

This mini spy novel was written to memorialize a trip that Edie and I took through the Swiss Alps and up the Rhine River on a riverboat in 2018. The photos shown were all taken on the trip, and the activities related to the photos all took place. All of the spy activity is pure fiction!

Chapter 1

I hadn't done any work for the CIA for over thirty years, so when they contacted me a month ago, I was more than a little surprised. I had let them know that I was out of that business, and now that I was retired for good after teaching engineering at the university for forty-six years, I didn't expect to ever hear from them again. They told me they knew about my upcoming group tour in Europe, which started in Switzerland—two days in Zermatt followed by two days in Lucerne—followed by a five-day riverboat cruise up the Rhine to Amsterdam. They told me they would pay for the entire trip, including my wife Edie, and would upgrade our air travel to first-class. That sealed the deal for me. My only question left, was what was I supposed to do?

Chapter 2

When I arrived at Langley for my briefing, I was met by a handler that went by Jericho and by Carl, who I hadn't seen since we worked together in the Air Force fifty years ago. We've kept in touch at Christmas, but I had no idea he also was connected to the agency. I got the impression that Carl had suggested my name when the project came up. He was certainly familiar with the book I had written on cybersecurity, and the project was certainly about that. I was told that a major breach of security had taken place, and some of our most sensitive counter-cyber-warfare tactics may have been compromised. And it got worse. Deep intelligence strongly suggested that the unknown spy may very well be on the tour I was about to take up the Rhine that ended in Amsterdam. Further human intelligence also suggested that a Russian spy would be taking an ocean cruise from St. Petersburg, ending in Amsterdam, and there would meet our spy, who would turn the material over to the Russian. My job was to try to identify the American spy from among those on the tour. The tour was made up of university alumni from across the country, including six other fellow alumni from RPI. The agency suggested that one of those could be the spy—we all had technical backgrounds. However, the spy could be hidden among the other several dozen, mostly retired, alumni, representing twenty-two different universities.

Carl had suggested that I wouldn't have much trouble bringing up cybersecurity in conversations—given my background in that area—and noting carefully the various reactions. I thought I knew Carl well. I still wondered how he got mixed up in this project with the agency.

Chapter 3

I was still trying to figure out Carl's involvement in this whole plot while we were sitting in the small Air Canada boarding area at Logan airport. The sign at the gate stated that our flight to Montréal, where we were to pick up an overnight flight to Geneva, Switzerland, had been delayed twenty minutes. Still plenty of time to make our connection in Montréal, I thought. Suddenly, a voice came over the intercom stating that our flight to Montréal had been canceled for mechanical reasons, and we should proceed to the ticket counter to get re-ticketed on another flight. By the time we got to the ticket counter, the line was long and growing fast. I knew there was no way we were going to get to Montréal in time for our flight to Geneva. After about a half-hour, we were at the front of the line and our name was called. We had been rebooked on Swiss Air for a flight from Boston to Zürich and then on to Geneva, but of course, my first-class seats were gone, and we

ended up stuck in the rear of the plane. So much for the first-class enticement. The flight switch caused us to miss the last group bus transfer from Geneva to Zermatt. Instead, we had to take the train from Geneva to Zermatt—a nearly four-hour trip with one train switch in Visp.

I had called our program director from Zürich, and she had told us how to take the train. Once on the train, I texted her our arrival time, and she had a person from the hotel waiting to transfer our luggage in a small electric vehicle the short two blocks to the Hotel Alex, where we were staying. That was a lifesaver, for by that time, I didn't think I could have lugged our luggage up the last flight of steps, leading to the hotel entrance. Our driver just picked up all four pieces at once—must be the thin Zermatt air at 5276 feet. Small electric taxis and an occasional garbage truck are the only vehicles allowed in Zermatt—the tiny village, seemingly dropped into the midst of the surrounding mountain ranges, including the iconic Matterhorn.



Train ride through the Alps going from Geneva to Zermatt



Hotel Alex, our home in Zermatt



The Matterhorn looks down on the car-free village of Zermatt

We arrived just in time to make a quick change of clothes and catch the tail end of a reception that preceded dinner in the downstairs dining area in the hotel. We sat with two other RPI couples, and I doubted that I would stumble on the spy the first night. Francis was from Seattle and had recently retired. They had come early and had spent a few days in Geneva, but due to their daughter's upcoming wedding, they would not be staying for the post-program option in Amsterdam. So, I guess I can scratch Francis from my list as he won't be in Amsterdam to deliver the goods to the Russian spy. Rich lived on Long Island and was a retired power company

executive. Probably not my man, but he would certainly know how vulnerable our electric power grid is to a cyber-attack. Better keep an eye on Rich and learn more about him.

When we returned to our room after dinner, I had a text message from Carl: *The bear went swimming*. I now knew that our Russian spy was on his cruise ship, heading for Amsterdam.

Chapter 4

Day three of the tour began by climbing aboard the Gornergrat Bahn, the highest cog railway in Europe. When we reached the summit of the 10,100-foot-high Gornergrat, there was still snow on the ground in mid-June. The alpine scenery was breathtaking—the Liskamm and Dufourspitze mountains, the vast Gorner Glacier, and the serrated profiles of the Matterhorn, which you could practically reach out and touch.

Sitting on the patio of the old stone 3100 Kulmhotel on the top of Gornergrat, looking across at the Matterhorn, we talked with Dick and his wife Lynn from Vermont. Dick was a skier and had graduated from Georgetown University. This Washington, DC connection kept him on my radar.



The Liskamm Mountains looking from the top of the 10,100-foot-high Gornergrat



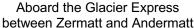
The Materhorn from the patio of the 3100 Kulmhotel on the top of Gornergrat

At dinner that night back at the Hotel Alex, we met Jack and Dede. Jack was another RPI alumni, who graduated a few years after I did. After doing some graduate work at RPI, including being a teaching assistant, he spent a few years in industry working for a company that made electron microscopes. He then founded his own company that made ion-beam microscopes—a leading edge technology. The company had its ups and downs but did survive and was finally sold. During his 30-year career, Jack traveled the world extensively, even living in Japan for a year. He retired about ten years ago. He's technically savvy, has made lots of international contacts, and has been heavily involved in the financial side of business. Could Jack be a spy? He checks many of the boxes—I have to keep him in my active file.

Chapter 5

After checking out of the Alex Hotel in Zermatt, we walked to the train station and boarded the fabled Glacier Express, "the world's slowest express train," for a ride through the heart of the Alps to Andermatt. On the Glacier Express, you sat across the table facing another couple. At our table were Kevin and Peggy, who traveled a lot—four or five trips per year. They told us that their favorite—one we must do—was a Safari to Tanzania. Their excitement was infectious—even showing us pictures. I figured they were too busy traveling to have any time to spy. I think I don't have to worry about Kevin.







View from the Glacier Express

When we arrived in Andermatt, the bus that had brought our big luggage from Zermatt picked us up at the train station and took us into the small village, where we had a short, guided walking tour before arriving at the Hotel Koenigen for lunch. I lucked out by sitting at a table with two other RPI alumni, Steve and Gordy, whom I hadn't met yet. Steve majored in physics at RPI, and although he graduated more than a decade after I did, he also took a course from my favorite physics professor. He is still working at the Sandia Labs in Albuquerque, New Mexico and was working on some type of inertial confinement fusion system—apparently an idea he had for some type of future space propulsion system. A highly technical guy, but not one who I would immediately suspect of being a spy—or particularly interested in cyber-warfare. Although he worked in a government lab involved in nuclear research, it was clear from our discussions that he was not at all interested in the "war" side of that kind of research. I enjoyed talking with him about

technical issues and would continue to press him about his research interests.

Gordie majored in chemical engineering and was from Rochester, New York, where Edie grew up, so we all had a lot in common. He worked for several companies in the plastics business and became involved in a number of patent suits. He was a real nice guy and a solid engineer—someone I couldn't imagine being a cyber-warfare spy.

After lunch, the bus took us through more of the Swiss Alps to Lucerne, when we checked into the Hotel Schweizerhof, right on the water near the center of town.



Hotel Schweizerhof, our home in Lucerne

Dinner was on our own, so Edie and I enjoyed fish caught in Lake Lucerne at the Wilhelm Tell restaurant—a floating ship, directly across the street from our hotel.





View of Lucerne from in front of our hotel

The Wilhelm Tell restaurant across the street from of our hotel

I continued to ponder Steve's work on inertial confinement fusion at Sandia Labs. It somehow rang a bell that I would have to pursue.

Chapter 6

Perhaps day five would be the day the likely spy suspect would appear. After a two-hour walking tour of Lucerne, we took the bus the short distance to Kriens, where we climbed into a four-seat aerial cable car and headed up the side of Mount Pilatus. Our cable car mates were George and Margaret from Georgia. His background was in some type of franchising and he didn't seem to have the skills one would expect of a cyber spy. I mentally scratched him from my potential spy list.



Our walking tour of Lucerne took us across the covered bridge over the Reuss River



Aboard the cable car up the side of Mount Pilatus

As we neared the top of the mountain, we transferred to a gondola for the final ascent to the 7000-foot summit. There we ate lunch at the Kulm Hotel Restaurant, where I was seated with fusion Steve and cable mate George. I was able to engage Steve in some deep technical issues, but his interests seemed focused on his inertial confinement fusion work at Sandia. He seemed less and less likely to be one who had veered off into cyber-war spying.

After lunch, we descended to Lake Lucerne aboard Pilatus Bahn, a cogwheel train, to Alphachstadt, where we got on a boat for an hour and a half Lake Cruise back to Lucerne. We sat at the stern on the second deck with two other RPI couples. Gordie from Rochester, New York I had already met and had pretty much excluded him as a suspect. I hadn't met Mike before, and I almost immediately became suspicious. He was from California and spent a lot of time fumbling with two special cameras he brought with him. When asked about what he did, he was very evasive-worked with all kinds of sensors, but couldn't talk about who he did work for, or any specifics. He said he couldn't even tell his father. Lead you to believe it was all top-secret government work. Sounded to me like he liked the spy business. Mike stayed on my list.



Returning to Lucerne by boat from Alphachstadt on Lake Lucerne

That evening, we sat on the sidewalk outside the Restaurant Fritschi for a fondue dinner with world-traveler Jack and Dede and had long, good conversations about lots of topics. This led me to move Jack way down on the suspect list.



View from the gondola that took us to the summit of Mount Pilatus



Descending Mount Pilatus in a cog railway to Lake Lucerne



The Restaurant Fritschi in Lucerne where we had fondue

Chapter 7

It was Monday, day six of our trip, the day we finally boarded the riverboat in Basel and headed up the Rhine to Amsterdam. Our Russian spy was on his cruise, probably somewhere in Norway, on his way to Amsterdam. Our first stop after leaving Lucerne by bus was in the charming little town of Interlaken, located between Lake Thun and Lake Brienz. The day was clear, and we got a good view of snow-covered Jungfrau—the imposing summit in the Bernese Alps, known as the "Top of Europe." Dozens of paragliders would jump off the 4334-foot Harder Kulm, float down gracefully, and land on a grassy park directly in front of us.





Snow-covered Jungfrau, the "Top of Europe"

Paragliders landing near the center of Interlaken

We proceeded to Bern, the capital of Switzerland, where we had lunch at a traditional Bernese restaurant that was converted from an 18th century High Baroquestyle granary. We sat at a round table with three new couples and three new suspects—Ed and Tom were both from North Carolina and neither seemed to fit my profile. Bill was a physician from Tennessee and a most unlikely spy.

After lunch, we had a guided tour of Bern and walked by the famous clock tower at the end of Kramgasse, the street on which Albert Einstein lived as a young patent clerk, and where he conceived the special theory of relativity.





Clock tower at the end of Kramgasse in Bern, Switzerland, where Albert Einstein lived on the left side of the street, not far from the clock tower, and where as a 26-year-old patent clerk, he conceived his special theory of relativity

The bus then brought us to Basel where we finally boarded the MS Amadeus Silver II—our riverboat home for the next five days. At the Captain's welcome dinner that evening, we sat with George and a new couple, Jim and Eddie. Yes, Eddie is a woman who grew up in Argentina, and Eddie is her real name—pronounced with three syllables in Argentina, one for each of vowel. But when she moved to the U.S. at the age of nineteen, everyone called her Eddie, with two syllables, just like the male name. I quickly eliminated Jim, who was in the high-end specialized furniture business, as a suspect. However, when I learned that Eddie had worked for twenty-two years as a chemical engineer,



The deck of the MS Amadeus Silver II on our cruise up the Rhine

she became the first woman on my active suspect list. Could she really be a cyber spy? My thinking began to change. I needed to start paying attention to the women as well!

Chapter 8

On Tuesday, our first breakfast on the riverboat was with Bill and Bonnie from Sarasota, Florida. Bill graduated from Columbia University with a degree in marketing and had worked for a number of companies including Nabisco. They have been in Florida for over two decades and Bonnie runs a real estate business. Neither one seemed like a cyber spy, and I figured I could safely eliminate them from my list.

Our boat was delayed getting through some locks overnight, so before it got to the port in Strasbourg, France, it pulled along the shore of the canal, lowered the gangplank, and we all went ashore out in the middle of nowhere. Five buses showed up to drive us into Strasburg for a bus tour, followed by a long walking tour that included the historic La Petite France and a visit to the Strasbourg Cathedral. We staved in town after the tour with Jack and Dede, finally returning to the boat around three o'clock.



Going ashore out in the middle of nowhere





Along a canal in La Petite France quarter of Strasbourg

Strasbourg Cathedral

At dinner, we shared a table with Ed and Jo from Colorado. They had both gone to Arizona State University where he studied biology and taught biology to blind students. Jo was a teacher—first in high school and then in Community College administration. She was apparently a gifted yodeler, and someone had made a video of her yodeling at the base of the Matterhorn and posted it on YouTube. They had just celebrated Jo's 80th birthday in Budapest. I scratched both Ed and Jo from my suspect list.

Chapter 9

On Wednesday morning, we arrived in Mannheim, where the Neckar River joins the Rhine. We went by bus to Heidelberg, home of Heidelberg University, Germany's oldest university, founded in 1386. We visited the stately ruins of Heidelberg Castle, dating from the 13th century and overlooking the town on the Neckar River.



Heidelberg Castle ruins



Overlooking Heidelberg from Heidelberg Castle

That evening, Rensselaer Polytechnic Institute hosted a cocktail reception for the seven RPI alumni couples. We had reserved tables at dinner for our group. I sat with Steve and Jack and was able to learn a lot more about both of them. In addition to physics, Steve had a deep interest in art and music, playing the saxophone and flute. Although Steve was plugged into some classified nuclear work at Sandia Labs, he didn't seem to be the type to steal cybersecurity secrets.

Jack, the entrepreneur, seemed even less likely to be involved in any kind of espionage. He was too open in his opinions and thoughts to be a good spy.

Chapter 10

On Thursday morning, we all headed for a morning winetasting in the small town of Rüdesheim on the banks of the Rhine. After sampling five different white wines, I would have thought that the lips of any spy might loosen up a little. But the more I got to know the passengers on the ship, the more I began to think the agency had sent me on a wild goose chase. No one I had met could possibly be their spy. I was beginning to think the agency had somehow lost its way. But we were enjoying the trip anyway—our gain—their loss.

We spent the afternoon cruising the romantic Rhine from Rüdesheim to Koblenz, past the famous Lorelei rock where legend has it that the singing voice of a beautiful maiden would lure sailors, causing them to crash their skiffs into the rocky cliff. We past the picturesque towns of Bacharach and St. Goar, where Edie and I spent a night twenty years ago.



Cruising the Rhine



Winetasting in Rüdesheim



Lorelei Rock





St. Goar

Bacharach

We arrived at Koblenz in time for a two-hour walking tour of the old part of town before dinner. At dinner, we sat with Jack and Dede plus a new couple we hadn't met, Tom and Ming from Pittsburgh. He graduated from the University of Minnesota and had been a CPA all his life—another non-spy type in our group.



Our Amadeus Silver II docked in Koblenz



St. Castor's Basilica in Koblenz

That evening, I got a text message from Carl: *The bear is drinking scotch*. Our Russian spy is in Edinburgh, Scotland, only a day away from Amsterdam—and so are we.

Chapter 11

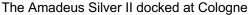
Friday morning found us docked in Cologne, Germany where we had a morning guided tour of the old town, including a visit to the Cologne Cathedral. About 90% of the city was destroyed during World War II, so most of the city construction had occurred since then. Our guide told us that visitors who were American bomber pilots during the war had told her that they were ordered not to bomb the cathedral, because the two large spires were important landmarks for the bombers.

They pulled out all the stops for the farewell Captain's reception and dinner Friday night. In addition to our new friends, Jack and Dede, we were joined at dinner by Joe and Pam, the only Canadians in the group. I thought I could pretty much eliminate Joe as an American spy.



Cologne Cathedral







Chefs bringing out the baked Alaska at the Captain's farewell dinner

We would disembark in the morning for two days in Amsterdam, and I had made no real progress in identifying the American spy. There were over seventy couples on board, so most I hadn't been able to meet. But I'm pretty sure the spy is not one of the other six RPI couples.

I'm beginning to think the agency may have gotten bad intel.

Chapter 12

Early Thursday morning, we docked in Amsterdam, and after breakfast we said goodbye to Jack and Dede, who were off to the airport to fly back to Boston. They weren't staying for the two-day post-cruise program in Amsterdam. Jack had been there dozens of times before on business.

Just before we boarded our bus for guided tours of the quaint port towns of Hoorn and Edam, I received a text message from Carl: *The bear is swimming in canals*. Our Russian spy was now in Amsterdam.



Town of Hoorn, former base of the Dutch East India Company



Town of Edam in Northwest Netherlands

After visiting the town of Hoorn, we drove to Edam where we had lunch at the Restaurant Auberge. On the way to Amsterdam from Edam, we stopped briefly in Katwoude to take a picture of a windmill.

We were scheduled to get to the Renaissance Hotel in downtown Amsterdam by 4:00 p.m., but an accident in one of the tunnels under the harbor closed the highway, and our bus was stuck in standstill traffic for over an hour. When we finally reached our room after six o'clock. I had another text message from Carl: Watch for the bear at night on Sunday. We had a planned visit to the Rijksmuseum Sunday morning, and Carl was telling me that the handoff from the Russian spy may well take place near Rembrandt's masterpiece Night Watch. My mind raced as I came to grips with the fact that the handoff might actually take place, with someone on the ship that I hadn't even suspected. I tossed and turned all night, wondering who he or she could be.



Windmill in Katwoude

Chapter 13

Sunday morning at 8:30, our bus left the hotel and went straight to the Rijksmuseum where our guide showed us the masterpieces of the Dutch Golden Age, paintings by Rembrandt, Franz Hals, Vermeer, Jan Steen and others. At 10:30, we were given forty-five minutes to explore the museum on our own. I headed straight back to Rembrandt's *Night Watch*. In looking around, I saw nothing unusual, but I found it difficult to take my eyes off of that large, incredible painting.



Rijksmuseum in Amsterdam



Night Watch by Rembrandt

Suddenly, there was a tap on my shoulder. I turned around and was shocked. There, looking straight at me, was Carl.

I was incredulous. "What are you doing here?" I mumbled. "I thought there was supposed to be a handoff with the spy on our ship."

"There is going to be a handoff," Carl said, "and there was a spy on the ship."

"Who?" I asked.

"You!"

"What do you mean, me?"

Carl smiled, "You were spying on all the other passengers."

"What the hell is going on?"

Carl grabbed my arm and guided me into the large area containing the works of other Dutch Masters.

"It's a long story," Carl said. "I'll pick you up at your hotel at three o'clock this afternoon, right after your boat cruise on the canals. You'll have important work to do then."

"What do you mean? Didn't a Russian spy come on a cruise ship from St. Petersburg to meet an American spy for a handoff?"

"Yes," Carl said, "the Russian spy is here in Amsterdam and there will be a handoff. I'll pick you up at three o'clock.

Chapter 14

After a quick lunch at the hotel, our group walked down to the nearby canal and boarded a sightseeing boat for a cruise through the many Amsterdam canals. I took a bunch of pictures of some of the many houseboats that make their home along the side of the canals. But my mind kept going back to Carl. Where is he going to take me at three o'clock?





Boarding a sightseeing boat on a crowded canal

Houseboats that people live in along the canal

I was waiting in the lobby of our hotel when, at exactly three o'clock, Carl came through the door. He guided me back to the hotel elevators and pushed the up button. In those elevators, you couldn't press a floor button without first holding your room key card next to a pad on the elevator wall. I was surprised when Carl held his own key card up to the pad and pressed floor six, two floors above our room.

When we entered Carl's room, I noticed two computers on the desk.

"Okay, Carl, where's this Russian and where is the handoff supposed to take place?"

"It took place this morning," Carl said.

"Between the Russian and who?" I asked.

"Between the Russian and me."

I was stunned.

"You gave the Russian our cybersecurity secrets?"

"No, he gave them to me."

Now I was confused. Carl went on to tell me that the Russian's name was Dmitry, and that Carl first met him ten years ago at a conference in Paris. They had similar interests and became good friends. The agency had told Carl that they suspected Dmitry was a Russian spy interested in obtaining cybersecurity secrets.

Dmitry was, in fact, a cybersecurity expert, and had invented a new hardware-implemented algorithm for countering cyber-attacks. He had not told anyone about his new algorithm. Dmitry had contacted Carl and told him he wanted to defect to the United States, bringing his algorithm with him.

"I knew the agency thought Dmitry was a spy," Carl said, "and they wouldn't believe that he had a useful algorithm to trade for asylum."

"So, what did you do?" I asked.

"Dmitry and I were able to plant the idea that our security system had been compromised and that someone on your cruise was going to pass the information to Dmitry in Amsterdam."

"You mean this whole ruse was your idea?"

"Don't get excited."

"But how did you know I was going to be on the cruise?"

"You told us in your last Christmas card."

"But, why me?"

"Because I have Dmitry's algorithm encrypted on this thumb drive. He gave it to me this morning. It's written in a hardware description language that I know you know, because you've written a book about it, and you're the only one I know who can verify that this algorithm is for real, actually works, and will be useful. If you can verify this, then I can persuade the agency to give Dmitry asylum."

"You mean you want me to test this algorithm right now?"

"I know you'll be able to write a test bench for it and see if it does what Dmitry says it does. You have until six o'clock to test it out. If it works, we'll all go out to dinner with Dmitry. If it is a hoax, I'll text Dmitry a coded message, and we will never hear from him again."

Not too much pressure, I thought, as I started writing the test bench.

That evening, Edie and I joined Carl and Dmitry at a nice Italian restaurant not far from our hotel. I could see why Carl and Dmitry had become friends.

Epilogue

Dmitry gained asylum in the United States, was given a new identity by the FBI, and is rumored to be living in Stratham, New Hampshire, where he has joined a weekly writing group.