

## Geointeresting Podcast Transcript

### Episode 8: Jack O'Connor, author of "NPIC: Seeing the Secrets and Growing the Leaders" Jan 15, 2016

Welcome to Geointeresting, presented by the National Geospatial-Intelligence Agency. On October 16, 1962, President Kennedy was shown photos that were taken from the high-altitude photographic aircraft, the U-2. After being briefed by analysts who had identified the objects in the photos as medium-range ballistic missiles, President Kennedy convened members of his National Security Council, and the Cuban Missile Crisis was triggered. What most people probably don't know is that those analysts were from NPIC, the National Photographic Interpretation Center, a legacy organization to the National Geospatial-Intelligence Agency. Today, we're speaking with Jack O'Connor, author of "NPIC: Seeing the Secrets and Growing the Leaders." In his book, Mr. O'Connor uncovers the history of NPIC, its employees, and its leaders and its impact on today's geospatial community and practices. Stay tuned for Geointeresting.

**NGA:** Jack, thanks for being with us here today.

**JO:** You're welcome.

**NGA:** I guess I'd like to start with what prompted you to write this book.

**JO:** It was something that didn't happen to me very often in my academic career, but I kept thinking I know more of the answers than I should. I would see promotion lists in CIA and other parts of the community, and I thought I knew more names than I should have, and I recognized them from the organization I'd started in, which was NPIC, and so I thought I would write what was it about; that culture of NPIC back in the '80s and earlier that led to so many folks doing so well. And I thought it would take me six months and be an article, and it took me five years and turned into a book. So the culture of the place was a little harder to pin down and took a little more work, but I was never alone in it because once I started asking folks for contributions, I got hundreds of emails and people who would ask if I knew someone or some activity, and if I didn't, they'd introduce me. So I got a huge amount of material and a huge amount of help, which was very gratifying because it turned out that organization was never more than 1,300 people at its largest, but it's produced more than 150 senior executives out of a population that was there on a 14-year period and that people succeeded in NGA and its predecessor organization. They went off and succeeded in CIA and in DIA and outside as well. A number of them went off to form the U.S. commercial-satellite business and were instrumental in that, so my little challenge of what was it about the place turned into a book.

**NGA:** Okay, great. So you just spoke a lot about the culture. What made the National Photographic Interpretation Center and being at Building 213 at the Navy Yard a special place to work?



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**JO:** Two things — the founder started a culture that really was pretty transparent and built a very positive peer pressure, because it was a joint organization and had CIA officers and officers from all the military services and then DIA, and they all work cooperatively in that there wasn't any rank given to any one person, and in the initial planning, this was the organization set up for the U-2. If you've seen the current movie "Bridge of Spies," this was the organization that received the product from those missions. And leadership rotated, meaning if the Army guy ran one mission, the Navy guy would go next, Air Force next, CIA next, and it started that in the training, even before they overflew the Soviet Union, so he 'wired' sharing and cooperation and from the earliest part, and that culture lasted. The second was the challenge of how do we keep preserved knowledge because there was too much to write down on the imagery. So the way they preserved it was by telling stories and sharing the consensus story and listening to the other analysts, so that when they would have a discovery, they might say, "That looks like something that someone else found. Go talk to him." So there was a lot of knowledge sharing, and in a formal way, that was wired in the culture, and because it was in a horrible neighborhood and there wasn't any parking, air conditioning or cafeteria, they all kind of worked very closely together, and that built a bond of we have to solve our own problems because it was so tightly compartment. And so they learned how to build their own tools, and that continued throughout the place.

**NGA:** I did like that about your book. I found it very interesting — both the very closeness of the analysts and also the kind of competition that was always around.

**JO:** Yes, there was always too much work to do, and then other parts of the community would have theories, and lots of times NPIC would bring facts to the table that would blow a hole in the theory, so it wasn't always a benign kind of meeting of the minds, but it always, as an organization, felt it had to earn its place at the table, so the pressure was on. But [for] very junior analysts, if you could make or find a call, you could be out leading the community on an issue, and that happened very, very often.

**NGA:** On page 118 you talk about analytical breadth and depth. Do you see that as a perennial challenge facing the intelligence business, and have you seen it elsewhere?

**JO:** Yes, I have, and it is an enduring challenge because right now it takes time to develop, as it always did — analytic depth — but now there's so much more information at such a greater rate. And the challenge at NPIC was the folks who predominantly worked at the ground station and did the digital imagery valued breadth, and their old saying was, 'you had to be an inch deep and a mile wide,' but the folks who were still doing the traditional film return on information at Building 213 valued expertise and deep knowledge on a subject. Both are critical; you can't help the people who are doing current warning without the depth necessary to build indications or to give them, 'here's what it looked like the last three or four times we saw it, so this will help you look at the next time those relations are both still critical, but the challenge now is greater than then, which is attention with so much information; where do I put my attention?' So that's what they're developing now, but paradoxically, that was the earliest challenge. We're looking at

a country we haven't seen in 15 years. We know nothing about it; what do we put our attention [on]? That was the earliest challenge that Lundahl and his people faced flying over the Soviet Union. The last people who looked at parts of it were in World War II.

**NGA:** Yes, I often think about that with our younger generation of analysts coming in because part of the title of your book is growing the leaders. How do you think NGA can entice young GEOINT [geospatial intelligence] pioneers to join the agency?

**JO:** Well, it's one of the things that came up, and I was surprised at how early it came up, and I'd noticed the criticality of youth and energy. Lundahl's organization, when it was made into the National Photographic Interpretation Center, had an average age of 29. Then they hired a lot of new young people for the Cage Nine programs, and that's the group that really blossomed into the current senior leadership in the intelligence community, but one thing that worked was the challenge. Good leaders lead and can influence individuals, but great leaders challenge and focus individuals, and they get extraordinary results, and I think our Lundahl did that, and I think Ray Hostetler did that again. So part of it is hooking the young analyst into the challenge and creating an environment where they can see the difference that they make, and that was there at NPIC, and the message for the young, though, is 'don't wait to be told.' Take the initiative, figure out where you can make a difference, and keep learning and build on your credibility and your analytic reputation. It's one of the things that senior analysts are made one day at a time, but there [has to be] the analyst to have the initiative to chase questions, and someone won't ask you the question that really matters, but you may see it in the information yourself; discern it for yourself.

**NGA:** So you spoke about Directors Lundahl and Hostetler's leadership and influence. What did the directors of NPIC bring to the job that was so impactful?

**JO:** I think each director made a significant contribution. The one that John Hicks made was recognizing that prior to the development of the new digital system, all the measures of how good an image were subjective and related to the chemistry of photography. And he recognized that there needed to be an objective correlative which was the development of the National Imagery Interpretation Rating Scale and having had the foresight to see and objectify that allowed people to stop being photo interpreters and start being imagery analysts because they could explain their tradecraft in terms that weren't so related to their tradecraft but were related to intelligence issues. And so that was, I think, an important contribution, and he also recognized that he needed to diversify his workforce, and I think that was critical. The following director 'Hap' Hazard, former general Rutledge Hazard — he recognized that NPIC at the time radically needed to develop a digital infrastructure because they got the digits down from space, and they could get them to a very few soft-copy workstations because they were half a million dollars each at the time. But he needed to develop an infrastructure for all the analysts, not just a few, and he was astute enough politically to realize that he personally would have to go and make a case to Congress and get the money, and he made a very successful case. It was the largest line item in the CIA budget for nearly a decade where it was, [where] it happened to be

placed, and it didn't achieve all its needs, but he had the vision to understand he had to change how the business was done, and I think that was a huge contribution that he had made.

**NGA:** Tell me what a typical day in NPIC was like.

**JO:** Well, a couple of things struck me and many others when I first joined there is how early it started. The parking lots were pretty full by 6:30 or 7 [a.m.] and part of that was because the imagery came in during the night, and the other was the inconvenience of driving all the way down to Southeast Washington — so get in early and then not spend as much time stuck in traffic. That was the one part. The other was kind of how when something was going on, things would mesh, and there was always something going on for the entire duration of its existence; there was some construction projects somewhere else in the building, so they had to keep modifying it to get mission done, and there was almost always someone in the building 24 hours a day, seven days a week, because of the volume of imagery or because a crisis would necessitate people working extended or long hours. And it used to fascinate me on the one day a year when you could bring your family, and for the open house they'd always have to segregate a piece of a vault off because there was a crisis there, so they moved the displays to the other end of the hall or steer the families away from an area where there was an active intelligence issue going on. And I think for every year that they had the open house, there was always a crisis. I mean there was always something going on in the world. I don't know anybody who was there who didn't spend at least one all-nighter here wasn't or doesn't have some crazy story in the middle of the night.

**NGA:** I'm sure you've heard talks a lot about being transparent and using commercial imagery — just explaining that right there. Did you ever think we'd be at a point to where we're trying to be more transparent as the IC?

**JO:** Initially, no, and I remember kind of one common feature of folks who worked at NPIC was their shock at seeing what they thought was their information appearing in a newspaper, being broadcast on the news. And I remember the phrase we'd use is 'we'd go to jail for that' because we took a secrecy oath to not share information, and someone would leak it, and now the value to explaining a story of imagery as ubiquitous. Grade-school kids are proficient in Google Earth, and so what was once scarce is now publicly known, but the tradecraft is not so ubiquitous and the ability to use different sensors and to know how to focus the attention in a way that other folks haven't figured out yet — those are the values that I think NGA has to sustain. It can be very transparent, and it can use commercial sources, and the panoply of new commercial sources means that hiding things will become harder, but there will still be people who hide things, and there will still be issues where certain countries around China or Russia will not want the same degree of transparency as the United States or the West would like in some issues and will work very hard to deny us information. And that was going on then, and we learned how to defeat it and do the same.

**NGA:** Are there any personal stories?

**JO:** I tried to keep the personal stories out of my book, but one interesting fact about that was part of the NPIC culture. Many of the stories that I learned were not told to me by the people who actually did the work. The man who got the Chernobyl collection I shared an office with a year. I never heard that story; I only heard it secondhand and checked it with him 20 years later, and you just didn't tell stories about yourself. Other folks would tell the stories about what you could or couldn't do, and that was wired in, but it wasn't a culture where self-aggrandizement was valued. And in the discovery of lots of these things, the multiple number of times when I would ask someone a story about himself and I would be told a story about someone else who did something they thought was more important — that happened more times than I can remember, so it really was an interesting and very effective place at its time, and it turned out to be a great crucible and a great start for folks in the community.

**NGA:** Actually, you've mentioned Chernobyl. Would you like to tell that story for those who may not know?

**JO:** Sure. Initially, they got news that there was radiation. That's all the news there was and was picked up in Sweden, and in the open-source material, you can read it was picked up because someone walked into a nuclear power station and set off the sensors, and they were deathly afraid that someone had walked out with that they were leaking material, and they thought, where did the radiation come from? They discovered it was outside in the atmosphere. They had no idea where it was, so the question of that news got back to the U.S., and then it happened at 1:00 in the morning, and by the next day, the Swedes had learned something, and there was something going on that was 600 miles away. And then we were in a very tight environment for collection, so they had to do lots of planning, but initially, the intelligence community didn't want to take a picture of the power plants. They said, "OK, if we think it's this power plant, let's take a picture of the town because for 50 years we've been trying to discover the secret Soviet civil defense plan." And earlier in the book, I wrote of Art Lundahl and his very first foreign visit. Konrad Adenauer the Chancellor of West Germany at the time didn't get to talk about the secrets that we were getting over the Soviet Union because Adenauer had been talking Khrushcheb, and they thought he might know something about their secret civil defense plant. So it had been an issue for a long time, and the other reason was they thought the U.S. had just had a nuclear accident at Three Mile Island, and they said if we'd have taken a picture of it, we would not have seen anything. So a branch chief at NPIC made the case persuasively along with an image scientist, Tom Wall, that we really do need to take a picture of the power plant and then persuaded the community to overturn the old source analysts and to take the picture. And because the Soviet Union was not so transparent, we knew about Chernobyl nearly at the rate of Gorbachev because the news they initially told him is that we had a fire, but it's under control, and we were able to see exactly what the damage was. And we did see civil defense actually show up as opposed to when they said it showed up, so we were able to present information to our government nearly as fast or faster than the Soviet Union. And it was an initiative on a Sunday afternoon by a GS-14 branch. No one told them what to do; we need to get this information. And they started doing research and then calling the experts or [Building]

213 to find out what they knew and to prepare for what they didn't know — what they were going to see — because nobody knew what a nuclear reaction a nuclear explosion would look like. We hadn't seen pictures of it, thankfully, and within a couple of days, we were able to tell the community.

**NGA:** Well thank you so much for joining us. You're a wealth of knowledge of our tradecraft and our culture, and we really appreciate you stopping by and talking with us.

**JO:** Thanks for having me.

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