

BAD BLOOD: THE FINAL CHAPTER

EPISODE 9: THE MILITARY

COLD OPEN

Elizabeth Holmes: Well, off the record, we were doing some work for the military, which we can talk about off the record.

It was September of 2014. The *New Yorker* writer Ken Auletta was interviewing Elizabeth Holmes at a Chinese restaurant in Palo Alto when she dropped a bombshell. Theranos worked for the Department of Defense. Auletta wanted to know more. Elizabeth obliged and dropped a few more breadcrumbs.

Elizabeth Holmes: When people are wounded in field, um... if you get someone through the doors of an emergency room within 60 minutes from the point of injury, you have close to the 99 percent survival rate.

Ken Auletta: Did you say 99?

Elizabeth Holmes: Yeah, and if you missed that 60-minute window, that's where all of our fatalities occur and so...

Ken Auletta: Is that bleeding to death?

Elizabeth Holmes: Bleeding, yeah, yes, exactly. You don't get the transfusion, you can't do stabilization, all this kind of stuff. So, if you could, this is off the record, do this type of testing on a medevac, then it makes it possible to begin stabilizing people before you can get back to a base.

On a *medevac*. Elizabeth seemed to be suggesting that Theranos' blood-testing devices were being used to treat wounded soldiers evacuated from the battlefield by helicopter. Confused, Auletta pressed for more details.

Ken Auletta: I don't understand by... What testing do you do? I mean, if someone is wounded, what are you testing for?

Elizabeth Holmes: Yeah, so you're doing several things. One, if you've lost dog tags, then you need to do blood typing so you can start the transfusion. And then once you initiate transfusion, now you need to do basic chem panels to understand how to stabilize them, right, so you can get some sense of what... what their state is, right. And there's layers and there's a basic chem panel, then there's like when you're in an ICU, what you do. But if you start all that before they even get to the base, you've collapsed that 60-minute window.

Saving American soldiers' lives. Few things were more noble than that. What a spectacular use of the Theranos technology. Auletta was impressed, but he didn't understand why Elizabeth was being secretive about it.

Ken Auletta: Since you've done work, why is that... Would you talk... I mean, when we're back on the record, I mean not tonight, but subsequently, would you talk about the work you've done with the military? Why is that... Why would that be off the record?

Elizabeth Holmes: Yeah, you know we... we haven't announced it publicly, in part because there hasn't been a reason to...

Over the course of a half-dozen follow-up interviews, Auletta came back to the topic of Theranos' military work several times, but Elizabeth refused to say anything about it on the record.

There's a reason for that. Theranos wasn't actually doing any work for the DOD, beyond a small burn study it had participated in years prior. For three years, Elizabeth had tried to talk various parts of the military into using her technology, but those efforts had gone nowhere.

***That's* why she kept her comments to Auletta off the record. She didn't want to be caught telling a lie publicly. And Auletta honored those ground rules at the time. But journalistic agreements are based on trust and Elizabeth shattered that trust by lying to him repeatedly, leading him to convey false information to readers, which is why he's allowing me to use these off-the-record excerpts now.**

While Elizabeth was careful to stay *off* the record in those *New Yorker* interviews, she was less guarded behind closed doors when she was pitching investors. According to prosecutors, she and Sunny told several investors that Theranos' devices were deployed in the battlefield and that the military was a big source of revenues and profits for the company.

In hindsight, these lies seem a little crazy, a little too big—like the tall tales of a teenager trying to impress her friends. But Elizabeth told them for a reason. She was a master of optics, and she knew that working with the DOD would sway investors and make them more likely to part with big sums of money.

I'm John Carreyrou and this is *Bad Blood: The Final Chapter*. On today's episode, the strange and at times comical story of Theranos' dalliance with the military. As with a lot of things at Theranos, Elizabeth's vision of putting her devices on medevac helicopters and doing big business with the Pentagon never got past the idea stage. But it's not for lack of trying.

Elizabeth repeatedly leveraged her relationship with two top military commanders, General Jim Mattis and Admiral Gary Roughead, to try to land contracts with the DOD, recruiting both of them to her board of directors.

That's what Elizabeth did when she wanted something. She charmed the powerful people at the top and got them to do her bidding. But what she failed to appreciate is that the DOD is a giant bureaucracy with strict rules and regulations.

When two lower-ranking Army officers doing their jobs got in her way, Elizabeth thought she could just steamroll them. But, in big bureaucracies, even lowly bureaucrats have some say.

That's after the break.

SEG A

David Shoemaker: You could see just from the kind of grimace, I guess you would say, on her face and the crossing of the arms and just her general posture, that she was very unhappy with me at the time.

Lieutenant Colonel David Shoemaker was experiencing the wrath of Elizabeth Holmes. It was November of 2011 and the low-key Army officer had come to Theranos headquarters in Palo Alto to discuss her plans to deploy her blood-testing machines in the battlefield in Afghanistan.

The meeting had begun cordially enough, but 15 minutes in Shoemaker had interrupted Elizabeth's presentation to point out a big flaw. The Theranos devices had not been approved by the FDA, and without FDA approval, there was no way her plans could go forward. This was not a message Elizabeth wanted to hear.

David Shoemaker: The response I got was not one of, "well, why do you think that?" Or, you know, "well tell me a little bit more about that." It was a pretty brusque response. So after a couple of minutes, I kind of just backed off because I could tell that that conversation was not going to be productive with me pushing that this early on.

The chain of events that led to Shoemaker's Palo Alto visit had started earlier that year when Elizabeth had met General Mattis, then head of the U.S. Central Command, or CENTCOM, the division of the military responsible for the Middle East and Central Asia.

Elizabeth had a pattern of cultivating powerful older men to advance her company's interests. She'd become chummy with former Secretary of State George Shultz and former Secretary of Defense William Perry, both fellows at the Hoover Institution, the conservative think tank housed on the Stanford campus. At their invitation, she'd gone to hear Mattis speak at the Marines' Memorial Club in San Francisco. And afterwards, she'd pitched him on her technology's potential military applications.

Mattis was the ideal target for Elizabeth's sales pitch. He was passionate about the safety and well-being of his troops and

receptive to any ideas that might help save lives in conflict zones, as he later explained to Ken Auletta.

Jim Mattis: I've been in, from everything from isolated outposts to ships at sea to refugee camps. And those are not places that are... are known for having medical care and I'd just actually come out of a refugee camp a short time before. I thought, my gosh.

Elizabeth had caught Mattis at an especially raw moment. Two weeks before his speech in San Francisco, he'd lost 38 men when a Chinook helicopter flying under the call sign "Extortion One-Seven" was shot down in Afghanistan. To identify the remains, CENTCOM had to wait until the mangled bodies were transported back to the U.S. for DNA analysis. That would no longer be necessary with her device, Elizabeth claimed. It could do DNA recognition on the spot from just a drop of a dead serviceman's blood.

Mattis was impressed.

Jim Mattis: When I heard that she was... she had an idea for how to do early detection based on what could only be described as revolutionary, drop of blood, and within a very short amount of time, you could know if you had a problem or not, if a person was ill or not.

He wanted to try it out in Afghanistan right away. That was music to Elizabeth's ears. Aside from the potential revenues it could generate, a DOD contract would give Theranos instant credibility with investors. After all, the U.S. military was probably the biggest technology purchaser in the world.

But before Theranos could get a contract, there were rules and regulations that had to be followed. And crucially, people in the military who enforced them. And those people tended to be sticklers. One of them was Lieutenant Colonel Shoemaker, a quiet, by-the-book officer in the Army's medical department at Fort Detrick in Maryland.

Based on what he was told, Shoemaker thought the Theranos technology was promising, and he wanted the company to succeed. But there was one glaring problem—its lack of FDA approval. Unlike in the distant past, these days the Department of Defense only used drugs and medical devices that had been vetted and approved by the FDA.

Elizabeth and Sunny protested that they didn't *need* FDA approval because the test data would be beamed wirelessly from the battlefield back to Theranos' lab in California, which had a valid license.

David Shoemaker: Their claim was that the actual test did not occur on the device, but rather the test... happened back at the lab in Palo Alto where their clinical pathologist would read the results, interpret the results, and then report them out. And it was kind of a head scratcher for me to get my arms wrapped around it because it just didn't make much sense.

It was a creative argument, but ultimately Shoemaker didn't buy it. No matter where they were analyzed, the tests themselves took place on the device and therefore it needed to be approved by the agency that regulated medical devices. The FDA.

David Shoemaker: I think they had thought they had found this huge loophole to get around the FDA requirements, thereby saving years in terms of regulatory filings and millions of dollars to support those regulatory filings.

Elizabeth countered that Theranos had retained regulatory lawyers who agreed with her position. That wasn't good enough, Shoemaker told her. If she wanted to test her machines on soldiers in the battlefield, she'd need to get a special dispensation, in writing, from the FDA.

David Shoemaker: I got a pretty cold shoulder from that point forward with... with the remaining discussions that day.

Six months passed, and Shoemaker heard nothing more from Theranos. He did hear from CENTCOM, though. They kept emailing and calling, wanting to know if they could proceed with the battlefield test of the Theranos technology.

David Shoemaker: I was getting frustrated. So, I said, you know what? I'm just going to informally go to the FDA and ask them what they think about Theranos' strategy.

What followed was essentially a game of telephone among several mid-level bureaucrats. Shoemaker emailed an FDA official he knew, who forwarded his query to several colleagues. One of them was Alberto Gutierrez, the FDA source Ken Auletta would call two years later to check on some of Elizabeth's claims.

Gutierrez was in disbelief. It sounded like Theranos was trying to circumvent his agency. He decided to email the Centers for Medicare and Medicaid Services, the sister agency that had licensed Theranos' California lab.

Before long, a CMS inspector showed up unannounced at Theranos' offices to lecture the company about how it couldn't deploy its devices outside the lab without FDA approval. Elizabeth was *not happy*.

David Shoemaker: She was apparently pretty furious to the point of um... suggesting that she was going to sue me. And so, when I found out about that, it was like [laughs] oh my goodness, what a hornet's nest I have stirred up.

Elizabeth sent a blistering email to General Mattis accusing Shoemaker of giving “blatantly false information” to the FDA and CMS about Theranos. Mattis, who was in Afghanistan at the time, was irate when he read her email. He forwarded it to Colonel Erin Edgar, the officer he'd put in charge of making the Theranos field test happen. “Who is LTC Shoemaker and what is going on here?” he wrote.

David Shoemaker: What happens next is that I get an invitation, if you will, to visit with General Mattis in person face to face and explain why I am uh... holding up, if you will, the deployment of the Theranos device into Afghanistan.

Shoemaker was nervous. Mattis was one of the most powerful and fearsome people in the military—not the kind of guy you wanted to be on the wrong side of. But he also knew he was right. So he agreed to

fly down to CENTCOM's headquarters in Tampa, Florida to brief the four-star general. For back-up, he asked the FDA's Alberto Gutierrez to join him. The meeting was scheduled for 3 p.m. on August 23, 2012.

David Shoemaker: We walked down the hallway, wait outside his office for about five minutes. The waiting area is just... it's very impressive. They've got a number of display cabinets there with various mementos that General Mattis had received from, you know, foreign dignitaries and other folks that he had worked with during his career. And then we are ushered into his conference room. We all sat down and General Mattis just starts off by saying, you know, "Hey, I've been trying to get this product, you know, into theater for a year now. What's going on? What's the holdup?"

Mattis was an intimidating figure. Broad-shouldered and with deep, dark bags under his eyes. He was also famously blunt. He'd once told Marines in Iraq, "Be polite, be professional, but have a plan to kill everybody you meet."

But Shoemaker managed to keep his nerves and calmly explained the situation. The Theranos machine was an unapproved medical device. Soldiers were entitled to the same protections as regular citizens. You couldn't just experiment on them like lab rats. Gutierrez chimed in, confirming that Shoemaker was correct.

Mattis seemed to understand but he was reluctant to give up. He wanted to know if there was a way forward they could suggest. After some back-and-forth, Shoemaker and Gutierrez proposed a solution. The Theranos device could be used to test the blood of wounded soldiers *after the fact*, once the soldiers had already been tested and treated with the military's conventional methods. Theranos would be

given access to their leftover blood samples and its results would be compared to the conventional methods to see if they matched.

It fell short of the live field trial Elizabeth had been pushing for. Theranos' blood tests wouldn't be used to inform treatment decisions. But it was *something*. Earlier in his career, Shoemaker had worked on diagnostic tests for biological threat agents, and he would have *loved* to get his hands on leftover samples from wounded service members.

Fifteen minutes after they'd walked in, Shoemaker and Gutierrez shook Mattis' hand and walked out. Mattis had been gruff, but cordial, and they'd found a workable compromise. Shoemaker was immensely relieved. He also now understood better why Mattis was pushing so hard for the Theranos test.

David Shoemaker: He thought that the Theranos device could contribute to the health and well-being of his troops, so that's why he wanted that device in theater so badly.

The path was now clear for Theranos to conduct what was known as “a limited objective experiment.” Once the proper documentation was drawn up, Mattis and his staff expected it could proceed within a matter of weeks.

But that assumed that the game-changing technology Elizabeth had been talking up for a year, worked. Which, it turned out, was a big assumption to make.

More, after the break.

SEG B

After his meeting with Shoemaker and Gutierrez in Tampa, General Mattis kept up his relentless pressure campaign on behalf of Theranos. He assigned Colonel Edgar to make sure the experiment they'd agreed on, happened. He even offered to fly his Gulfstream 5 over to Palo Alto, pick up the device and fly it to Bagram airfield in Afghanistan himself.

But what Edgar and Mattis didn't know was that Elizabeth had sold them on something she didn't have. She'd told Mattis her device could do 2,000 different tests on a fingerprick of blood, but what she really had was a malfunctioning prototype that could handle only a tiny fraction of that number.

It was the same fake-it-'till-you-make-it playbook she'd used with Walgreens and investors. Overpromise and hope that, in time, her engineers and chemists would catch up. So, while Mattis chomped at the bit, Elizabeth stalled, leaving Colonel Edgar confused and perplexed.

Erin Edgar: I was constantly speaking with Elizabeth, either via phone or email and, you know, just trying to get that... that product over into Bagram. But, you

know, as time lingered on, there just was a delay, delay, delay and really no good explanation for why can't we get it there.

Elizabeth stalled so long, she lost her most important ally in the DOD. In March 2013, Mattis retired from the military. Although he joined Theranos' board a few months later, he was no longer as useful to Elizabeth. Under Pentagon ethics rules, high-ranking officers can't lobby their former colleagues in the Armed Forces for one year after their retirements.

With Mattis no longer inside CENTCOM pushing for the Theranos study to go forward and his influence from the outside restricted, it stopped being a priority.

It didn't help that the FDA now had Theranos in its sights. After he'd flown down to Tampa with Shoemaker to brief Mattis, Alberto Gutierrez had summoned Elizabeth and Sunny to the agency and told them that the Theranos device was very much subject to FDA regulation.

From there, tensions with the FDA had escalated and CENTCOM had gotten wind of it. In October 2013, CENTCOM pulled the plug on the Theranos study. The DOD division Theranos had cultivated for two and a half years no longer wanted anything to do with it.

Elizabeth was back to square one. But she wasn't ready to give up. If Mattis could no longer help her and the route through CENTCOM was blocked, she would try another way.

Gary Roughead: The first contact Theranos had with the Navy was when I put them in contact with people in the office of the Navy surgeon general.

That's Admiral Gary Roughead, the U.S. Navy's former chief of naval operations. Admiral Roughead had retired from the Navy in 2011 and joined Theranos' board of directors in January 2013. Unlike General Mattis, the one-year moratorium barring him from contacting his former Navy colleagues had expired. And he was free to lobby them on Theranos' behalf. So, Elizabeth asked him to make some introductions and he obliged.

Roughead's intervention rippled down to a lieutenant colonel named Eric Wagar, who led a team that oversaw medical diagnostic products for both the Army and the Navy. Wagar frequently fielded pitches from companies that wanted to sell their wares to the DOD, so he was used to this sort of thing. Though they usually didn't come by way of retired four-star admirals.

When he heard about the Theranos device, Wagar, like everyone else Elizabeth had pitched, was intrigued. He'd managed field labs during several of his deployments and he was keenly aware of their limitations.

Eric Wagar: If there's a system out there that could provide more capability in a smaller size, weight and power, then, you know, by all means, we'd... we would be interested in that. But we're not careless shoppers. I mean, we're going to do our homework and... and test it.

Wagar reached out to Theranos and invited the company out to Frederick, Maryland to present its technology. He was aware of its previous failed attempts to work with CENTCOM but was willing to keep an open mind.

Eric Wagar: I just assumed that it was a fresh start and we would let bygones be bygones or whatever, you know, we would start a... try and start a new relationship.

A meeting was arranged for late January 2014. Wagar invited colleagues from different DOD departments: regulatory affairs, IT, product management. For its part, Theranos sent just two people. Christian Holmes, Elizabeth's younger brother, and Dan Edlin, a college buddy of Christian's who functioned as Elizabeth's de facto chief of staff. They showed up with one of the Theranos devices.

Eric Wagar: The building we were meeting in is actually an old barracks, so we... we lugged this... this big 'ole black box up the stairs or maybe we took the elevator, but it... unwieldy in size to say the least. Got it upstairs, got it plugged in. And they... they started going through some... some view graphs, some PowerPoint slides.

Holmes and Edlin had come with a well-rehearsed presentation extolling the capabilities of their technology.

Eric Wagar: And then they... they wanted to demonstrate it. One of the two Theranos guys collected a drop of blood, sucked it up into one of those little capillary micro tubes and... and put it in the box. And then we went through and, while the machine was doing its business, you know, humming and whirring, we went on with some more and we started to... to ask questions of them.

This is where things started to get tense. Holmes and Edlin were put off because they thought a two-star Navy admiral named Bruce Doll would be present, but he didn't show. Instead, they were surrounded by a dozen lowly DOD bureaucrats who were showing them no deference.

The DOD's IT folks were being particularly nettlesome. They wanted access to the Theranos device to run security checks on it, a prerequisite to connecting any new piece of equipment to the DOD's network. But Holmes and Edlin told them that was out of the question. Theranos needed to protect its trade secrets.

Eric Wagar: They were adamant they didn't want us poking around on their device. They countered by saying, you know, well, we could just run it off of cellular data. And I... I think I laughed heartily at this point.

Wagar had done a tour of duty in Afghanistan a couple of years earlier. While he was there, every time the Taliban attacked, they disabled the local cell towers to scramble enemy communications.

Eric Wagar: So it wasn't like, you know, in the midst of bad things happening, when you might actually need the device, that it was going to be able to connect to Roshan or whatever cell network they were using to phone home for data exchange.

Wagar also didn't think giving Theranos employees in California access to the wounded soldiers' blood-test data was a good idea.

Eric Wagar: Imagine you're at a facility and... and if every lab test or nearly every lab test that's requested reflects a patient, I mean, that's like real-time reporting of casualties to somebody who's... who's not in the circle of trust. It seemed like an extraordinarily bad idea.

The problem was that Theranos' regulatory strategy was predicated on that. In the absence of FDA approval, the company continued to argue that its California lab license gave it cover to deploy its devices in the battlefield. But that argument only held up if soldiers' test data was beamed back to the California lab.

As the meeting wore on, Wagar and his DOD colleagues grew increasingly annoyed with Theranos' secretiveness. Holmes and Edlin were continuing to go through their rehearsed PowerPoint presentation, but Wagar noticed they were quickly skipping over the charts about the performance of Theranos' blood tests.

Eric Wagar: I, data person, was like, you know, "No, no, no, no, go back, go back." And they're like, "Oh, we'll send you the... we'll send you the charts by email after the meeting." So... so there really... it was... it was long on what the military might call "con ops," but short on what I would call data.

The DOD contingent pressed for more information on how the black box that looked like a big desktop computer tower even worked. Holmes and Edlin refused to answer. That was a trade secret, they

repeated. Frustrated, one member of the DOD delegation blurted out, “I’m starting to believe the device is just a box of Palo Alto air.”

Sensing that they were fast losing credibility, Holmes and Edlin made a small concession. They agreed to pass around the white rectangular cartridge containing the blood sample that slotted into the front of the device. Wagar asked what was inside the cartridge beside the blood sample.

Eric Wagar: And they're like, we're not going to tell you. And so, when it got to me, I reached into my pocket and pulled my Swiss Army knife out and started to try and cut it apart because, you know, I'm curious. And that really wiggled them out. I think they kind of jumped over the table to take it back from me. And I laughed at them and I said, “You know, you realize that... that if you actually let this thing out into the wild, the first cartridge, you know, people are going to tear it apart to see how it works. You know, you can't non-disclosure the entire Department of Defense.”

Judging from the scowls on their faces, Holmes and Edlin looked angry and humiliated. The meeting ended awkwardly. Wagar helped them lug the Theranos device back to their rental car and told them he would follow up by email.

Although he was put off by how coy and secretive Theranos had been, Wagar was open to continuing the discussion. In particular, he wanted to take a closer look at those slides showing the performance of Theranos’ tests they’d promised to send him.

But Elizabeth had other ideas. And they didn't involve the pesky lieutenant colonel.

That's after the break.

SEG C

As promised, a few days later, Lieutenant Colonel Wagar sent Dan Edlin a follow-up email. He said he welcomed further discussions and reminded Edlin to send him a copy of the PowerPoint presentation shown at the meeting.

Wagar heard nothing for several weeks. That's because, back at Theranos, Elizabeth was furious. Her brother had briefed her on the meeting and some of the things that were said, which had put her back on the warpath.

Faced with this new obstacle, Elizabeth acted the same way she had before. When she'd run into problems with Lieutenant Colonel Shoemaker, she'd gone over his head to General Mattis. Now, she planned to go over Lieutenant Colonel Wagar's head.

She asked her brother to send her "the most egregious of the comments/behaviors." Christian Holmes replied with a list of all the critical comments he remembered from the meeting, including the one likening the Theranos device to "a box of Palo Alto air."

Armed with that info, Elizabeth emailed Admiral Roughead. Roughead testified about what happened next in one of the lawsuits filed by Theranos investors.

PFM lawyer: There's an email that appears to be from Ms. Holmes to you, correct?

Gary Roughead: Correct.

PFM lawyer: And... and she talks about the people at the meeting being extremely rude and disrespectful.

Gary Roughead: Right.

PFM lawyer: That Rear Admiral Doll did not show. And she says, "It does not make sense to me to engage in any way with any of these people going forward." You say in your response to her email you were disappointed that Doll wasn't there, and you suggest if you agree, you would like to call Matt.

Gary Roughead: Correct.

PFM lawyer: And move it higher in the chain of command.

Gary Roughead: Right.

PFM lawyer: Who's Matt?

Gary Roughead: Matt is... was the surgeon general of the Navy.

PFM lawyer: OK, and did you ever call Matt or move it higher in the chain of command?

Gary Roughead: Um... uh... He and I talked.

PFM lawyer: But it's fair to say that there... An impasse remained at this time, correct?

Gary Roughead: As of the end of this email chain, they... they had not come to agreement on how to go forward.

PFM lawyer: With the military.

Elizabeth's gambit didn't work. Her high-powered military connections could only go so far. Admiral Roughead had reached the limits of his influence.

If she couldn't work with the military on her terms, Elizabeth decided she wouldn't work with it *at all*. Several weeks after he sent his follow-up email to Dan Edlin, Lieutenant Colonel Wagar finally got a response.

Eric Wagar: He replied with basically that... that Theranos no longer wanted to pursue working with the Department of Defense. And that was sort of that.

Elizabeth's dreams of landing big military contracts were dead in the water. But she didn't let on that that was the case. In talks with investors, she and Sunny continued to pretend the military was a big part of Theranos' business.

Steve Burd, the former CEO of Safeway, testified at trial that Elizabeth told him Theranos was involved in a confidential deal with the DOD to deploy its devices in remote areas. Former Walgreens chief financial officer Wade Miquelon testified that Sunny showed him one of the Theranos devices and said the military was using it on "a helevac" in Afghanistan. Lisa Peterson, a representative of the DeVos family, which invested \$100 million in Theranos, testified that Elizabeth told her the military was using Theranos' devices on helicopters and ships.

The presence of Mattis, Roughead, Shultz, Perry and Henry Kissinger on her board of directors helped cement this fiction. Why else would

the Theranos board include so many ex-military men and cabinet members?

That was certainly the impression Elizabeth gave Ken Auletta when he began interviewing her in September of 2014, eight months after her contacts with the DOD had ended.

Ken Auletta: What about Defense?

Elizabeth Holmes: You know, it's a really important area of our business in terms of the potential impact that it has the opportunity to make.

Ken Auletta: But, but... but I'm not wrong to think... to think that you're actually doing some work for Defense Department today, are you? Right?

Elizabeth Holmes: Um... we've not publicly disclosed any work that we're doing for DOD. But... but we have said that it's... it's a really important element of this.

In their last phone interview, Auletta pressed her once more on the subject.

Ken Auletta: Could you say anything about military contracts you have? I mean...

Elizabeth Holmes: No.

Ken Auletta: [laughs] When you had... I'm going to make you feel guilty at some point.

Elizabeth Holmes: [laughs] You already have. You're good at it too.

Ken Auletta: But when you have... If you have... in a medevac unit or a helicopter, Theranos machines. Do you need FDA approval?

Elizabeth Holmes: Well, that's... that's... I mean, so off the record that... that's sort of a whole other element of... of our work. And it's not something that we're doing right now.

Ken Auletta: So, you don't have any machines, off the record, on a medevac or helicopter?

Elizabeth Holmes: Not... Not right now.

Ken Auletta: Have you?

Elizabeth Holmes: Um... We've done some work on that in the past, yeah.

That wasn't true, as Holmes later admitted under questioning from the SEC.

Jessica Chan: Would that have been true any time from 2010 to 2014?

Elizabeth Holmes: We did not deploy on helicopters.

Jessica Chan: You did not deploy on helicopters, ever?

Elizabeth Holmes: Correct.

In retrospect, Lieutenant Colonel Wagar says it was a ridiculous lie to tell. Getting permission to deploy the Theranos devices at the hospital at Bagram Airfield would have been hard enough. Getting approval to put them on military helicopters would have been exponentially more difficult. Any new piece of electronic equipment adds weight to a helicopter and can interfere with navigation and flight controls. The Theranos device would have had to undergo extensive flight testing before it was allowed on any military helicopter. Not to mention the fact that Theranos would have needed to prove that it worked as well in the air as on the ground.

Eric Wagar: Oh jeezy peats man, to get something on a medevac helicopter is an entire another thing, right. You don't just... you don't just throw something like that on a... on an aircraft. No, that... that's not cool. The aviation community would say, yeah, get off. Ha!

That someone like General Jim Mattis, a master of military strategy who outfoxed wily foes in Iraq and Afghanistan and went on to become Secretary of Defense in the Trump administration, fell for

Elizabeth's lies, is a testament to the hold she had on some older, powerful men. You can hear it in the interview Mattis gave to Auletta at the time.

Ken Auletta: When you think of Elizabeth, what are the first words that come to your mind?

Jim Mattis: First is integrity, then competence and competence is both technical, technological, scientific, but also leadership. She is a true leader for all seasons with very strong humanitarian impulses. There's no drama to her, it's just raw leadership and... and basically rock-solid competence. When you look at the old Einstein quote, "If I had 60 minutes to save the world," I think it's, "I'd take 55 minutes to define the problem, then I'd save the world in five minutes." That's what she is capable of actually doing. She doesn't just talk it, she actually can do that.

When he testified at trial, Mattis said his high opinion of Elizabeth eventually eroded after my Wall Street Journal stories came out.

"There came a point where I didn't know what to believe about Theranos anymore," he said.

Thankfully, not everyone was as gullible as he'd initially been. The little people in the DOD Elizabeth had no time for, they're the ones who saw through her. People like Lieutenant Colonel Wagar.

Wagar says the U.S. military's procurement process is the way it is for a reason. There's too much at stake to allow for any bending of the rules.

Eric Wagar: There's no shortcuts. There's no shortcuts. And I.. I just have to say, I think that Theranos' constant search for a... for a shortcut, for a... for an inside edge, it... it really rankles at least DOD acquisition people like me. You know,

like, hey, quit trying to cheat. You know, we want to give you a fair shake, but... but don't be a... don't be a cheater. Cheater, cheater, pumpkin eater.

CREDITS

Bad Blood: The Final Chapter is a Three Uncanny Four production.

The show is hosted by me, John Carreyrou.

Our show is produced by Lena Richards, Rahima Nasa, and Jennifer Sigl. Emily Saul is our reporter. Jenny Kim is our production manager. Rachel B. Doyle edited.

Laura Mayer is our executive producer.

The show was mixed by Kevin Seaman. Casey Holford composed the theme music.

I hope you've been enjoying *Bad Blood: The Final Chapter*. And I'd love to hear your thoughts on the show. Your feedback goes a long way. It helps us make the best show we can make and it only takes a few minutes. Just head to [Bad Blood dot fans](#) on the browser of your

choice to answer a few questions. We're looking forward to hearing from you.

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Thanks for listening. For Three Uncanny Four, I'm John Carreyrou. We'll be back next week.