

*Interview with James Lewis*

*CSIS*

*February 5, 2008*

MB: Turkey was having problems with a Kurdish terrorist organization called the PKK which is based in northern Iraq and conducting operations against the Turkish military and Turkish civilians from the base camps. And after that, we start hearing that the US is trying to give some intelligence sharing to Turkey and often that Turkish operations started in northern Iraq. Now, what do you think this intelligence sharing from the US is including?

JL: A lot of the most useful military intelligence is what people sometimes call target packages. And a target package would be information on say a camp, a PKK camp. It would include imagery; it would include assessments as to what the best approaches are, what the weapons are that were there. So that could be one thing that the US is giving. They might be giving things that are a little more real time. They might be giving imagery from satellites or from UAVs. But basically visual intelligence, pictures of the targets that the Turkish air force might go after.

MB: Let's talk about this real time intelligence first of all. I mean which kinds of instruments can be used for this real time intelligence and what are they?

JL: Real time intelligence is that you have a sensor, probably on an aircraft or on a UAV, and it relays the data, the picture it's taking back to either a command center or in some cases probably an aircraft. It does that however through satellites. So think of it as the UAV is here, it sends a message up to the satellite with a picture, and that video stream comes back down to the command center, or wherever the receiver is. So real time means that you're seeing the picture as it is taken, just as if it is a live television show.

MB: And the satellites do not have the capability of real time?

JL: No, satellites are getting close to real time but the issue there is the ability to receive the picture, you need special equipment to do what they call download or downlink the image. A satellite may be able to do real time data streaming to the headquarters here in Washington, or perhaps to one of the military commands, but it wouldn't be able to do it to a truck or an aircraft.

MB: And what is the difference between the civilian satellites and the military satellites?

JL: The main difference is that the military satellite is a little more precise so it can take a slightly better image, a greater level of detail. And that it also can provide more timely detail. You know that the military satellite might be giving you a picture that was

taken an hour ago or two hours ago. In the civilian satellites it might be a day old or a couple of days old. So it's the timeliness that's the most important.

MB: What about the zooming in? I mean like in the Tom Clancy books or the "Enemy of the State" sort of Hollywood movies? Can they really observe the people's clothes and even faces when they look up in the daytime from space?

JL: The short answer is yes. The movies exaggerate quite a bit, not surprisingly. But for a UAV for example, they could zoom in and they could see your face, they could see what kind of car you were driving. They could see what you were holding. And so either a UAV or a satellite can provide an immense amount of detail, much more than what we're used to getting.

MB: Would you give us some more information about UAVs? What are they, where have they been used mostly, what sort of information can they tell us?

JL: UAVs have been around for a long time. In fact the first one was built in 1916, but the big change came about a decade ago with more powerful computers, with lighter sensors, with better materials. You could suddenly build high performance UAVs that were much more capable than anything we'd seen in the past. And so many countries now use these, including the US. They're basically small unmanned aircraft that carry some kind of camera, a radio, and they can be very precise. What we know too is that some UAVs have been armed and can be used successfully to attack targets.

MB: So from what sort of distance are they flying from the earth's surface?

JL: UAVs are controlled out of Las Vegas, many of them. So you can have a UAV operating in Afghanistan, and the controller, the operator, the pilot will be sitting in Las Vegas. It's nicer for him because of course when he gets off he can go out to a much nicer city than might be the case in Bagram or someplace.

MB: And when they fly, what distance do they fly from the surface of the earth?

JL: It depends on the mission. The most common UAV, the predator, can go up as high as five miles, which would be of course very hard to spot. It's a small aircraft, very tiny, and if it was five miles up there's no way you could see it or hear it. They can also come down to a very low level, they can come down to a few hundred feet. The issue there is you don't want the UAV to accidentally fly into something. So picking the height that lets you see the target, that lets you collect the data you want, and that avoids crashing into something is the optimal range. But it's anywhere from a few hundred feet to five miles.

MB: What are the countries in which the US military have UAVs at the moment?

JL: Most countries have seen the benefits of UAVs, and so a lot of them are either developing them or acquiring them. The Russians, the Indians, the Chinese, the Israelis,

the Germans, the French, the British, the list is endless. Because UAVs are cheap. Right, it's basically a relatively small aircraft and the cheapest models might have something that's a lot like the digital camera you might own yourself. So many countries are looking into building these things.

MB: So do you think at the moment, for example, to observe the base camps or the movement on the Turkish-Iraqi border of the PKK terrorists, the US is more using the UAVs than the satellites?

JL: One of the things the US is good at is combining data from different systems so it might be an aircraft like the U2, it might be a UAV like the predator, and it might be a satellite. And what the US has become good at doing is combining data from all three sources so you get much more precise intelligence. UAVs have an advantage because they're easier to keep over the target area. You know the satellite is going around and around the earth, but the UAV can loiter for maybe an hour, maybe two hours. It can sit over the target and take pictures and provide, in close to real time, exactly what's going on in that camp. So my bet would be that UAV data is part of what's being used.

MB: Now when we are talking about intelligence sharing, which agencies do that? I mean how does the system work? How does the US share intelligence that it gathers with another country? How do the channels operate?

JL: There's several different ways that the US can share intelligence, and some of it depends on the kind of intelligence, some of it depends on the relationship with the country. In the case of Turkey where we've had close relationships for a long time, it might be from military to military. So the Air Force might provide, or the military commanders in Turkey, the army might provide to the Turkish military. The more usual system is for the CIA to provide the intelligence directly. And in the past that's usually been how it worked. Sometimes there's been a little bit of a turf battle among agencies is to see who will get to supply intelligence. I don't know which one it is in Turkey, but it's probably either the CIA or the military providing the intelligence directly to their counterparts.

MB: So that brings us to what is the intelligence structure of the US at the moment? I mean are there civilian intelligence agencies, military intelligence agencies, are they different? How many agencies are we talking about?

JL: There's 15 different intelligence agencies in the US. And it's called the intelligence community – they ought to call it the intelligence tribe cause it's not really a community because they don't always get along with each other. One of the big efforts over the past few years has been to reform US intelligence, to make it less this collection of different agencies. It can run from the Coast Guard, which is kind of silly as an intelligence agency, to something like the National Reconnaissance Office which operates satellites, or the National Security Agency, which conducts signals intelligence.

MB: What are the differences between the National Security Agency, CIA, DIA. I mean, which is the biggest, which is the more powerful, how can we classify them?

JL: None of them are particularly more powerful than the other. They all have different missions but there's a lot of overlap. So the CIA for example has the clandestine service that is the human agents, it's what most people think of as espionage. But they also have the biggest analytical branch, they have something called the Directorate of Intelligence, and they do most of the analysis, they sit down and write the reports that our leaders read. And they might be the ones assembling whatever intelligence is going to Turkey. The DIA, the Defense Intelligence Agency, does almost the same thing for the Defense Department. The National Security Agency focuses mainly on communications intelligence. They don't have agents, they don't roam around the country, what you've seen in the movies is wrong. NSA is an agency where people sit all day and listen to tapes and try and decipher them. NRO is the office that builds and operates the spy satellites. So a very different mission, but they have no analytical capability. So what you see is a very diverse community serving different customers, each of which have a slightly different mission, but some of whom have considerable overlap and they compete with each other.

MB: So how does the US decide to share this intelligence that they've gathered from all this community lets say to a country. What are the ways, what are the channels?

JL: This would have been a White House decision, and it's made at the National Security Council. Usually you have the State Department, the CIA, and the Defense Department agreeing that it's in our interest to help an ally by providing them with intelligence. We don't do it with everyone, and the level of intelligence we share differs from country to country. Some countries get the really good stuff, other countries get stuff that's not much better than what you can read in a magazine. It depends on what our relations are, and what we think the value of the intelligence is to you. In this case its very valuable intelligence. It's intelligence that would be very difficult for Turkey to get from anywhere else. So I'm sure that was made at the highest levels.

MB: When you think about some insurgents, some terrorists using a very high mountainous area, with some caves and some very closed valleys trying to infiltrate from one country to another lets say, from northern Iraq to Turkey, which do you think is the best intelligence to provide for Turkey? In the future maybe Turkey should gear itself with this intelligence. What's the best sort of intelligence to work under these circumstances?

JL: The intelligence that we see the most demand for these days in the fight with terrorists is UAV intelligence because it's very timely and it's very localized. So you can fly the UAV over a camp, over a transit route, they can operate at night, they can loiter. They can carry different types of sensors like radar or infrared. UAVs are what people want.

MB: And also, trying to understand this system of sharing intelligence, is there a lot of mutual interest involved in this? Is there bargaining involved?

JL: Usually not. Usually there's an existing relationship where we've say we've worked closely with the Turkish military, they've made a request, and we'll meet it. It's usually done that way. We have intelligence sharing relationships with many countries because the US has what are called national technical means, satellites, other systems that most countries can't afford. And so we share with our allies and it's usually not a reciprocal arrangement or a bargaining arrangement.

MB: So they don't say like we are providing you these pictures, or these intelligence, but in return we want you to do this for us.

JL: Usually not. I mean there might be some of a larger more political bargain, but we wanted to keep Turkey happy and giving them intelligence is one way to do that. And it's relatively low cost for the US because we collect that intelligence anyhow.

MB: And to wrap it up, you're saying that it's sort of a combined intelligence sharing, with satellites, UAVs, and on the spot in the field, manned intelligence as well. Which is the best to conduct? Which is the most useful one?

JL: You know a couple years ago the US set up a new intelligence agency called NGA, the National Geospatial Intelligence Agency. And this doesn't have any agents, it doesn't operate any equipment. What it acts as is a fusion center where intelligence from satellites, from UAVs, from NSA, all come in and it's fused into a new kind of product. So if you can fuse intelligence from the human agents, from your signals intelligence, which Turkey has, with UAV data or satellite data, it's better than any one flavor by itself.

MB: Cause what we see normally is that the Turkish airport operates pinpoint bombings to the camps or the bases, and then the artillery from a distance start to bomb as well for a laser guided target. So what does this sort of scenario tell you? Who is working for what sort of job?

JL: The first part, the air force strikes, could be satellites, they could be UAV. Those are probably imagery – you get a picture of the target and a location which you might want to bomb. The second part, if you're using a precision guided munition with an artillery shell that's laser guided, that's either a human being on the ground with a laser pointer, or it's a UAV using a laser pointer.

MB: UAVs can do that too?

JL: UAVs can highlight, they can paint it's called, they can paint a target to guide a munition in. You can also do that from another aircraft, and that's one of the things

you'd want to look at. If there was an F-16 flying over the target, it might be painting the target with a laser to guide the artillery shell, but the usual bet is a person or a UAV.

MB: And very lastly, where do you think this high tech is taking us in the intelligence world?

JL: We're actually getting into a situation where people are overloaded with data and we need to find a better way to sort data. There's so much more data that people here in Washington are thinking, how do we sort this information, how do we take advantage of it. In the field what you're seeing is what people might call greater situational awareness. Commanders have an insatiable demand for UAV data, they love to get the real time video. And you can think about it, if you can see what was down the road ten minutes before you walk down that highway, you would be much better off. You might be able to avoid an IED or a sniper or an ambush. So people love UAV data. So we see two things happening. One: a need to sort the information, and two: a need to better integrate it down to the actual fighting units. And that's where we're driving. So we're going to see a very different kind of combat in the next three years, one where the US may have an advantage.

MB: What about the ability to read or make sense of the data that's coming from the intelligence sources? Is there any sort of movement, because that was a big debate in the states after 9/11.

JL: Two things have happened to make better use of intelligence. The first is an effort to get these various agencies to work better together. The US created a new kind of control for intelligence called the Director of National Intelligence. He has put a lot of effort into getting agencies to cooperate. Everyone says information sharing is the new mantra for the intelligence community. The other thing that's interesting is the question of software. You can have people sort intelligence, maybe you can have a machine sort intelligence. One of the things we're looking at, we're all familiar with google right? So google, you have a question, you type it in, and it collects data for you. What if you had something like google for intelligence data? That would be kind of neat. So one of the things you might see in the next two years is new software that will do a lot of the sorting and prioritizing before a person even looks at the intelligence.

MB: Jim Lewis, thank you very much.