

Winston Soriano – Analysis in 3D

Mindy: [00:00:00] Welcome to Analysts Talk with Jason Elder. It's like coffee with an analyst, or it could be whiskey with an analyst reading a spreadsheet, linking crime events, identifying a series, and getting the latest scoop on association news and training. So please don't beat that analyst and join us as we define the law enforcement analysis profession.

One episode ahead time.

Jason: Thank you for joining me. I have many aspects of your life for progressing. My name is Jason Elder and today our guest has 20 years of law enforcement analysis experience and he's currently in the Combined Forces Special Enforcement Unit, British Columbia in Canada. He is a self prescribed gun nut.

And it's here to talk about 3D printed guns and modified toy guns. Please welcome Winston Soriano Winston, how we

Winston: doing? I'm doing well, Jason, how are you this morning?

Jason: I am doing very well. Happy New Year. Did

Winston: you have happy new as well? I did, yes. Very relaxing. Thank you.

Jason: This is gonna be a fascinating topic.

I, I feel I, [00:01:00] for as, probably as much as you are a gun enthusiast, I am on the opposite spectrum in that, that I'm not, I don't, , know too much about guns. I didn't grow up with guns and I've only fired guns. I think I can count on the number of two hands that I've ever fired guns in my life. So really looking forward to hearing some of the trends that, you are analyzing in the gun investigation world

It's gonna be a really interesting segment, but let's first start with how you discovered the law enforcement analysis

Winston: profession. Okay, Jason? Yeah. So I did a criminology degree in Simon Fraser University up in beby, British Columbia. And the reason I got into criminology has always been interested in policing and the criminal justice system.

I didn't necessarily want to be a police officer, but I thought perhaps, you know, I could work as a policy analyst with the Ministry of Attorney General or in, in that kind of capacity. So after I [00:02:00] graduated from my university with my criminology degree one of my first jobs was I worked for a

Municipal Police Department, and I was working in the records section and, you know, basically there was a lot of data entry, retrieving files, et cetera. It was an entry level clerical position. And one day I, I got a request from a crime analyst within our department, and I was kind of intrigued. I'd never heard of this profession before.

So this was roughly about 21 years ago. And so I got ahold of the crime analyst and then we started chatting. She wanted me to pull up some records for her and get some information. So we started chatting and, you know, I, I found out that her background was she worked for our, Canada Spy Agency actually as a, an open source analyst.

And then when she retired from that, she became a crime analyst. So I was really fascinated by the type of work she did. You know, looking at crime trends in the city in terms of like breaking enters, auto thefts, and, you know, writing reports analyzing different types of information, working on [00:03:00] investigations.

So I was really, that really piqued my interest. And so that's pretty much how I got started. So I started chatting to her, you know, on a weekly basis. And you know, about a year later there's a another agency that started up which is the Combined Forces Special Enforcement Unit, and they were looking for a junior analyst.

So I applied and fortunately I got the position and I've actually been with the organization ever since. So that's pretty much how I got my foot in the door in the analytical profession. And just to give you an example of how much it's grown, when I've become a junior analyst, you know, 20 years ago, There was maybe a dozen analysts in the whole province of British Columbia, and now there's over a hundred.

So it's definitely an expanding field, and I know at this stage in my career, I now am mentoring and giving advice to prospective analysts. All right. Good. And

Jason: who is the analyst that you were

Winston: working with? Her name is Terry Stewart. She's now retired as a crime analyst. But yeah, like I said she was very helpful in, in getting me into that profession and getting me some [00:04:00] advice.

I'm so grateful that, , she took the time to talk to me and, you know, explained what she did . So yeah, she kind of steered me in the right direction and here I am today,

Good.

Jason: And the Combined Forces Special Enforcement Unit, that seems like a boiler plate of what you could get. You could get into just about anything in terms of that title, but what does that unit

Winston: focus on? So our unit is the largest integrated task force in Canada. So we're based in British Columbia and we have about 400 employees.

So our mandate is organized crime and high level street gangs. So this unit that is at sole mandate is to tackle organized crime groups and high level. Street gangs. So, you know, encompass like the unit itself, it encompasses outlaw motorcycle gangs Asian organized crime. We have illegal gaming team that looks at organized crime involvement in gaming and gambling.

So it's a, yeah, like I said, it's an umbrella organization. We, we looked at different [00:05:00] types of offenses such as drug trafficking, illegal gaming, like I mentioned, firearms trafficking. And our unit is comprised of police officers from different agencies, including the RC m P, which is the Royal Canadian Mounted Police, the, the Federal and Federal Police Force in Canada.

And we also have civilian members for which I am a civilian analyst. So yeah, so this unit's been around for over 20 years. And we have one in British Columbia and there's other. Across the country, but I, I would like to say it's similar to, you know, some of your joint task forces there in the us.

You know I did a lot of work in the beginning of my career with the DEA A and ice because I worked on a lot of cross border drug smuggling files. And as recently now because I'm with the firearms trafficking team I do a lot of work with hsi, Homeland Security Investigations, and obviously the atf.

All right, so,

Jason: British Columbia, just, and I probably should have looked this up before I asked, talked to you, but how big of. Area is British [00:06:00] Columbia.

Winston: In terms of geographic size? Yeah. I wanna say, you know, it's similar I think to California or, or maybe perhaps Washington and be, or Washington and Oregon combined.

Okay. And for those who don't know where we are geographically, we're just north of the Washington state. So Seattle up in Northwest and US there is about a three hour, two and a half hour drive from Vancouver. So yeah, when you think of Seattle, you can think of Vancouver. So like, like, like Seattle, it rains a lot up here.

Jason: Yeah. So it's rainy and cloudy all the time, right? ?

Winston: Pretty much, yeah. , we only get two months of good weather. That's in July and August and if we're lucky, it may extend in September. But yeah, like I said van Kurin Seattle have a lot in common and the rain, cloudy, rainy weather is one of them.

Yeah. So

Jason: then, you know, as you come in, you're a junior analyst you know how. Has your role grown from the first days you walked into the door until now?

Winston: Well, I actually, so as a junior analyst I was [00:07:00] fortunate enough to have a mentor, so, you know, for any aspiring analysts out there if you join a unit I don't know what it is now, but I am actually mentoring one of our junior analysts now.

But when I first became a junior analyst, I was working in the Asian organized crime portfolio and the senior analyst that I was, that was mentoring me, his name is Tony Tong. He was a former Hong Kong police officer. And after the changeover from Hong Kong to China in 1997, I believe he immigrated to Canada and was able to get a job as a law enforcement intelligence analyst.

So I learned a lot from him. So in the beginning, you know, Basically getting my feet wet. You know, I did a lot of data entry and, and simple queries. You know, if you can check, I would get requests from, you know, police officers or members of the team, you know, can you query this person on this database or that database?

And at the same time Tony was, like I said, my mentor and he was kind of giving me tips and advice and I would kind of shadow him. And so, yeah, so from [00:08:00] the very first day I was a junior analyst and after. Two, two years. I graduated, so Tony and myself, we were attached to the Asian organized crime team.

And after a couple years on that team, I was a senior analyst on another team. So I pretty much advanced that way. And throughout my career I've worked on different sections like Asian organized crime, outlaw, motorcycle groups, and, and now with the illegal firearms team. But yeah, no, it's been a learning experience.

I'm still learning. So learning doesn't stop. As we all know, technology changes. I remember when I first started in, in 2002, I believe Tony was still going through hard copies of Excel spreadsheets, at the time, , and, and I was like, there's gotta be a better way to do this. And then obviously then technology changed and we were able to get the Excel spreadsheets rather than like the hard copies.

And I, I remember him doing that. I was like, oh my gosh, I don't know how you're able to do that, but this guy had an amazing memory and able to analyze that information. But yeah, like I [00:09:00] said, it, it is a learning process and I'm still passionate about this job 20 years later. And, you know it's like, you know, I, I know team's kind of cliché, but it is really my dream job.

You know I know you had asked me how I got into law enforcement analysis, but ever since I was a kid, I've always been interested in reading books on organized crime on the mafia, you know, Asian organized crime groups terrorist groups. So I've always had that interest. And when I had this position to work with the Combined Forces Unit as an intelligence analyst, I was in my in my realm there.

Jason: In your department to move from junior to senior analyst, it just quickly, how does that process work? Is that based on time? Is it a promotion? Is it a test or something that

Winston: you have to take? Yeah. So right now Jason, we have a program at our unit where when a junior analyst comes in, they're assigned a mentor.

And so I have a junior analyst working with me in our farms team, and she has to [00:10:00] fulfill certain tasks and reports. So it's a progression. So, you

know for example, a basic report. Can you do a target profile or a target background on a subject? You know, like what you know it.

Her the ability to research databases to pull out information that's pertinent, you know, to obtain photos of our target you know, any open source information. So that would probably be one of the first steps is to do a target background on a subject. And then from there, perhaps, you know, we would get phone records like tdr, we call them transmission data recorder.

I think it's very similar to your pen link. I, I believe in the US mm-hmm. where we would get live phone records. So then, you know, then she would start looking at that and analyzing information that way and using different functions and excel like pivot tables to identify frequency of calls. And then perhaps you know, we also get surveillance reports.

She would be analyzing that and then, you know, and then it would graduate to say, doing another, doing a [00:11:00] verbal presentation, a, a debrief on an investigation. Just to build up on your presentation skills. And then it would be like further down the road of an investigation, it would be more advanced analysis.

You know, you would get surveillance reports, the phone records, if we have a wiretap investigation, tie all that in together and write a lengthy report. So she the junior Alice we have now, she's been with us for about six months. And so it is a progression. It's not necessarily time per se, but you know, myself and our supervisor would look over her work and, you know, would give feedback.

So after a certain When she reached, I, I would say maybe in a couple years, like after she reaches all these milestones that we've set out, then she could potentially graduate from a junior to a senior analyst. Excellent.

Jason: I really like that there's this established path for, analysts to move up, and it's certainly getting better, but there's still a lot of police [00:12:00] departments in the US where there is just not this established path for analysts, to move up.

And so it's really good to see that you have this mentorship program, you have this established set of criteria for. You're meant to be able to aspire to.

Winston: Oh, yeah. No, it's great. Like I said, when I started, you know, 20 years ago, it was an informal relationship between me and the senior analysts.

But, you know, fortunately we got along really well and, you know, became a really close friend and just guided me. And now you're right. Now when, you know, with the field growing in Canada and there's a lot of aspiring analysts who want to get into the program, and if they're fortunate enough to join a police agency, yes, it gives them, you know the ability to progress through their career and, you know to expand on their skills and abilities.

So yes, it is, it is a good program that we have. And, and the rcmp, which is the federal Police Force they have an established program as well. So we actually borrowed our [00:13:00] program from them because they've had it in place for a while now. But I think it's a great idea that there is an established process.

Yeah, there's nothing wrong with use and what works. Yeah, definitely. Why you don't have to reinvent the wheel. That's right, .

Jason: All right, so this brings us to your analyst badge stories, and for those that may be new to the show, the analyst badge story is the career defining case or project that analyst works, and you have more than one, which is always welcomed on this show.

And let's just start with the, the earliest one and it's, is it project.

Winston: Yes, that's right, pav. Yes, that's right. Okay. The reason for that name is, unfortunately in the RCMP world the, the project names are given an alphabetical order and there's no rhyme or reason. It has nothing to do with the project itself.

it's like a hurricane. It's like the, how they name hurricane. So at that time, we were going through the p the P words, and this is the one we were getting from Ottawa . But so, so yeah, [00:14:00] like I said, the, the name Pav, I'm not even sure what it means, but it has nothing to do with the investigation I worked on.

So this is an investigation I worked on, I guess three years into my career, and it's been one of my. Career defining moments and because it, it was such an unusual investigation. So so basically how it started is a colleague of mine with Canada Border Services Chris Gahan, a close friend of mine, I remember, he came to our office one day and, and we do a lot of work combined forces unit with a lot other law enforcement agencies including Canada Border Services, which is similar to US Customs or hsi.

And anyway, so Chris came over to my desk one day and he was showing me these overhead aerial photos of a property right near the US Canada border. So

it would be the BC Washington state border, and. Showing me these aerial photos. And he was telling me, he's like, Winston, I think they're building a tunnel from the Canadian side of the border to the US side.

And I was like, no, there's [00:15:00] no way. And he said, you know, he'd been following this subject that he previously investigated years ago for drug trafficking onto this property. And he noticed that you know, construction equipment was going onto this Quonset hut on the property, which is basically a little single detached home in this, you know, metal Quonset hut.

And, you know, he would see dirt coming out. . And so he was, and I remember when he first brought it up, I said, there's no way. And back in 2005 one of our big problems in, in BC was BC grown marijuana, which was being exported to the us which we, we are reaching really high prices. So I thought it initially that it was an underground marijuana bunker.

And, and so Chris presented it to my boss and my boss was of the same opinion. He's like, there's no way they're building a tunnel, cuz we'd only heard of tunnels across the US Mexico border, never Canada, us. So my boss, you know, didn't believe Chris, but kudos to him. He was very persistent. [00:16:00] And so finally my boss decided, okay, tell you what Chris, we're gonna get a geologist to use a ground penetrating radar on the property.

We'll do it covertly to see if there's a void in the ground. You know, to see if there's something there. And so, you know, we got this geologist to come in and lo and behold, he hit on a large void in the dirt in the earth. So with that, we were able to get grounds to execute a covert general warrant.

And I still remember this day. And so that night when we got it approved, we had our investigators go into the Quonset hu you know, in the middle of the night. And one of them had a GoPro camera on his on his vest. And so he goes into the Quonset hut and he's kind of looking around and, you know, just looks like a regular, you know, Quonset hut with like farm machinery in there, construction tools and that.

But anyways, he pans his camera down to this big sheet of metal on the floor. So he kind of lifts it up and he looks down and there's like, A ladder down to the [00:17:00] bottom of this void and he climbs down the ladder and lo and behold, there is a tunnel and it was all framed up. And so, you know, fast forward we started investigating and you know, we advised the Americans the DEA at the time, Hey, we found this tunnel.

You know, we suspect it's being used to smuggle drugs from Canada to the US and you know, vice versa. So we started working with the Americans and we were able to get phone numbers for our subjects. So I was monitoring their TDRs and I believe we had a, a vehicle tracker on their vehicle. So I was and then we also had a wiretap investigation.

So I was analyzing all this information to try and identify other associates. And so I guess after about a six month investigation it was decided, you know, we let a couple of shipments go through and, and the DA was able to, you know, arrest these guys and seize the drugs in Seattle. And I guess a decision was made to shut the tunnel down because there, there was work concern that, you know, [00:18:00] perhaps, you know, terrorists or other weapons would be falling down into the US and, and similar to Canada.

So the decision was made, and I still remember the day before they shut it down myself and my colleague Chris, we went down to the US side and we actually got to go into the house where the, the US side of the tunnel was built. And I was able. Go into the tunnel. I was very claustrophobic , but it, it was pretty amazing.

It was about, you know, I'm, I'm five seven, so it was about, yeah, about, yeah, about about my height. I could definitely stand up in it. And yeah, it was literally, and this tunnel was literally went under, this road is zero Avenue, it's called, it's about, and it was literally like perhaps a hundred meters from the US, Canada custom station.

So that was a very career defining. Experience myself and my team colleagues, we both, we all got certificates from the U S D E A to acknowledge our participation in this investigation. And from that day on, I've [00:19:00] never heard or investigated any other tunnel along the Canada US border. So I'm sure there are, but it was quite unique.

And so, like I said, even now I hear about tunnels along the Mexican US border, but never along the Canada us. So that was definitely a career defining investigation for me. It was very successful. We arrested three suspects. They actually spent it, they all three got convicted and they actually spent all their time in the us.

So that, that was very fortunate. But that was very definitely a career defining moment. Yeah. So,

Jason: How long was this tunnel?

Winston: I believe it was about 300 yards. 300. It wasn't very long. Literally it was a house on the US side of the property and directly across, it was another home on the Canadian side.

And it was literally just under the, the main road. It's a two-lane road that separates Canada and the US and I didn't walk the whole length of the tunnel. Like I said, I was getting claustrophobic, so I went back up. But yeah, like I said, it, it and I remember when some of the [00:20:00] guys I work with, they have construction experience and they were telling me, I'm like, Winston, the bad guys, were using their skills.

They would do really well in the construction industry. . As opposed to building an illegal tunnel. Right. So yeah, like I said, it was never heard anything of since. And every time I, I go through that border at that port of entry, I always think about that tunnel,

Jason: oh man. E every time I think of some of the things, and this can be either illegal behavior or even in the business world where someone spends either exorbitant amount of time, money, or resources on a particular thing, and I'm like, man, what return were they expecting from this?

And it must be worthwhile to do all that. Oh, yeah, yeah. All that effort. Just, just to be able to run those back and forth between US and

Winston: Canada. Yeah. Yeah. Exactly. Yeah. Like I said, I guess at the time like the main product that the Canada [00:21:00] or British Columbia was involved in, was BC grown marijuana.

And that was being, and we, we did corroborate that because we let a couple of loads go through and then, you know, fortunately the Americans took it off, but we never, the only one thing that I have a regret is we didn't identify the financier of this operation. Because you're right, Jason, I'm sure it costs a lot of money to build this thing.

And we only arrested the guys who. Doing the dirty work, so to speak.

Jason: Oh man. Yep. So, ah, interesting. . All right, well, hey, that gave you some momentum. Let's move on to your other story. And you, you must have just waited until. , the peas came up in the project because I see that this next one is 2008 and it's Pastology.

That's right. ,

Winston: yeah. I guess within that three year span, they're still on the peas. . . So yeah, so Pastology so this was another career defining investigation. And I gotta say, like these two investigations [00:22:00] that I worked on, it was a A J F O with the dea. Kudos to the da. We had, we've had a great relationship with them.

And, you know, I, I, I speak so highly of that agency because of the investigations we worked on with them. And this project Histology was another investigation and it stemmed from a DEA investigation in, in Los Angeles where they arrested somebody who provided information to the DEA that he was quite, you know, technologically gifted.

And, and the subject was able to set up a, a Blackberry server. So I know we don't use Blackberries too much now, but back then it was fairly common. And so what this subject did is he set up his own Blackberry server. I ba I guess it was, believe it was it was based, physically based in la but I, I think it was being used in Panama there.

And so what he did is he set up this Blackberry server and what, so he was a cooperating agent with the dea and they started handing out these [00:23:00] blackberries to bad guys. And, and so they started investigation that way and they were able, the DEA at the time were able to, to receive the Blackberry messages, BBMs in live time, which was very unusual.

Even then, we can't do that. So back then, because, you know, they had a, a server they could literally see the messages coming across between. people who are using their blackberries. And so the DA identified, Hey, you know what, there's some Canadians on here. It looks like, you know, they're getting cocaine from the US and shipping it up to Canada.

So we were notified by the dea and so we started doing a parallel investigation in Canada. And so what we ended up doing is we actually physically brought the server cuz I, I guess they had taken down their, their guys. So we used their server in the LA and brought it up to Vancouver and then, We started handing out these blackberries through an undercover operation to bad guys up here in Canada and also intercepting the ones that the [00:24:00] US were intercepting up here in Canada.

So the name of the server was Goose Bomb. That was the name of it. and . And literally, I still remember this, Jason. So we have a wire tap room and when we, right now, when we have wire tap investigations, literally, you know, we have

an intercept monitor sitting at their desk and listening to calls, and on their screen they're gonna see the calls.

But I remember when we set up for this investigation, The intercept monitors had monitors in front of their screen and they were not listening to the calls. They were reading the messages. Mm-hmm. . And so, like I said you know, fast forward on that investigation, I remember this, it was I believe it was 2009 December 24th.

So Christmas Eve we intercepted a shipment of cocaine coming out from the US to Canada, at the Canada US border, a hundred kilograms of cocaine, which at the time was unheard of. And two days later we got information that another shipment was coming up, and that was 102, [00:25:00] two kilograms of cocaine. So that was worth.

Tens of thousands of dollars, if not millions. And so those were very good seizures and we were able to take down an organized crime group in Canada and another one in the US as a result of this investigation. And so since that time we were not able to you know, follow up on our success and, you know, do subsequent investigations.

But that was another groundbreaking investigation for for our unit to set up our own server and, you know, basically hand them out to bad guys and they had no knowledge that we were reading all their messages. So, so yeah, those were the, like I said, two of the, basically career defining investigations that I've personally worked on.

And again, like I said, you know, we, we got a certificate, myself and the rest of my team as a basis of that investigation. We, we were recognized for our work because it was challenging, but it was very worthwhile.

Jason: Yeah. Again, I, the recognition, so goose bomb, [00:26:00] does that mean anything? Or you just happened to hit the G'S at that

Winston: particular point?

well, it's funny actually, that was the name that the DEA gave the name of the server, was Goosebump. I guess they could give it different names down there. So so again, goose Bum has nothing to do with the investigation, but yeah, so that, that's that's pretty much the name of the server that the DEA provided.

Jason: It's fascinating that you physically moved the server and, and how that would've impacted, I mean, somebody in the know that would've been using that server would've been able to identify. That that server had changed locations. But obviously in, in your case nobody that was using that server realized that it was now coming out of Canada and not California.

Winston: Exactly. So how it was set up, Jason, is that Yeah, physically the server was in LA at the time, but for all intents and purposes it was being transmitted out of Panama. And the same, [00:27:00] same thing when we physically moved it from LA to Canada. For all intents and purposes, all the users knew that it was being transmitted out of Panama.

So so that was kind of I guess a fail safe so that they wouldn't. Determined that, hey, it's in law enforcement's hands, you know? So

Jason: It's funny until you mentioned Blackberry, I guess I didn't realize that blackberries aren't around anymore, and it's, it's kind of a shocking moment because blackberries were everywhere 15 years ago.

Oh, exactly right. Yeah. I mean, I, I'm thinking President Obama, I believe had, he was a Blackberry user and the Secret Service had to do something special to, so he could have a blackberry. I remember that I might have to look that up afterwards to see when they actually faded away, but

Winston: yeah, blackberries actually a Canadian company, a research in motion that invented it.

And yeah, you're right. Like all the government agencies up in Canada were [00:28:00] using Blackberries because the the app is, it's an encrypted application the bbm, Blackberry Messenger, and you're right, it was quite common. And yeah, now we're like, you know, using different phones now. But yeah, blackberries were everywhere back then.

And then now they've just kind of faded into obscurity

Manny: what's going on. Analysts, my name is Manny San Pedro. I'm the technology director for the I A C A and here is my public service announcement for analysts. Don't become overly reliant on Excel. Use it to analyze and break down your data. It's a fantastic tool. Fantastic, and it's free as part of the Microsoft Office offering, but don't use it as a database.

Use a database as a database. Connect to the database with Excel, and then use it for your pivoting for all, your slicing and dicing, even developing your dashboard. [00:29:00] But again, don't use Excel for everything because it may not be the best tool for you.

John: Hi, I'm John Ng. I'm a Prime analyst with the Police Service.

Winston: The public service announcement that I have is for, especially for junior analysts, but also senior analysts, just be true to yourself and recognize that the police culture that you're in shouldn't necessarily shape who you are, but you have something to bring towards your service as a benefit as well.

Let's

Jason: talk about another story that's more recent now. And so y this gets into your love of guns and your investigation of guns, and you recently spoke at Euro Pole. 3D printed weapons conference, so Yes. Yeah, that's right. Let's

Winston: talk about that. Yeah, actually so just to give you a bit of my background, like my ethnic background and actually [00:30:00] born in the Philippines adjacent, so mm-hmm.

I dunno if you know, but the Philippines has a very extensive gun culture similar to the us. I, I mean, mind you, Philippines was an American colony for about 50 years, so, yeah, like, you know, I, I've always grown up around guns and throughout my career, I'd never worked specifically on firearms. So three years ago I joined the Firearms Investigative team and I felt like I was in my element.

I was able to combine my hobby and passion with my work, and so a couple years ago, you know especially when Covid hit, I was, you know, I think a lot of us were quarantined or, I, I know I was working from home for about a year when Covid first hit in March of 2020. And so I was doing a lot of research from home and reaching out and networking and yeah, so I was doing some research on illegal firearms and I got ahold of this gentleman from Interpol with their farm section.

So we started chatting and, you know, I, I was sending him reports I had been doing on illegal firearms in Canada, et cetera. But then in March of this year, I got an email from him and, [00:31:00] and basically talking about Euro Polet, which is the European equivalent of Interpol, just with the European Union

there, that they were planning to have a 3D printed farms conference because it has just been kind of a trend that was just starting to get bigger.

In Canada itself I've been working on 3D printed farms since 2019 and but in, in Europe I believe as of earlier this year, they've had perhaps three or four investigations in the whole continent. And I personally worked on three 3D Farms investigations personally. So anyway, so based on that email, they had invited me to attend this conference in, in The Hague, which was in May of this year.

And it was a three day conference and they were bringing in law enforcement agencies from Europe and academics as well to study, you know, the impact of 3D printed firearms look at legislation they could implement to address it. Look at other agencies, what they've come across. So based on my background and the experience I [00:32:00] had with 3D printed firearms, I was fortunately invited to present at the conference.

So I was able to go to Europe for the first time in my life. I'd never been there. So I went to the Hagan, the Netherlands, and Europe Pole had sponsored the conference and I was able to speak. I believe we had about 200 attendees, and it was a great conference. You know, everyone was sharing information they had, and I was actually the only Canadian who presented, and I, I met some atf.

Cohorts. But yeah, it's funny. When I first got invited to the conference, I was like, well, I'm from Canada. And they're like, no, no, no, that doesn't matter. You know, because you've got this 3D printed farms investigation. I'm like, okay. And so I, I said, well, you know, I can only speak to what's happening in Canada that I personally worked on.

They're like, well, no, no, that's what we want, so, mm-hmm. . So yeah, I think I got some very good reviews of that. And, you know, the director of Uol, the weapons and explosives, he was fairly happy with my presentation and, and I got other kudos from other people I met from different agencies throughout Europe and was [00:33:00] able to do a lot of networking.

And so yeah, so like I said, that was I know initially when I was invited to that conference, I was telling. Manager about it, and he was like, yeah, yeah. You know, Winston, you should definitely go, you know? And he said, but you know, we have to bring it up with, you know, senior management. And so senior management gave me the go ahead.

And I remember coming back from the trip and, you know, the, the chief of our agency, he, oh, Winston, you know, I bumped into him in the hallway. He's like, oh, hey Winston, how was the conference? I said, oh, it was great, sir. You know, I got to meet so many people. And I said, I brought, you know, a lot of coins, challenge coins patches, you know, swag from our unit.

I said, sir, if nobody knew about Combined Forces Unit before I got there, , all of Europe. Definitely knows now , because that's all I talked about. And so actually they're planning to have another follow up conference this year. Probably May or June. So we'll see if I get invited to that one. But yeah, like I said, it was a very Career defining experience to be the only Canadian to present at that conference and to represent [00:34:00] Canada really in terms of 3D printed farms.

Jason: So let's go into the 3D print process a little bit cuz I'm trying to get a, a general understanding of what it is and what it is not. And cuz I think of 3D printing, I, I think of this process of building this little plastic figurine or this piece of plastic that is going to be used very specifically around the house or the office and or whatnot.

So I just wanted to get a general understanding when we say 3D gun is, is the entire gun made out of the 3d? Print material or is it osa?

Winston: Okay. Actually that's a good question. Jason, so the farms are coming across now, we consider them hybrid 3d. So the whole gun itself is not 3D printed and it's not made of polymer plastic, which is generally the material that's used [00:35:00] to 3D print, like you said, figurines.

So just to give you a bit of a background on 3D printed firearms in 2012 Cody Wilson, a gentleman from the us he actually made the first 3D printed firearm, which was a single shot pistol. And it was comp completely made of polymer plastic except for the, I believe, the firing pin and some screws. And it wasn't very durable.

But what he did is he published the digital blueprints for. 3D printed firearm on the internet online. So that was in 2012 roughly. So 3D printed firearms have been around for the last 10 years now, and from there it's evolved. And you know, to your point about the figurines and that you're right, 3D printers have obviously, Other uses than just 3D printed farms.

And it's widely used you're right to create figurines. And I think 3D printers themselves became more widely known during covid because I'm sure people

have heard stories of, [00:36:00] you know, protective equipment face masks, et cetera, being manufactured using 3D printers. So that became more well known.

And from there, I think you know, because this is my theory, at least because of the covid lockdown quarantine, people were at home and, you know, people are on the internet surfing and, you know, perhaps, you know people are like, Hey, you know, there's all these 3D printed firearm blueprints. Perhaps, you know, I could try and build one just for curiosity's sake.

So, you know, like I said, these blueprints and schematics are widely available online. They're not restricted at all the 3D printers themselves. You can get one for as low as \$200 US, and as high as up to \$10,000 if you want it. Really high quality. And but yeah, so the 3D printer at firearms, so right now what we're seeing is as I'd mentioned hybrid, so I'll, I'll use an example of a Glock Semiauto Pistols, which I, I'm fairly sure people are familiar with.

So this is the common firearm we're seeing in Canada is the hybrid [00:37:00] Glock pistol. So when you think of a, a Glock pistol, Two parts, main parts to it. There's the frame, which has the grip and, and the, the trigger housing. So that itself is generally made of 3D printed polymer plastic. So you can get those schematics online, you can download it to your printer and your computer.

And basically it gives it instructions to the 3D printer to literally make this frame. And so once that frame is created right now, you do still need the conventional I would call it the upper receiver, which contains the barrel. The slide that has to be all metal because it bears the pressure of, of the fire, of firing the a, the firearm.

So that has to be metal. So when we consider, when we think of 3D firearms, the whole firearm isn't 3D printed. It generally the lower half the frame say, or the lower receiver there are 3D printed firearms that are completely made of polymer plastic, but they're not very [00:38:00] reliable. But there is one called FGC nine which is mainly built of 3D polymer plastic, but there's also metal parts in it as well.

So right now most of the firearms that I'm seeing and that are being made are considered hybrid because until the technology advances where 3D printers can print like metal frames and receivers, the whole firearm in, in metal, then it's gonna continue to be a hybrid 3d. polymer frame and, and firearm.

Sorry. Yeah.

Jason: And so fgc, I have to smile when I hear, see what that stands for. F gun control. . But you mentioned that you can get a 3D printer for as low as, \$200. And then the material, , the polymer to make these, ha parts to the gun. How expensive are those reference?

Winston: Oh, they're inexpensive to adjacent. Like say for a spool of polymer plastic, you're paying maybe [00:39:00] \$20, \$15 US for a spool. And like I said, with 3D printed firearms, it's, so the ability to print these are so easy now because of the cost of printers and the supplies and the avail availability of the digital blueprints, that's what makes it so appealing to, you know, those who are hobbyists, who are generally interested or curious if they can build these things.

But on the other side, you have the criminal underworld who are taking advantage of these 3D printed farms and making 'em themselves or contracting other peoples to other people to make them, and then in turn, trafficking these firearms. ,

Jason: I probably watch too much movies and tv, but I'm just thinking, you know, in terms of somebody that's up to no good that would want something like this is you're going through metal detection, you know, they're, they're looking for that shape of the gun, right?

They, the, the, the whole gun itself. But with this, [00:40:00] this might not come up on an x-ray or anything else. It's not the shape that they're looking for. Is that what you found as well? Yeah.

Winston: So Jason, in terms of like airport security and scanners at the airports, so if you have just the 3D frame itself, so there's no metal, it's just.

That's gonna get through the metal detector. I don't believe we, there's actually, speaking of that, that's a good question. There's actually a company that is currently in marketing and, and they're doing testing at different airports in North America. I know they're doing one in Toronto airports where they're testing it's called Hex Wave.

And what it is, it's a, it's a unique scanner which detects the shape of the item. So it's, it's they're testing it there. And so this would then be a game changer in terms of identifying 3D printed firearms, because right now with 3D printed frames, like I said, they're made of plastic, it's gonna get through a metal detector.

But with this new type of scanner, a 3D X X wave scanner, it's gonna detect the [00:41:00] shape of the pistol or the firearm. So then it would be more difficult to get that through. But the other big point with these 3D firearms, it. Is they're considered ghost guns. And for those who are not familiar with the term, it basically means a firearm that is not traceable.

So for a 3D firearm, there's no serial numbers on it, so you can't trace it as compared to conventional firearm. When they're manufactured, they all have serial numbers and there's usually some kind of markings on it. Say, you know, Smith and Wesson are Glock, but with the 3D printed firearms, there's nothing to identify that firearm.

So that's another thing that makes it appealing, is that they're literally untraceable and that's why they fall under the category of ghost guns, because when these guns are used and they're found somewhere, there's no way you can track who made that gun or who it came from. So that's another big advantage, I guess, for criminals to go down this route of 3D printed firearms.

Hmm. And then

Jason: you, [00:42:00] the, cases that you came across, , how did the department discover these weapons?

Winston: Okay. Actually I'll speak about the first 3D farms investigation I worked on. And so this was a joint investigation with our Canada Border Services. And so we have an intelligence analyst actually that works alongside myself.

And she was with Canada Border Services. She's retired now. Sherry Olson's, her name. And she provided information to her unit that they identified a subject who was importing parts from the US into Canada through the mail carrier. And so she did some background checks on the subject who's receiving this material and found out, oh, lo and behold, he's prohibited from owning firearms and he has no firearms license.

So even though technically, importing these parts, you don't require a farm's license. It kind of raised a red flag. Well, why would this person who's got a lengthy criminal record, you know, for drug trafficking fraud, he has no farms license, he's [00:43:00] actually prohibited from owning farms. Why is he importing these farm parts from the US and also from other Canadian farms retailers?

So, you know, we started investigation on this subject, you know, did surveillance, you know, traditional investigative techniques. And we found out he was purchasing a suppressor from China at, which is a prohibited item, a silencer another name for it. And so what we did is we identified when that shipment was coming in, and we conducted what's called a controlled delivery.

So that item was delivered to the subject, and we also had a search warrant in place as soon as he accepted that item. So, as a result of the search warrant the investigators went into the home. And basically discovered a farm's manufacturing facility. And so this was the first time I came across a 3D printed firearm.

So this subject had purchased a 3D printer online, I believe it was 1200 Canadian at the time. And it was sitting in his home and [00:44:00] he had examples of 3D printed Glock frames. And then he had completed farm pistols with the frame and then the conventional upper receivers. And he had conventional farms in his home as well.

And I remember going through the printer there. So in his printer, he actually had a USB card in there, a memory stick. So I, my, one of my jobs was to analyze information on there and. It was a treasure trove of evidence because he basically had files that he had downloaded from the internet on how to build these guns.

And, and actually the funny thing is too, we, we seized his phone at the time and he actually took a video on his cell phone of his printer printing a 3D printed firearm, and he took a video it, and we were able to determine yeah, that is his printer and that background is in his home. So we use that as great evidence.

Mm-hmm. . So, and then I

Jason: like when they make it easy,

Winston: exactly. Exactly. Jason, like [00:45:00] I said, that was like, that was a gimme. It's like, oh, thank you. You know, thank you for recording that video. You know that of your 3D printer in action and you know that it's actually. In the process of building this frame?

So yeah, actually, so for the three, as I mentioned, the three farms investigations I've worked on, which involve 3D printers, they have come from our Canada

Border Services agency. And like I said, they, they have measures in place well where they can identify certain products that are coming into the country.

And right now, the, the main items are, yeah, if they're being purchased from farms, retailers in the US or you know or overseas generally us, you know, has a large farms market as you know. But yeah, so that's pretty much how they've come in. And also also from other conventional means of getting information, you know, from confidential informers or, you know, other police departments, et cetera.

Hmm, that's interesting.

Jason: So, and, and we're gonna put some pictures of some examples of [00:46:00] these weapons. In the show notes. So I, I highly recommend you take a look at what's being produced. So since the, the 3D printed part is not the actual barrel, that means though that the shell casings that these, these weapons would fire, they still could have you can still run the shell casing match to compare that, the shell casings that were shot with the 3D printed one that would matched the one that maybe it was the originally part

Winston: of the gun.

That's correct. Yeah, that's a good point, Jason. So, If we so yeah, I guess I'll talk about an example here. So for example, there's a shooting and yeah, a shell casing is retrieved and they're trying to identify where that casing, which firearm that casing came from. So they would run it through the ballistics system.

It's called Ibis, I believe, integrated ballistics information system. And if that [00:47:00] 3D printed firearm is in the possession of law enforcement, then they could do a test fire on that gun, would put the information on the shell casing into the system, and they could match it that way. But if they have the shell casing itself and they have no way to identify where that firearm came from, because like I said, the 3D printed farm, the barrels may be serialized, a lot aren't serialized, so there's no way to track the barrels.

So really the only way. To link a shooting scene to the firearm is if the firearm itself is seized and it's in the possession of law enforcement as opposed to a traditional firearm where you can determine, you know, there's been examples where, you know, the same firearm was used in multiple shootings because the casing all matched together.

And so you know, those are coming from the same firearm even though the firearm has never been recovered. You know, it's linked to the same firearm, whereas opposed to a 3D printed firearm, like I said, it's not serialized and that [00:48:00] makes it difficult to link, mm-hmm. shell casings to that firearm.

Yeah.

Jason: So you mentioned that he recorded a video. Approximately how long did it. For him to print out that part of the

Winston: weapon. Okay. So the frame itself, it is a, a lengthy process. Mm-hmm. , it's about mm-hmm. 12 to 13 hours to print like a Glock pistol frame. Mm-hmm. Because it's building up layers of frame itself.

So it is a lengthy process, but you know, you can literally turn it on, go to bed , and the next morning or later that day it's completed. So it's not necessarily something you have to keep an eye out for. I, I'm sure you know, when you do your first test runs that you know, it'd probably be important to, to, you know, make sure it's all printing properly, et cetera.

But yeah, approximately Jason will 12 to 13 hours to print the actual frame be. It builds layer upon layer.

Jason: , but as technology goes, that is gonna get faster and faster. Oh, definitely. That's just like every, you know, everything progresses that way. So it may be 12 [00:49:00] hours today, but in two or three years it could be half that.

Oh,

Winston: exactly. Exactly. Like I said, you know, with the cost of printers nowadays, the advances. You can print and availability of these files. You know, it, it's it's definitely gonna advance. I know in the US I'm not sure if it's that big a problem yet. Mm-hmm. . But actually one thing I wanted to discuss Jason is for your American audience is I know it's a big issue we have up here in Canada, and from my speaking to my ATF colleagues, it's also becoming a big problem in the US are the auto switches or the auto series.

So these are used specifically with Glock Pistols and they're like little devices that go on the back of a receiver of a slide. And what it does is it converts. The Glock pistol from semi-auto to full automatic. And I know that's a growing

problem in Canada and, and as well as the US And initially they were made of metal and they're being produced overseas.

You know, I think you could get them off [00:50:00] like Alibaba or wish these kind of online websites, but now tying it into 3D printers. We're starting to see these auto Sears being 3D printed. Mm-hmm. . And so that's another big problem again too because, you know, when law enforcement basically when they're going into these, you know search warrants or coming across these firearms when they're being converted to full auto, and I know you could get extended magazines for these Glock pistols up to 30 rounds.

And if you have one of those auto seers on this pistol, those 30 rounds are coming out of that barrel within seconds. And that is a big public safety issue both for police and for the general public. So yeah, cuz I know that's one of the photos I, I. provided to you is the autos here, so I wanted to mention that too for for your audience.

Yeah,

Jason: that's scary stuff there. Cuz if, you know, you just think of the size of a pistol versus the size of maybe a bigger machine gun or [00:51:00] automated semi-automatic rifle. Those things that mean that when you see that little pistol, you might be thinking that, oh, it can only shoot so fast, but obviously they're modifying it so it can, you know, produce more shots in a shorter period of time.

Oh,

Winston: exactly Like you said, because of the size of the pistol, it's easily concealed. Mm-hmm. . Uh, So it makes it difficult to Yeah, you're right. You're not be gonna be carrying like a big machine gun out in public mm-hmm. Mm-hmm. . But uh, if the police are not aware that they potentially, you know, they're gonna be facing more firepower than what they're used to.

So that's why these auto Sears are becoming a very dangerous item out there. .

Jason: Yeah. And so another trend that you've come across is converting Airsoft guns. And my son has an airsoft gun, so what do I have to be worried that he may be going to his

Winston: airsoft guns ? Well, yeah, so air converted Airsoft guns they're more of a, because our laws in Canada are stricter and as opposed [00:52:00] to the us so we've seen, and I've personally seen this is converted Airsoft pistols.

So what the bad guys are doing up here in Canada, especially in British Columbia that I've seen is they're as generally the, the Pi, the pistols, the Airsoft pistols. So what they're doing is they're buying the air. Frames. So the bottom half of the pistol, which is an airsoft kwc kilo whiskey Charlie, that is a very well known Airsoft brand of, of weapon.

So what they're doing is they're buying these kwc airsoft pistol frames. They look like the 1911 type model, which the, the Americans were using in World War ii, mainly the American Army there. And what they're doing is then they're buying these 22 caliber conversion kits. So these are the upper receivers, are the slides, and those are being made by a company called German Sport Guns, G S G, which we've seen up here in Canada.

And just by doing some minor modifications on the frame of the Air Soft pistol, [00:53:00] they're able to combine. The 22 caliber slide to this frame, and it acts as a functioning 22 caliber pistol. Now 22 caliber. It's a fairly small round, but it still could kill you. Yeah, these guys are, being fairly creative.

And, and again, the thing is too, with these converted Airsoft pistols, you can find a video on how to do it online on YouTube. It, it's so widely available and, and I guess that's the main issue. You know, you can't. You know, it's impossible to remove all this information from the internet, but it's there and you know, there's forms where you can learn how to make these things.

And so I don't think it's as big a problem in the US as it is in Canada, but that's what we're seeing is that yeah, these Airsoft pistols are being converted to fire 22 caliber rounds. And I know when I spoke about it in, in the Hague with Uol, they had never heard of this trend before. Like, because different countries have different regulations on Airsoft, and so they were [00:54:00] quite interested when I mentioned to them.

I actually am working on a current investigation where, you know, these guys are converting these airsoft guns into functional firearms, you know, something to keep an eye out, up for. So I don't know whether that trend will, you know, follow through in the us but it's certainly something up in Canada we're seeing.

But yeah, as long as you know if like does your son himself play Airsoft or he just has the Airsoft farm? .

Jason: He just has the Airsoft fire arm, shoots it for targets and, and whatnot.

Winston: There you go. So, yeah. Yeah. Like I said, I mean you know in Canada, airsoft guns are so widely available.

They're not restricted yet. So we'll see. , yeah, but

Jason: it's, and it could be to other things. I, it, my neighbor, the neighbor boy got for Christmas. This gun, I couldn't figure out what it. But it had, it was just, it had a battery operated in it, and then it will just shoot, it's, he told me it's not an Airsoft guy and it's some, something a couple levels down what it, what it actually shoots.

So the, the bbs that come out of that are [00:55:00] a little bit more, yeah, more softer. And he told me, but I can't remember what it was. But again, with these toys, if they can get them so that they can weaponize them and make them accurate, there certainly is going to be this development, consistent improvement on this process.

Because we just talked about some of the lengths that people will go to to avoid detection. Right. And so this is probably going to be a, a continuing trend that we see.

Winston: Oh yeah, definitely. Like yeah. No, I mean, farms are gonna be around forever and, you know, the criminals are gonna be, you know, creative and think of different ways to obtain them.

Yeah.

Jason: So in terms of our audience who are analysts, what message would you like to tell them in terms of weapons investigations?

Winston: Okay. In terms of weapons, investigations, I guess try and keep, you know, updated on, you know, what kind of firearms and [00:56:00] weapons are showing up in your jurisdiction, or, you know, ATF is a great resource.

There is a website that the ATF have on information on firearms. So yeah, when I think of weapons, I guess I, you know, because of my background and what I'm currently working on, I think of farms itself. And just keep abreast of what the current trends are. And like I said, ATF is, has a, is a good resource in terms of the laws that are currently in place.

And, and the type of. Firearms that are being being seized across the country and, and throughout the world. And, and I actually, another thing I would suggest is to network, you know if you're working in illegal farms, you know, you can reach up to myself or, you know, other analysts who are involved in, in.

Firms and just to share information and intelligence, because I always believe, you know that as an analyst, I think networking is such a valuable tool and it, it's underutilized and, just a great example of networking being such a great resource for me is [00:57:00] by being able to present in the Hague with Europol and being able to attend their first 3D printed firearms conference.

I've been able to learn lots just from networking and, granted, as you, you know, as I said, I'm a self-described gun nut, so , it's in my DNA to, to be familiar with firearms. But I'm not saying you have to be completely, you know, knowledgeable about firearms.

Just, you know, be aware of the trends that are out there. Like, you know, there's stuff showing up on the news on terms of like these Glock Auto Seals, there's, you know, news items across, you know, in, in different jurisdictions where these are being seized and, you know, 3D printed firearms. You just need to Google it and just see what the current trends are and just be aware.

, and the other thing too is that for those analysts who are working law enforcement agencies around the. drugs and guns go hand in hand. So, and I've learned that too. I said, you know, early in my career, I, I was working a lot of drug trafficking groups, firearms always involved because they need these firearms to protect their, their property, their, their [00:58:00] supply, you know, to take out other rivals.

So I find that you know, drug trafficking groups, you know, they will eventually, you know, it's just another commodity for them. So keep an eye out on those groups as well. And anyone involved in, in drugs, because like I said, firearms and drugs usually go hand in hand. So those would be kind of my advice is to yeah, like I said, you know, keep abreast of anything that's happening, you know, firearms related network.

Try and identify, you know, counterparts or even, you know, within your own law, law enforcement agency, if you have a weapons expert or firearms expert, have a little chat with them and say, Hey, you know, what, can you tell me about, you know, what you're seeing? Type of thing. Because that's gonna go a long way.

And like I said, you don't have to be, you know, no guns like the back of your hand, but if you're just aware of what, what's going on within your area and outside of it, I, I think that will give you a step up. Yeah. And for the

Jason: audience we'll put Winston's contact [00:59:00] information in the show notes with all our guests, they're, happy to receive messages and answer questions that you may have.

So please feel free to reach out to Winston if you have questions or just want to network. Yeah, definitely.

, so our last segment of the show is Words to the World, and this is where I give the guests the last word.

Winston, you can promote any idea that you wish. What are your words to the

Winston: world? Let's see. My words to the world, and I've learned this throughout my career, is to network. And I know, you know, I always joke because you know, the reason I became an analyst is I don't like working with people. , . I prefer working with data, but, you know, people are part of our industry.

And, you know, I'm, I'm kind of an introvert and I, like I said, that's pretty much why I got into the analytical world because I, you know, a lot of us analysts work with data mainly, but go out there and network because you know what? Like we come across so much information and we're not [01:00:00] the expert on everything.

and if you can reach out to somebody that will be able to give you that information at the drop of a hat and can expand your knowledge, you know nowadays, you know you can do it virtually, you can. email somebody and say, Hey, look, I came across, you know, your contact information. I'd like to discuss something with you, or do you have any information?

And LinkedIn, again, it's been a game changer for me so I just recently joined LinkedIn during Covid and it was one of those things that's like, oh, you know what? I'm not being able to go to conferences or to meetings. I'm pretty much stuck at home. I'm gonna start networking online.

And so I joined LinkedIn and didn't realize the number of intelligence analysts on that platform. I was blown away. And just one by one, I started connecting

with people and. It's such, an underutilized tool, and it's something as analysts, I think it's something we really should work on doing more of.

And you know, now with, you know, things opening up a bit, you [01:01:00] know, there'll be conferences and, and seminars. But like I said, you know, if you're sitting at your desk and you know, you, you, you're able to get some contact information, just reach out to them. Because the thing is, is like when you, like, if down the road you're working in investigation, you're like, oh, I need some, you know, somebody in this part of the world or in this part of the country, hey, I, I, I sent them an email and you know, you send them one back and they'll, they'll more than likely recognize your name and you can form that instant connection.

So yeah, like I said, the main thing I, I would like to say to the analyst out there is to

Jason: network. Very good. Well, I leave every guest with you giving me just enough to talk bad about you later. But I do appreciate you being on the show, Winston. Thank you. Thank you so much, and you be safe.

Winston: You too, Jason.

Thanks very much. Take care. Bye now.

Mindy: Thank you for making it to the end of another episode of Analysts Talk with Jason Elder. You can show your support by sharing this in other episodes found on our [01:02:00] website@www.podcasts.com. If you have a topic you would like us to cover or have a suggestion for our next guest, please send us an email@elliottpodcastgmail.com.

Winston: Till next time, analysts, keep talking.