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His work helped save the world

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It isn't often when one comes face to face with a true hero but when it does happen, there is a sense of wonder that fills the air. When we think of heroes, we often think about those that have either risked or laid down their lives for others. There is no doubt, they are heroes but there are numerous other heroes who often go unnoticed, who are responsible for saving millions of lives with their efforts. Without them, we would not be living in the world as we know it today. They are the unsung heroes who persevered through numerous failures, criticisms and threats of Congressional investigations to bring about an end to the Cold War. They were the men who, according to history, worked on the Corona program, "a series of strategic reconnaissance satellites produced and operated by the Central Intelligence Agency Director of Science and [Technology](#) with substantial assistance from the United States Air Force." Without them, the world could have easily experienced an apocalyptic ending.

To understand the importance of the program, look back at history. World War II had ended, the Iron Curtain divided Europe as the Soviet Union's influence of Communism spread. Both the Soviet Union and the United States were testing highly destructive bombs. The first intercontinental ballistic missile was tested by the Soviets and concern was growing over the Soviet's intercontinental ballistic missile arsenal. The 1950's became a showdown between the [United States](#) and the Soviet Union. It was the age of the Red Scare and Cold War. Tensions in the US and throughout the world were on high alert. The US desperately needed to confirm the Soviet's military strength and gather as much intelligence on their adversary as possible while also dealing with the rise of Communism throughout the world in China, North Korea and Cuba. Left without a means for obtaining aerial reconnaissance of the Soviet Union after a U-2 spy plane was shot down, President Dwight D. Eisenhower threw full support to the Corona program despite Congress' threat of investigation for the Discoverer program portion's failures.

Army veteran and North Coventry Township resident, John Segletes, had no idea what life had in store for him when he graduated in 1957 with a BS degree in Mechanical Engineering from Drexel Institute of Technology (now Drexel University). Though he worked for GE as a co-op student in 1957 he was not hired permanently until early in 1958.

By this time, the space race had begun. GE and its prime contractor, Lockheed, were working on a Top Secret program for obtaining aerial reconnaissance called Corona. A cover program, called Discoverer, was used to hide the classified name and clandestine mission of Corona from public view. "According to the Discoverer story, we were sending two monkeys into an earth orbit." John was assigned to a team of several hundred engineers and technical managers to focus on return of an object into the earth's atmosphere from an earth orbit without burning up. His team needed to know "how hot the reentry vehicle (RV) would get and how its protective heat shield would respond to intense temperatures. For the longest time, John and many others were unaware of the program's real name (Corona) and its clandestine mission (spy satellite).

"Working along with an aerodynamics engineer who predicted the angle and speeds the RV would reenter the atmosphere; I would take his information and use it to predict what the heat shield temperature would be during reentry and how much would burn away. We found we were putting too much faith in our analysis and not enough in actual telemetry instrumentation that could provide hard data on each flight and give clues to the reasons for failure. The problems started in space and continued through reentry."

Discoverer 13 was the first recovered flight test vehicle for Corona and the first time an object was recovered from an earth orbit. The internal "bucket" returned exposed film but this time, it and the heat shield did not separate. John was able to see the returned shields when they were transported back to Philadelphia but only from a distance for a short time. He described it as an amazing feeling to see that what he had worked on returned from space.

Corona set the stage for military intelligence and helped end the Cold War. Though John said "the program was not necessarily as interesting for engineers as the engineering problems they faced", his team knew it was urgent for national security. When John was asked if he felt that he "saved the world" his eyes welled and his voice cracked.

"Yes," he said. "I suppose I had a part in it."

John could never tell anyone about his work until recently, including his wife. She could only tell people he was an engineer and "he worked on stuff." Without a doubt, John Segletes is an unsung hero.

Author's Note:

I truly feel that behind every person is a story begging to be shared. Unfortunately, too many of us fail to interact with others on a personal level that we miss out not only the emotional side of the story, but also on what makes the story so remarkable. I have had the pleasure of conversing with several women these past few years in a local grocery store that are at least thirty years my senior. Though they are old enough to be my parents, it was refreshing to see people getting together for coffee and conversations in person rather than just "texting" each other.

We started to say hello to each other and soon we were sharing stories, wishing each other the best on the holidays and I found myself a loyal readership for my writing. I learned that Polly knew my parents and we would talk about my hometown. Irene had shared with me that her husband was very ill. Though I was running a little late that day, I took a few minutes to listen compassionately and let

her know I understood how she must be feeling. Though I have never lost a spouse, I had lost my father two years earlier and my mother-in-law in 2006. I understood the hurt she was experiencing. It was a little compassion even for someone I barely knew but it is something few of us truly do anymore.

This past week, Irene approached me and said that she always reads my stories and now she has one for me. She reached into a plastic grocery bag and pulled out a book entitled, Intelligence Revolution 1960: Retrieving the Corona Imagery that Helped Win the Cold War. She turned to page 115, which she had marked, and pointed to a picture of John Segletes, Aerothermodynamics Lead Engineer, SRV Reentry System.

"That is my husband" she told me. I could see the pride come across her face. He and other members of the Corona team were honored at a dinner in King of Prussia recently for his work on the Corona Spy Satellite Program during the early 1960's.

She went on to tell me that his work had been classified; John was unable to say anything about it. Finally, his contributions to the Corona Program were revealed in the book. Copies of the book were presented to each contributor at the dinner; some posthumously. Her husband was too ill to attend. Inside the cover was a handwritten note from Ingard Clausen, Project Manager for the Corona Satellite Reentry Vehicle at General Electric: "To John Segletes: Thank you for saving the world."

These words gave me goose bumps! What did this man from North Coventry Township have to do with saving the world? I needed to know John's story. I asked Irene if I could write a story about her husband and his work. Though she agreed, she wanted to check with John. When he also agreed, I was elated. John's work was classified Top Secret by the US Government until it was declassified under an Executive Order signed by President Bill Clinton on February 22, 1995. It wasn't until this past month that Intelligence Revolution 1960: Retrieving the Corona Imagery That Helped Win the Cold War was officially released and the key player's stories were revealed. I want to thank John Segletes for allowing me to share his story.

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