

Please stand by for realtime captions. [Captioner is on hold, waiting for event for event to begin.] Doing another sound check, we are getting started in five minutes. Can someone chat in the chat box that they keep me -- That you hear me okay? Joe here again doing one last sound check we will get started and thank you for chatting in the chat box that you can hear me I appreciate it thank you. Good afternoon everyone and welcome to the FDLP Academy. We have another great webinar for you today. My name is Joe from GPO, I am with my colleagues, today's title is Enhancing Your Intelligence Agency Information Resource IQ , PT. 4 National Geospatial Intelligence Agency National Intelligence University, and National Reconnaissance Office, and also joining us, from Purdue University. Before we get started I will walk us through a few housekeeping reminders. If you have any questions or comments on the presentation please feel free to chat them in the chat box at the bottom right corner of your screen. I will keep track of the questions as they come in, at the end of the presentation I will read them back to Bert and he will respond to them. We are recording today's session, and we will email a link of the recording of slides to everyone who registered for the webinar, and send you a certificate of participation using the email you used today using the email you registered with. Please email FDLP, including the title and the email addresses of those needing certificates. If you need to zoom in on the slide being shown by the presenter click on the full screen button on the bottom left side of the screen, to exit the full screen mode mouse over the blue bar at the top of the screen so that it expands, then click on the blue return button. Hit that after, to get back to the default view. We will be sharing a certified webinar satisfaction, the URL will appear on the chat box. We also will appreciate your feedback after the session today, please keep in mind to reserve your comments about the presentation style and value of the webinar for the satisfaction survey, and use the webinar Chat Box for questions that you questions that you would like to ask Bert and any technical issues you may encounter. I will hand the microphone over to Bert and take it from here.

>> Good afternoon everybody thank you so much Joe, I would like to continue our deep dive with resources from the national intelligence agency, by discussing agencies the national geospatial in GIA, the national University at NIU, and the recognizance office. This is a logo for the spatial intelligence University. To give you a brief detailed background on some of the historical emergence of this agency and its predecessors in US history. Understanding the training, has been a very important component going all the way back to the colonial era, in August 1918, the graphic Bureau was established within the Army engineer department playing an important role in many US government sponsored exploration expeditions. 20 years later, Congress established engineers with responsibility engineer works, and military engineer was canceled by the Army Corps of Engineers. Nine years later 1847 the published current chart of the North Atlantic, enhanced scientific knowledge of the charting in the North Atlantic, just after the Civil War the Navy took to printing Nava books for safe navigation. 4 1/2 decades later the Army engineers skills operated in Washington DC, aviators made the map from aircraft to fly across Texas. World War I was ending, and the surveying map production, was now Virginia, in 1941 the Army Air Force and Navy collaborating, used aerial photography and strategic flying for strategic analysis. In 1942 the Army math service created 5 million topographic world war maps World War II, they begin offering in St. Louis, and in 1952 the five-year-old CIA, established a photo interpretation unit. Then in January 1972 the defense map and he -- The defense mapping agency for products and services to combat merchant Marine mariners, and 1975, 300 and million charts had been produced during the Vietnam War, Prior Year the defense dissemination program office was established electronic imagery, this was for overhead imagery for rapid parting in strategic threats. In 1983 following the Soviet shootdown of a Korean flight, the GPS a valuable for civilian use, and also other resources can be found on this website. There is a history book that they have. Then in 1996 the national imagery and mapping agency was established for Nemo. It integrated mapping charting imagery and facial information to government, seven years later. They became the intelligence agency reflecting the technology and its

uses. A longtime publication of these organizations notice the mariners, published since 1969 -- 1869 -- Fully digital.

>> -- For earthquake disaster relief, six years later, corporate intelligence and military agency [Indiscernible]. The agency provide products and services for makers, and responders for the war fighters carrying out objectives, and geospatial information to describe and assess, to take physical features and activities on earth, they want to keep up-to-date with technology and enhance the skills and perspectives of personnel. Statutory authority for in GIA comes from a following the section of title X of the US code. Headquarters in Springfield Virginia and also Missouri. Currently I have 14,500 training contract [Indiscernible] the budget is classified. They also collect intelligence consistent with executive 243 and provide support for domestic support and security events. That means their responsibilities include domestic and international activities. They seek to ensure navigation and safety by maintaining those current information's for the global transforming networks, and also actively involved in supporting intelligent agencies in analyzing cyber networks and dealing with cyber threats. So here is the current leadership. Robert P DeLo is the deputy director. These are subject and nominated for company confirmation. On the website you can find links to historical maps, that they have done. Here are a couple historic maps done from World War II from the University of Iowa library. I just included part of them on the slide. Here is some recent mapping they have done at least the eastern part of the United States. This is a world map they have done it's broken down into the different regions. You can gain more information from these maps. On all kinds of different topics. Here's an example of imagery done a before and after photography of the damage done in the Philippines. Received from a typhoon in 2013. You will notice on the right-hand side. MH -- The damage was pretty consistent and significant. They do a lot with the industry. They are talking about a two meter resolution map of the party, there is information on how you can download it. Here is an example of a map they have done of the Antarctica. They give you the information about the resolution and the scale of the map. This is a newsletter they put out. A commercial geospatial intelligence strategy. They also put out a news bullet. A magazine called Pathfinder, to find information on some of their supercomputing initiatives. The community data and how they use that to provide for humanitarian aid.

>> This notice the mariners. This is a flagship of location, that they have put out well over a century. To prepare collaboratively with the national Ocean service in the Coast Guard. Here's some information about characteristics of the water it shows where you can find submarine power cables. They give you very specific latitudinal and longitudinal ordinance for those cables and where they can be found. This is a map of the city of low wobble, -- Done in collaboration with the British government. Here is a map of North Korea. You will see a breakdown in different areas. This is a promotional history and how it's done. It came out about four years ago, it describes some of the other activities and how they handle the Cuban missile crisis. The operation enduring freedom and various other events. Here is information about the support they provided to negotiate a border support between Peru and Ecuador in late 1980s, as well as other initiatives they have been involved with. If you are familiar with the joint Chief of Staff joint electronic library. You will know it has a lot of publications dealing with US military doctrine in various types of operations. Here is the publication dealing with intelligence in joint operations, joint operations involve two or more branches of the US armed services. This particular publication came out in July of last year. Here is the table of contents. This is difference in the breakdowns and where you can find doctrinal statements in various series of activities. Here is an overview. They reference title X section 4 of the US code, and different very to hear, a visual and different variables. Some of the differences of types of elements involved in geospatial operations. It covers all kinds of different subject areas representing multiple disciplinary perspective lives. And interactions with other countries and international government organization. Next I want to turn to the national intelligence University. It's actually a part of the defense intelligence, the agency I did a webinar on, I wanted to cover this as a separate entity. Somewhat similar to an earlier webinar, of earlier educational institutions. National

intelligence University is located in Bethesda Maryland. Also having additional campuses in other US and international locations. It was founded in 1962 by the director of NSA, and various name changes over the 5 1/2 decades, known as the University since 2011. It is accredited by the higher education. Examples of degrees you can receive include bachelor of science in intelligence, strategic intelligence, and a master of science in technology of science. Information on every class side how many faculties and a current resident picture. You can attend, by being a US citizen, meet university security requirements. There are a variety of different eligibility requirements. The GPA is the coursework you will have and attend, and program requirements for the program such as Master of science in technology and science. The faculty comes across the intelligence military government and academic community. They have expertise in all relevancy for all topics including weapons of mass destruction -- Destruction -- Holding terminal degrees for strategic languages such as Russian and Chinese, representing expertise military service and intelligent experience. This is one of the buildings at the main campus. This is their current year academic catalog. These are very good source of finding information on institutions and their curriculum. Here they give you a table contents. They mention the college of strategic intelligence, and various areas of concentration within this college, collection analysis, issues for intelligence and leadership department. Here are some of the warning outcomes. For the master of science in strategic science and these are just the things we find in the traditional university. Having knowledge of scientific literature being able to evaluate security, and applying what you learn to the interactions with national security and intelligent communities. Academic freedom is important part of the NIU operational activities as stressed in the slide.

>> They have a library. Another at the health and safety headquarters. There are a lot of different resources they have available. They list staff operating hours. Some of the classes available, they have strategic price exercise. If you are in this class. You get the chance to enhance the intelligence value of role-playing in the different functions. Dealing with constant changing situations. In various price regions. I think this would be quite exciting if you are participating in this class and also get a chance to revise for rapidly written evolving price situation, and tax law, ensuring US intelligence operations are consistent with the Constitution, federal law is important students will also study how national security and national security law and intelligence may interact with each other. Also there is class called geospatial intelligence strategic introduction. They will provide an in-depth summary of geospatial intelligence and coverage of the multitasks involved in these areas. Also a prerequisite is given for enrolling in this class. Also an introduction to the intelligence studies, a lot of different topics that are within this class. Now a couple of years ago. And I you did put out a journal of strategic intelligence, it was the only issue published. Here are some of the topics they covered. In this issue as well, there were some book reviews, here is an article on the Pakistani read which has been a source of problems in Pakistan, this is in the region, you will notice not too far from [Indiscernible], where there is some activity and a wider geographic context of the Maybury heard -- Neighborhood and the relevant proximity to Afghanistan, [Indiscernible] and India. From this article there is also more information. For the national intelligence many publications are in the publications to see here, you would be in the 200 range. This is a compilation of essays, the titles you could see to some of them. Here is an article called intelligence law historical legal evolution institution, and also Peruvian background, intelligent laws, and policies from Peruvian national intelligence service, Anna Talbot -- And a table from Chile, Canada and another study they did. These studies are available in the press website. Using industry analysis for strategic analysis, the strategic intent. Here's some information about this. The role of the intelligence community, from 1950s and 1980s, methodologies that can be used in this analysis, and here they provide a flow chart to examine national act to the for a firm with particular analysis of survivability and how they can affect possibilities, and the appendix of conducting the Semite tutorial -- Conducting the [Indiscernible] tutorial.

>> -- Here is a logo that was established in 1951 and formally classified in September 1992. Near Washington DC it may seem ground stations of other international locales, in the upper right-hand corner, you have the facility of [Indiscernible], -- And also the Air Force Base that is involved in launching satellites and surveillance. Of various roles and have ordered 3000 employees and civilian employees. Funding is through the national intelligence program and the national intelligence program. Policies and processes established by the secretary defense of intelligence. The responsibility in providing policymakers with global situational awareness real-time imagery or weapons of mass destruction, terrorist drug dealers, other bad actors and developing charting data and bomb data assessment supporting international peacekeeping in national disasters and predicting climate change and habits during environmental things including climate disaster impact, and innovation from our oh, and medical imaging high definition intelligence, GPS and other areas. Governing statutes are in title 10, in 50 of the US code and from the DL D 51 directive point 203. -- DoD.

>> This is other information about the our oh, and the deputy director. And then there are a lot of different press releases on NRO website, here is one from a couple weeks back on enhancing their commercial imagery acquisition and the private sector company they are working with. These press releases go back from 1995 to the present. This is a statement director made before the house of the service committee, the subcommittee on April 3, 2014. She provides information about other act over these and mentions launches of 12 in the University, and NASA, and stresses the importance of the University of science technology programs. This is about the huge fact sheet. This is been a lot of evolution and satellite technology. This tells about the satellite, the cube satellite. Here is the information on what this can do. Mentioned it can be launched in a variety of different platforms. Intended to have cost savings, and delivery capabilities. Also that it doesn't have a very long lifecycle development. One of the great resources on the NRO website produced for the national Center of reconnaissance, a terrific resource the history of surveillance in the world of NRO and how it has been playing in it for national security reasons I can present an up-to-date satellite imagery of North Korean nuclear facilities but you can find a lot of historic stuff available some of these publications are available through the [Indiscernible] and the website. An important example of NRO work, this is a satellite surveillance program, to 1972 and inspired and instigated by the Sputnik launch, consisting of 800,000 images from space as the program developed it improved from eight meters to two meters, or six feet. Individual images would cover 10 by 120 miles. The collection includes 2.1 million feet of cams, these cans here, and the cams tossed from the satellite picked up by the flame, and in return to the headquarters, this question of the first recovery vehicles returning from space, and here's the first mapping of space, the first data from space. Also the first recognizance program this occurred as a result of executive order 912 on 1995 executive order, held in the CIA space Museum to commemorate this occasion, the next pictures are examples of the imagery gathered by project Corona. The former Soviet Union was a high priority target for US intelligence, and this is an image taken on August 18, 19 60, they are showing as time goes on the technology, taken just a couple years later a volcano on the peninsula. A significant improvement in quality here. Here is a detailed photo of a long-range deviation airfield, you can make out specific runways and buildings. I would imagine if you were trained interpreter you can make out specific kinds of aircraft. This is sort of an artist rendering of what the exterior of NRO plane and this is what it would look like. You notice the earth is in the background. This is an example of the launch path and trajectory of NRO satellites from the rocket. Going to various cutoff stages until it hits orbit.

>> This is a photo in Jordan of September 1971 pointing out specific markers remains of four walls, and biographical sketches of key individuals in the program, the roles that they played in it. There are a lot of organizational program histories available on the NRO website. Here are a few titles you can have access to the text on the reports. Here is a recognizance processing program, giving you an idea of the private sector and how the company works with NRO to improve the quality of the intelligence gathering and

satellite surveillance, this is a table of contents of what is involved in this work. How they handle the difference in the categories of the project Corona. Here is information on how the US intelligence is gathering. It evolved from the spy planes to the satellite imagery. So here is information on the black and white film, the detailed information that you can find here. You can click stuff here on the technical steps of these cameras. Here is a history of Congress and the reconnaissance office, we now have intelligence committees, and the commercial arm services and special issues. When NRO was first established only five members of the house of appropriations new about it and had knowledge of the extent of the program in the future. One of these. Michigan Congressman who became president. They mentioned a Congress with must less actively involved in monitoring the and intelligence agency that would start in the 1970s. As technology advanced the need of gathering higher-quality intelligence and other capabilities, that reflect did in the page particularly the need for a real-time intelligence report since the 1980s went on, they had increasing emphasis on political intelligence, and values on battle readiness, and organizational readiness areas. There is a time I think you can see from this information resource, one of the most important historic emerging intelligence analysis, learning about these roles played in the policymaking. Increasing awareness of the technology in the private sector businesses. And intelligence analysis gathering and policymaking. Wondering about the emerging policymakers and how they have the research in gaining US intelligence with adversaries. Gaining enhanced study on analysis and learning topography and data scientific Haitian, and topography of other -- And other data scientific [Indiscernible] -- And topography of other information. Geographic factors and how they affect the response and other developments. Understanding of the agency of these accurate and timely information for international requirements, I am ready for your questions with that.

>> Thank you Bert.

>> Thank you another great webinar. Any other great questions from you for Bert?

>> This is a terrific series. I really learned quite a bit. Any questions from Bert out there?

>> I tell people all the time. Sometimes I think the presentations are so good. They cover every issue. This may not be anything here left to ask about. Here is a shout out from Rebecca, very informative. Here's a question from Jan, how closely do and GIA and NRO work together?

>> I would think they would have to work very closely. They probably have to contact people at those agencies a lot of the work would dovetail each other.

>> Any other questions for Bert? We have time. No time constraints really. Bert has upcoming webinars we are talking about keep looking at your FDLP news event calendar and email alerts. My colleagues Sean just put the satisfaction survey into the chat box, please fill that out. Here is a question from Sheila. Do you work with agencies and states during -- Surveyor whether events? -- Severe weather events. --

>> I would think they would work with the national hurricane Center. Possibly Homeland Security. These departments. If there is a hurricane, a tornado. Any other questions for Bert? My colleagues Sean just put another link in the chat box. We have a new training repository we have been working on really terrific. Bert's webinars are in there. That is for two years. If you want to see all of our webinars there is another link for that. That is another unwieldy. We have tags that you can search in. It is really terrific and goes back the last two years. We have a parallel site in which we have all webinars going back many years. Give that a look. Are there any other questions for Bert?

>> I encourage you to explore these websites to see what treasures you can find. That is definitely an excellent point. A thought came to me as we are talking about the weather. I know the weather service has great technology. I'm wondering if these intelligent agencies far surpass what the weather groups have or not?

>> Possibly they can have many memorandums of understanding between these different agencies on what degree they cooperate or share information with each other. There can also be presidential documents as well as laws that would determine that to what extent they would cooperate. In the case of the intelligent agency, particularly before 9/11, there was a refusal to cooperate with each other how

much that has changed, you would have to ask professional intelligence about, but there are these turfs that can come into play. Good point. My colleague Sean has put in what Bert has done for us in 10 webinars, we have links and brief descriptions to all of them in the chat box. You might want to give that a look. Most of these are in the new file repository, if you are older than two years, there in the major archive, which you can find. We will link to all of them in the chat box please give that a look.

>> I the chat box please give that a look.

>> I can give you information on some of the earlier webinars.

>> One year ago it was on of the earlier webinars.

>> One year ago it was on air University and that University Journal, that they had just launched a new journal called Indo Pacific affairs, it just went online a few days ago, I let GPO went online a few days ago, I let GPO know about it, if you have any users industry of Pacific of Pacific region, then Marine Corps website was hacked earlier this year by the usual foreign suspect. It year by the usual foreign suspect. It is now beginning now to come back up. That is another illustration on Cybersecurity and how no entity is immune from hostile attacks. Good point.

>> Excellent point. One last piece of piece of information for my colleague Sean. He read my mind. my mind. If you want to read more about the Academy and all the webinars we have done about 500 Academy and all the webinars we have done about 500 over the years we do conferences, we just conferences, we just finished a big conference a couple weeks ago. out this out article from Scott [Indiscernible], he left us a couple weeks ago for another job, give that a look. Let's see if there are any other questions. Okay. Let's see. I think we have covered all the bases. Of course once again Bert I want to thank you for a terrific webinar. Number 11. More for a terrific webinar. Number 11. More to come. Keep an eye out audience. I would also think my colleague audience. I would also think my colleague Sean for keeping me running smoothly. Thank you audience. I Thank you audience. I hope you enjoyed this webinar as much as we did here at GPO, here at GPO, upcoming webinars we have three more scheduled for November, the next one. I have the wrong link, sorry about that. I have the wrong link, sorry about that. Check our calendar November 14. Tuesday. Another webinar coming up let me see if I can quickly come up on the events calendar. I can quickly come up on the events calendar. Our good friend Jane Canfield has another one of her terrific webinars a good nights rest government resources can teach you good nights rest government resources can teach you about adequate sleep habits, we can all use that I'm sure. that I'm sure. You will receive notice of all of our upcoming webinars when you sign up for news and of our upcoming webinars when you sign up for news and event emails at FDLP.gov, from the FDLP Academy webpage, link to at the bottom of link to at the bottom of the FDLP.gov homepage. You can view a calendar of webinars and other events access past webinars calendar of webinars and other events access past webinars, from our archive, and links to the web form to volunteer and present FDLP the web form to volunteer and present FDLP Academy. I know some of the people in the audience. You can present a great webinar on audience. You can present a great webinar on any topic. It could be how you run your depository. If you have done you run your depository. If you have done presentations locally or nationally if you would like to share them with the FDLP you would like to share them with the FDLP Academy, please consider that Bert has done 11 webinars and more to come. Jane has done even more webinars and more to come. Jane has done even more than that leave it or not. More to come from her too. More to come from her too. I know there are people who can do a great webinar. Are there any other last questions for Bert? who can do a great webinar. Are there any other last questions for Bert? A bunch of thank youse and shout outs.

>> Thank you to everyone who has attended. I think the audience really love the webinar today. With that I will close things out thank you one more time Bert.

>> Thank you.

>> Have a great rest of the day.

>> You too

>> You too.

>> [Event Concluded]