

# Torrance Police Department (CA)

## Voiceover

00:00

Welcome to *The Beat*—a podcast series from the COPS Office at the Department of Justice. Featuring interviews with experts from a varied field of disciplines, *The Beat* provides law enforcement with the latest developments and trending topics in community policing.

Today's interview is on-location at the COPS Office sponsored, PERF-hosted Forum on Unmanned Aircraft Systems.

## Jennifer Donelan

00:23

Hello, I'm your host, Jennifer Donelan. In 2016, when the Federal Aviation Administration sketched out its official rules for how drones could be operated safely, the Torrance California Police Department was ready. Today we are pleased to have with us Sergeant David Maitlen and Police Officer Matt Slawson, both founding members of the department's drone team. Welcome to *The Beat*.

## Sergeant David Maitlen and Officer Matt Slawson

00:46

Good morning. Good Morning. Thank you for having us.

## Donelan

00:49

Let's start with a basic question. What drove the Torrance Police Department to be ahead of the curve and to start its own Drone Program? Sergeant Maitlen, what was the impetus?

## Maitlen

00:59

So in 2016 we started a users' group, kind of a working group just to try to see if drones were going to be something we could use in police work and how we would use those drones. With that, we had one lieutenant, one sergeant and multiple officers kind of sit down and try to sketch out exactly how we'd use it. At that time we came up with probably five, maybe six things that we're thinking. Basic stuff like crime scene investigation, like overall photos, perimeters, searching for missing people. Since that time we've had our program approved and deployed almost 200 times now. And, it's really gotten the ball rolling. And now, we're figuring out that it's not just those five or six times that we can deploy. We're now figuring out we have a lot of different ways we can deploy. We have deployed not only police work-wise, but we also have helped out the city and inspected cell towers in our city. We have coyotes that run around the city and we get calls from residents. We've actually searched for coyotes which, I can tell

you, we never thought we'd be doing as a police department with a drone when we first started to roll this out.

## **Donelan**

*02:04*

Officer Slawson, anything to add?

## **Slawson**

*02:06*

So early on, when we were just starting to sit down and consider using drones, we considered the fact that the technology is so much more affordable so it's essentially off the shelf that we're buying from companies that anyone can really buy off, at Amazon or in the Internet. The technology really became affordable and it was easy for us to obtain.

Additionally, another reason why we consider using it was because we don't have a helicopter program at our police department. We rely on neighboring agencies such as the L.A. County Sheriffs or LAPD for manned aerial support. However, when they come over to assist us, their primary function is going to be in their jurisdiction. So they maybe overhead in an incident of ours but have to leave or have to refuel or whatnot. So now having the drone program allows us to have constant aerial support for our operations.

## **Donelan**

*02:56*

You mentioned cost effectiveness. Just curious, what is the cost of the drones you use, Sergeant Maitlen?

## **Maitlen**

*03:03*

Ah, it varies depending on the type of drone. The real expense that we're finding, again, something we didn't understand when we first started, is actually the payload, it's the camera system you're using. A lot of times, for an infrared camera, that would actually cost you more than the drone itself.

## **Donelan**

*03:18*

Officer Slawson, what is your current drone capacity in Torrance? How many units, operators, number of mission, primary functions and uses? Those kinds of things.

## **Slawson**

*03:28*

Currently we have ten drones right now, some of which we're the same platform that we initially started with, a cheaper model that was here with in training. So we have six of those. On our bigger end, we have two larger drones, both that are capable with infrared or as we call it FLIR, Forward Looking Infrared, which allows us to see heat signature. So, if someone is hiding in bushes, under a car or whatnot, we potentially will see their heat signatures. That really helps us in trying to locate suspects at night.

## **Donelan**

*04:04*

Sergeant?

## **Maitlen**

*04:06*

And then as far as our team goes, we have one lieutenant, myself as the sergeant, and then ten officers. Our capabilities are most of our people are on patrol, so we actually have them in the cars with us and can deploy on patrol. We also have—One of our members is in detectives, another one in personnel. We kind of have them staged throughout the day and throughout the week when they work. So we're basically available 24/7. And, if there's not somebody available, we get called out which seems to happen on a regular basis.

## **Donelan**

*04:35*

Do the officers that operate the drones have any special skills or certifications? How do you develop them Sergeant Maitlen?

## **Maitlen**

*04:43*

So everybody on our team, from lieutenant on down, including myself, all fly the drone and can get deployed. As far as our training, we are all 107 certified, and we also have a two-day in-house course that we do as well where everybody has to go through this two-day course. Part of that is flying. Part of that is learning about the airspace COAs and different things that we do and are going to do on a regular basis when we do deploy. We also do a monthly training with our team. During that time, one of the things we quickly learned was drones were really kind of regulated.

A lot of the ideas were coming out from helicopters, but we also quickly realized we're not the same as a helicopter. One of the helicopter things was, for them to stay proficient, they have to have three takeoffs and landings. I don't want my guys to only have three takeoffs and landings with the drone, it

doesn't make sense. So, we implemented more of a qualification where, like for our trainings, we'll go out and basically reenact a situation that we may have had during the month that we had problems with something that happened. Then we'll practice that and we'll qualify on that to make sure everybody's proficient with it. Again, that's our idea of how to keep the drone program safe. And that's a big thing, the safety.

## **Donelan**

*05:57*

You mentioned that your pilots are Part 107 certified. Can you tell us more about that certification and process Officer Slawson?

## **Slawson**

*06:05*

Sure, I can touch on that. In 2016, the FAA established regulations in the framework regarding the commercial use of UAS or commercial use of drones. That took place in August of 2016. And, public safety can also fall under that although it's intended for commercial use. For example, someone taking real estate photos and making money by using their drone. Public safety also falls into that category.

All 11 of us on the team are Part 107 certified which requires taking a 150 multiple choice-question test given by the FAA. Essentially, it's the same as ground school for a manned pilot. So you're not learning everything that a manned pilot would learn but definitely all the same materials, such as aerospace and other aviation topics related to that.

## **Donelan**

*06:56*

Sergeant, tell us some of the success stories of your drone deployment, particularly if it pertains to cost reduction or easing of liability for your department?

## **Maitlen**

*07:07*

Sure. Absolutely. We have a ton of great use cases and again now we're starting to see them on a weekly basis. One of the first ones that was really interesting that we had was a felony stop, basically a high-risk stop on a stolen vehicle. The driver exits the car. The passenger, we get no response from him. One of my guys was actually out taking pictures of a traffic accident that had occurred. Here's a call, go out. Here's that they can't get the person out. They have K9 en route and a couple of other tactical resources in route.

Ultimately, what happens, the initial thought was that we were going to send the dog on the person that wasn't responding and get him out. This was gang-related as well. And instead, they ended up using one

of our smaller platforms actually flew it up on the car. We quickly figured out that the person had passed out inside the car and that was why he wasn't responding. It wasn't willful not responding.

And the other good thing about that is around the city we have people that film and that are negative obvious on YouTube. We actually got a really positive response from some of those standing around filming. How great it was that we're using a drone to get basically live time information and figure out what was going on. Further, they used it to see what stores were unlocked. Then they came up with a tactical plan of how they were going to get them out. And then again, limiting liability, no force was used now when he is taken out of the car. So it gives us great intel into what's going on.

## **Donelan**

*08:31*

Officer Slawson, any other examples?

## **Slawson**

*08:34*

I can provide a couple more instance that was really beneficial with the drone. We assisted our neighboring agency closer to the LAX Airport. It was an individual who had ran from the police, actually shot at the police and there was an exchange of gunfire. No one was hit thankfully. The suspect ended up hiding and barricading himself up on the roof of an apartment complex in that city. They called for our assistance. We responded and we launched the drone. We actually got the clearance to fly in very close proximity to LAX Airport and we're able to keep constant visual of the person on the roof with the drone.

And we were so close to the airport that the police helicopter actually was not allowed to fly there because they were so much higher than drone. In regards to that, the drones are never going to replace helicopters. We don't see it that way, but definitely they complement each other. We can both share the airspace and work at the same time. It was pretty impressive.

## **Donelan**

*09:28*

Your response, Officer Slawson, brings up a quick question. Some listeners may not be aware that Torrance is adjacent to the city of Los Angeles and near the complicated airspace of LAX airport. What size is your city, and what unique challenges do you face operating so close to a major airport in your area.

## **Slawson**

*09:48*

Torrance is a suburb of Los Angeles. We're about 20 miles south of L.A. We're about 20 square miles. We, from my understanding, we are in some of the most complicated airspace in the country. We have

upwards of 20 airports within L.A. County. We have multiple airports right around us, Torrance being one of them. We have Torrance Airport in our city. So there were some unique challenges for us when we were getting started.

As part of the rules under Part 107 that we discussed earlier, in order to operate a drone as a public safety entity within what they call controlled airspace, basically within close proximity to the airport, you have to get certain authorizations and waivers from the FAA. This was back in 2016 when we started working on this. And from what the FAA told us, we are actually the first public safety agency in the country to have received a Part 107 airspace waiver, which is pretty neat. So we kind of worked on that together. We built really strong relationships with the FAA. We now have authorization to fly not only in our city but within the LAX airspace, Hawthorne airspace, and the surrounding area.

## **Donelan**

*10:49*

We are talking with Sergeant David Maitlyn and Police Officer Matt Slawson of the Torrance California Police Department about Unmanned Aircraft Systems and their drone program.

This next question is directed to you first, Sergeant Maitlen? What was the response when your Unmanned Aircraft System was introduced by the Torrance Police Department? Did you have a public conversation about the implementation of your drone program in the beginning, or was it an internal process within the department and city?

## **Maitlen**

*11:19*

So I guess a little bit of both. We didn't know how we are going to be accepted. It hadn't been tried in L.A. County really. We had seen LAPD I guess kind of tried, and that didn't go over very well. So we weren't really sure what kind of response we were going to get. Our citizens are very positive towards our police department, so we knew that would be beneficial. Ultimately we went to the City Council first and did this closed session and told them what we were planning on doing, the different mitigation things we're looking at for safety, and how we thought it was going to benefit the police department and the citizens for that matter. Then ultimately, when we got it approved, we went before the City Council and in front of an open forum and we had very little push back by anybody.

Again since we've had the program started, we go to co-partners in policing, teams in policing, different basically public avenues where we show what we do. We were using, I don't want to say off-the-shelf drones but we go back to you can buy any of these drones on the Amazon. It's just how we fly them, and we have a lot of flight time into them, and it's how we're using them. It's no different than with the Ford Explorers we use, right? We drive them better a lot of times than the general public. But I think our openness and the fact that we have gone to these different things. If there's a question in the field, I know my guys will always stop and answer questions.

We're always happy to show off the drones. I know one of the things we do at some of the public ones, we'll let people fly the drones so they can understand exactly what we're seeing and what we're trying to see. We make it very clear that we're not there to look into your house.

We're not there to fly them next to your window unless you're the bad guy, unless we're, you know, doing some tactical situation. At that point in time if the SWAT team's outside your house, you'll know we're there. It won't be the drone flying in first.

We've had a great response. We really have had a lot of positive feedback. Truly, and I never thought about this when we started, they like it because there's less noise than the helicopter. So now when we're flying, they generally can't hear it inside their house. Compared to when you have a police helicopter at 400, 500, or 600 feet, it's very loud. Especially at 2:00, 3:00 in the morning you're going to hear that. It's going to wake you up. A lot of times they don't hear it if it's a drone.

Then with that we also put out a PA announcement and let people know that we are flying and that we are going to be filming if we're going to be filming. Then we also have the ability to put out what's called Torrance alerts. It's basically an alert system that goes out over people's phones. So we've tried to be open and honest about it. Also my team members, if there's drone calls in the field, we'll go and try to educate and also talk to people in the field. So if we get a police response to something that has to do with drones, we also respond out to that and try to educate them as well.

## **Donelan**

*13:59*

And you, Officer Slawson?

## **Slawson**

*14:25*

And just quickly, I've been on the team coming up on three years now. And we have hundreds of deployments. So I can say we have never had a negative comment even one time on the field. It's been very supportive. In fact, on one of the search warrants we had done, there was an individual who came out of his home. Unrelated to the search warrant, he was coming out to go to work. He came out and saw us flying the drone. He looked up and looked at us and said, man, why can't all the departments use a drone instead of a police helicopter. So it's been very positive.

## **Donelan**

*14:25*

That's an interesting concept, particularly about helicopters and how drones afford you uses that helicopters simply cannot. What conversations did you have within your department about incorporating drones and the process of when drone deployment is requested? Sergeant?

## **Maitlen**

14:42

Yeah, that's been an interesting road to say the least. I'm a patrol supervisor as well, so that helped because I was in the field and I can also okay it. So that really helped out with deployments. Because I'm always pushing my guys when something did come up, take it out there and fly.

Initially, one of our first things I believe we went out on was a traffic collision. Unfortunately it's a fatality traffic collision but the debris field probably went for 200 yards. It was a big scene, lots of skid marks and stuff. Nobody really understood, I don't know if we totally understood the things you could see with the drone and what you could actually photograph and videotape. So we put it up on that and instantly they were amazed because they get to see not only the debris field. They could see skid marks. They could see where the cars collided. They could see so many different things. Again that's all going to help with prosecution. So I think that was huge. That literally started pushing us forward.

Then the first perimeter we had when you have a sergeant that knows nothing about drones standing next to you, and all of a sudden he like, oh my gosh, look at that, look at that. And then we ended up having another one where there was a different sergeant standing next to Officer Slawson and he actually finds the guy. The sergeant was beside himself on the radio trying to tell the units where this guy was standing at as the bad guy, next thing you know, ends up giving up to the drone. He does and he just puts his hands up and basically gives up and they catch him without an incident.

## **Donelan**

16:03

So it was like, surrender to the drone.

## **Maitlen**

16:06

He surrendered. He didn't know quite what to do. We were fairly early on. We weren't totally sure what to do either. So we just guided in units and went from there. So we've had so many successes and that's what really pushing us along. It almost snowballs.

Once you have one success, that turns into two more. And now we're non-stop. Now we actually get called not only by our police department but by every other surrounding police departments that doesn't have a drone team as well.

We have also found success not only with the drone but utilizing the drone with a helicopter. So that's been the other interesting one, that we never thought we'd actually work alongside the helicopter. We had a department that had some bad experiences with the helicopter. Then we had them out to our training and said, hey, here's what we do, here's how we can mitigate the risk. We had a lot of long talks about, hey, this is what we'll do, this is what you guys can do. He actually flew the drone a couple of times and he was like, man, this is great.

Not too long after Matt actually ended up finding a guy that was running from the helicopter. He was actually watching the helicopter and running when the helicopter was in orbit and the drone was following the whole time. So we had even more conversations after that. That pilot actually calls us out now when they have a perimeter so we can work in unison with them.

## **Donelan**

17:15

Interesting. You've talked about how you use drones tactically, and its different surveillance uses and flexibility, as well as drones as a police responder in capturing a scene. What about enforcement of drone use, by which I mean people who fly drones recreationally, or possibly for criminal or illicit purposes. Have you had reason to address this issue Officer Slawson?

## **Slawson**

17:39

This is a large topic of discussion right now. In our opinion there's quite a disconnect between the enforcement powers, between the federal government and local agencies. So to put it in perspective, the FAA is the sole jurisdiction for where drones can fly in the air. The FAA has sole jurisdiction on where drones can fly. Where that leaves us as local police is that creates an issue for us because we can't enforce that law. We actually have no enforcement power over that federal law.

I gave the example of someone trying to operate a drone close to an airport. We don't have a local ordinance in Torrance that covers drone law. Even if we did, once again it's only the federal law that can control where the drone can fly. So really the federal government, and the FAA, and essentially the FBI would have jurisdictional power. So it's a problem we're running into. Thankfully we haven't run into it much, maybe one or two times in Torrance, but we can see it being more of an issue. From my understanding, that issue is being addressed right now. There's recent legislation that's being looked at and a report going back to Congress to kind of address that. So we're looking forward to what's going come of that.

## **Donelan**

18:55

Anything you would like to add, Sergeant Maitlen?

## **Maitlen**

18:58

If I can just correct something as well. When we talked about surveillance, I know that was one of the big issues we had. And that was one of the things that we saw other departments don't do well when they talked about surveillance and stuff. That's one thing the Torrance Police Department really tries to stay away from. We don't do surveillance. The only time we use the drone is when have a crime, an actual crime minus missing people and things of that nature. But we don't do surveillance on anybody's

window or just randomly put it up to follow somebody. We always have some type of crime or something specific we're looking for during that time.

## **Donelan**

*19:30*

Interesting to know. We are getting to the end and it brings up this question. If you come across a department that is considering a drone program Sergeant, what advice would you give them?

## **Maitlen**

*19:41*

I think the big one is you don't know what you're getting yourself into. When I started this, I put my hand up and said, yeah, that sounds like a lot of fun. Next thing you know we get phone calls constantly. Yeah, you don't know what you're getting yourself into. The couple times you think you can use it, it's amazing all the different ways you can use it on how you're going to save yourself and the department the liability and you're going to make your officers safer. So what did they need to do? I think they need to look at their cases and not look at the technology. Use the technology but more look at how they're going to use that technology and so more the officer's safety side of it. That's really where I think the bonus of this is, is the officer's safety and how we can make our officers and citizens safer.

## **Donelan**

*20:22*

And your advice, Officer Slawson?

## **Slawson**

*20:25*

Yeah. I will just add personnel. It's very, very important within public safety to find your motivated personnel who are somewhat tech savvy; who can understand the equipment, understand troubleshoot issues and really put forth the effort. I think this detail within our department differs from others in that, with the technical aspect, they really have to be motivated. For agencies who are looking at starting the program, I would suggest reaching out to neighboring agencies or someone else in your area who you know has a program. See if you can attend their trainings. See if you can learn from them and obtain as much information from those agencies that already have programs up and running.

## **Donelan**

*21:01*

One last question. If someone wanted to pick your brains about drones, how would they get in touch with you? Sergeant Maitlen?

## **Maitlen**

21:08

The best way is probably email. I work graveyard, evenings. So unless you're up at 2:00 in the morning, email is probably the best way. My email is D-M-A-I-T-L-E- N-at-Torrance, T-O-R-R-A-N-C-E-C-A-dot-G-O-V.

## **Donelan**

21:28

And for you, Officer Slawson?

## **Slawson**

21:30

Matt Slawson. Email is M as in Mary, A, S like Sam, L-A-W, S like Sam, O, N as in Nancy-at-Torrance-C-A-dot-gov.

## **Donelan**

21:43

Thank you both Sergeant David Maitlen and Police Officer Matt Slawson of the Torrance California Police Department for joining us on *The Beat*.

## **Voiceover: *The Beat* Exit**

21:52

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22:51

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