set up a secret, parallel investigation with part of their team or even all of their team. That reduces day-to-day exposure to law enforcement officers, but it can be dangerous. Being caught inside a secure crime scene and tampering with evidence carries a heavy penalty (three to five years in prison under New Jersey law), and of

course the Program cannot come forward to assist any of its personnel caught in such a situation.

A tandem approach is probably the safest, if the Agents think to propose it. One or more Agents can be officially placed on the case as "experts," while the rest act as a "go team" to investigate leads leaked by their insiders.

Experts on the Case

It is generally easy to place an Agent or Friendly as a specialist on the Ridgeway case, as it now falls within the FBI's jurisdiction (due to Wei's interstate transportation of firearms to commit murder). The murderer killed himself after killing the family, so the local police are eager to close the case and move on, but the FBI wants to confirm that Wei was not involved in anything broader-reaching.

Ironically, the most unassuming role for an Agent would be as a mathematics expert brought in to examine the numbers, as well as Wei's work, email and documents. Of course, Delta Green is bringing in the exact opposite: people with little skill in mathematics. Still, the role of mathematics specialist is not unattainable, even to someone uneducated in mathematics. Possessing the proper badge and ID is far more important than actually understanding mathematics, as far as the bureaucracy of the FBI is concerned. Few FBI agents are expert mathematicians, so it's not hard for an Agent to fake it. A "mathematics specialist" can get away with saying a series of numbers "are gibberish, they mean nothing." No federal agents or cops on the scene will know to say otherwise, at least for now.

Paperwork and ID

The Program sends the proper paperwork and ID to Agents assigned officially to the investigation. Agents with the appropriate backgrounds—those who are already federal law enforcement officers—are suddenly assigned to the Ridgeway/Wei case, and their day-job supervisors are not told why. The whole thing strikes everyone as political, so the Agents' colleagues encourage them to keep their heads down and finish as soon as possible to avoid trouble.

Agents without the proper background each receive a FedEx envelope filled with a disturbingly detailed dossier of a new identity. This "cutout" is as real as you can be on paper, at first glance, right down to dental records, IRS returns for the last two years, and credit card receipts. It also has the appropriate law enforcement ID, and details on what firearm to purchase as an appropriate duty weapon. However, this identity will not stand close scrutiny for long. Anyone examining this paperwork at length can make a Bureaucracy roll. Success means some inconsistency has been detected. It is then only a matter of time until that thread unravels the false identity. Avoiding that kind of attention is critical.

Anyone caught illegally posing as a federal officer faces eight to 13 years in jail—even a special agent from a different agency. Anyone outed in such a manner better be prepared to flee. If they don't, it could mean

an ignominious end to a career. Exposed Agents can be readily identified by their fingerprints. If the Agent is in the employ of another agency (for example, if the Agent works for the IRS but is pretending to be with the FBI), each agency will launch an investigation.

Such a discovery, and possible detainment of an Agent, may make the Program take some unusual steps to prevent a deeper witch hunt from occurring. We leave those details to the Handler. But an Agent who is unfortunate enough to try to crawfish on Delta Green—to expose the Program after being left to dangle—will be in for a swift and lethal surprise. Horrific things happen in jail all the time, over things as trivial as a case of cigarettes.

A Friendly on the Inside

If the Agents do not officially join the investigation, the Program reaches out to a contact in the New Jersey State Police and gets him placed in the investigation. The last victim and Wei technically died on the highway, which opens the jurisdictional nightmare of the Ridgeway murders up to the state police.

This contact, Trooper Thomas Blanet, is a 22-year veteran of the New Jersey State Police and a wholehearted believer in Delta Green, though he does not know it by that name. Agents he worked with before simply called it "the Group."

Blanet has access to most files on the case, as well as crime scene photos, copies of Wei's hard drives and more. He is careful and resourceful, soft-spoken and to-the-point. Blanet does his best to assist the Agents in retrieving whatever information they need to complete their investigation. He is willing to copy or photograph evidence for the Agents.

Blanet will not cross certain lines, however. He will not falsify information, tamper with evidence, steal evidence, or tolerate murder or abductions. Agents asking for his assistance in those matters find themselves stonewalled.

If confronted with an unnatural threat, Blanet acts by the book, never losing his cool unless insanity strikes.

Blanet brings with him a bit of baggage. His involvement with the Group dates back nearly 20 years

to the locally infamous Tiem slaughter, a hit on a dozen men of Vietnamese extraction by an unknown gang. Blaneet claimed he was struck on the head and did not recall any of the particulars of the firefight that erupted. Investigators said Blaneet froze in the line of duty, which cost Alliance Police Officer Morris O'Dell his life. Blaneet was cleared, but it put him on the radar of local news. He was later diagnosed with and treated for post-traumatic stress disorder.

Blaneet will do his best for Delta Green. His maneuvering would be easy if the Ridgeway murders were an abstract little news story. For about the first ten minutes, it was. It's not anymore.

Preliminary Plans

Smart Delta Green Agents will immediately secure a primary base of operations and, if they are particularly diligent, a secondary safe house. Alliance, New Jersey, is nothing more than two strips of restaurants, gas stations and some large shops, surrounded by sparse lots that once were farms. Two large motels sit on the east and west of town and a hotel stands in the center of the strip. The Motel 6, on the west side, is the current haunt of all manner of law enforcement personnel; it would be the common choice of an FBI specialist, and, most likely, a room is waiting for any official member of the investigation.

Killer Math Teacher!

By the time the Agents are in the air from their various ports of call, the story of Wei's murder of the Ridgeway family has become national news. Reporters have descended on Alliance, New Jersey, in droves. The story is filled with the hooks that make viewers tune in by the millions: insanity, murder, innocents slain, and a confusing back-story which may never be understood. Already, camera crews are camping out at every meaningful place in Wei's life or the lives of the Ridgeways. They are likely to be anywhere the Agents arrive, and they are likely to have lots of questions. This makes the investigation doubly dangerous. Conspiracies don't have a good track record of surviving encounters with the press.

Official Investigators: Ambushed

If any Agents are officially placed on the case, the following occurs just as they arrive at either the airport or at Alliance, New Jersey, itself.

As an Agent exits a vehicle, he or she is ambushed by a small press team: reporter Enrico Savé (see **THE FACE OF NORTHERN NEW JERSEY** on page 9), a cameraman, and a producer. The camera shines a bright light in the Agent's eyes as the reporter launches a barrage of questions that vaguely imply that the case's investigators are keeping the truth to the public. The reporter already knows the Agent's name (or at least the name on the Agent's credentials), and bombards the Agent with questions about Wei and his motives.

If the Agent has a **Charisma** of 13 or better, the player must make a **Luck** roll. If it fails, that Agent becomes the "face" of the investigation in the eyes of the media. (If there are two or more Agents with **Charisma** 13 or better and only one is female, she gets the honor. Otherwise it goes to the one with the highest **Charisma**.)

If that happens, other news agencies now go out of their way to track down this particular Agent and interrogate him or her with ambush interviews. God help the team if this comes to pass while they are involved in something unnatural, because a camera crew is likely to be nearby, looking for trouble.

Worse yet, if that Agent has been assigned a false identity to pursue the investigation, every time he or she appears on the news, the player must make a **Luck** roll. If it fails, someone recognizes the character as a video spreads through Twitter, Facebook, YouTube, cable news, and so on. The character may suddenly get a phone call asking what he or she is doing in New Jersey and why he or she was identified by the wrong name on the news. If the **Luck** roll is a fumble, someone in the character's own office saw the broadcast and the Agent's official supervisor is informed. It's then only a matter of minutes until the hammer falls.