

## European Region Introductory Remarks

Colonel George A. Uribe, USAF  
Chief, Operations & Training Division, Headquarters United States Air Forces in Europe

Thank you very much for the kind introduction, and my thanks to the association for the invitation to lead the European panel. For background I do not work in U.S. European command, but I do work in the air force component to EUCOM. I do not work in NATO, but I do work regularly with the NATO air component headquarters also based at Ramstein. I'm not going to describe Europe to you, as it has been around a lot longer than I have. My comments today aren't on behalf of NATO, but are to paint a picture of what is happening in the alliance and to share some considerations for precision strike there.

To prepare for this I attended the NATO senior officer staff policy course at the NATO school, which I highly recommend to any military or government personnel doing business with NATO. Since we are talking about precision strike I also spoke to the EUCOM targeting shop, and the target support element in the NATO air component headquarters at Ramstein.

I'll start by noting that NATO is in its third stage of life. It was born into the first stage, which was the cold war. That stage was of deterrence, where NATO showed its force but did not use it. Its forces were primarily deployed within the borders of the alliance. The second stage was the post-cold war stage where NATO had a role in re-ordering Europe, and through partnership linked it with nations on its periphery. This is also the first time that NATO started operating outside its own borders in the Balkans. The current stage is the post-9/11 or post-globalization stage. Here it is dealing with the security challenges that have arisen from globalization, its forces are operating even farther away to ensure its security, and its membership has further expanded. Today, NATO members and partners have 140,000 troops deployed in Europe, Asia, and Africa, and afloat in the Mediterranean and in the Somali basin. There is an arc of instability that extends from central and northern Africa to the Middle East, to the Caucasus and southern Asia to North Korea, many of NATO's operations are in the western half of that arc.

At the Lisbon summit last year, leaders of the alliance nations agreed on a new strategic concept. The alliance is in the planning stage to implement the new concept both politically and militarily. What is clear is that NATO will reform its structure, and like the nations that comprise the alliance, it is working to control costs and increase efficiency. The strategic concept focuses the alliance's efforts on three themes; collective defense, crisis management, and cooperative security. It is shifting its focus away from military-only solutions to face the new challenges that exist today and to establish new partnerships. Yesterday we heard admiral Roberti call it the "whole of government approach." NATO calls this the comprehensive approach, and it aims to integrate military, other government, and non-governmental organizations into both planning and execution stages of operations.

So with this background in mind I began to think about what the current security and fiscal environments mean for precision strike. First, I thought about what precision strike means to me. Is a guided bomb going through a specific window a precision strike? Certainly. Is a special operations team knocking down the right door and capturing a specific person a precision strike? You bet. How about

cyber precision strike? Consider the STUXNET virus. Strictly from open-source reporting, it exploited a security flaw in a piece of industrial equipment. It took action only when that equipment was in a very particular configuration, and has affected the Iranian nuclear program. Was that a precision strike? In its most generic sense a precision strike is a discrete action on a particular target to gain a certain effect.

While you think about that I'll say that it is easy to focus on the "striking" part of precision strike, just look at the much of the hardware displayed outside. But that diminishes the efforts on the very necessary before and after parts. What comes before, or left of the bang? The process to identify targets and characterize targets. The PSA vision statement lists them as "locate, fix, track, and target" before attack. After the strike is a necessary assessment process to see if it yielded the desired results. An effective precision strike capability requires the ability to execute the entire targeting life-cycle. The targeting personnel I spoke to are concerned that some nations have focused on the striking part, and still need to develop the others. Another point to ponder is that precision strike also requires supporting policy development. Precision strike may allow economy of force, and the ability to limit collateral damage. For example, though, each nation needs policies that determine the acceptable levels of risk of collateral damage, how those decisions are made, and who makes them. Another policy topic is if a target is not fixed, how is command and control exercised over the engagement?

Another reality is that many alliance members are facing drastic cuts in defense spending. There is concern about the extent of these cuts, as the NATO Secretary General said at the Munich security conference he is concerned that the fiscal crisis does not progress to a security crisis. In terms of percentage of cut, many NATO nations are contemplating reductions that are much larger America. There are also concerns that if spending is reduced too much the defense industrial base will be lost. Yesterday Major General Davis mentioned this could be starting here in the area of fuse technology. In this case outsourcing will be required. Today, many commercial-off-the-shelf components are manufactured by a near-peer, or global competitor. Yesterday Dr. Huesy talked about the need for EMP hardening, are these COTS components cyber-hardened following the example of STUXNET? Will defense planning become budget driven instead of risk driven? Will the hard power of NATO's military capability be diminished as to reduce the political maneuvering room it offers the alliance? These are tough issues being discussed in Europe, all while several other global actors are significantly increasing defense spending.

The Secretary General announced his concept of "smart defense" in Munich. It proposes to assist nations to develop greater security with fewer resources through coordination and collaboration. He acknowledges that many European countries cannot on their own develop the full range of responses to meet all security challenges. Through smart defense nations will pool resources, set priorities, and better coordinate their efforts. The defense industry, however, has been collaborating for some time now. You look at any new weapon system being rolled out and there are many different company stickers on the side. So either by force or by design you have figured out how to do it, and maybe there are lessons learned that can apply to national level collaboration in the alliance.

What are some characteristics of precision strike needs for European nations? I can think of three attributes that I'll share with you. First, it must be interoperable, a sentiment commonly stated in NATO

and echoed yesterday by Major General Snodgrass. Interoperability in equipment, in training, and in support. Both the EUCOM and NATO air component targeting staffs commented on the need for better standards for the “left of bang” parts of the engagement cycle. There are plenty of national systems that don’t or can’t talk to each other preventing effective precision strike in a coalition environment. They need systems that are designed from the beginning to share information to coalition partners, as clearly the age of unilateral action is passing. We have standards for weapons; we need standards for data as well. I see the association has a technology symposium later this year at the Secret/NOFORN level, if you want to lead efforts towards interoperability perhaps you can hold a later one at the Secret/REL NATO level.

A second attribute would be adaptability. Precision strike capabilities should be able to operate in as many of the five conflict domains as possible; air, land, sea, space, and cyberspace. NATO also acknowledges that future threats are likely to be hybrid threats. Though the Russian-Georgian conflict reminds us that traditional force-on-force conflicts can still happen, emerging threats encompass many others such as irregular warfare, terrorism, organized crime, cyber threats, and economic warfare. Yesterday adaptability was described as a weapon being able to have multiple effects, today I propose it is the ability to operate against multiple threats. Energy security is another important area of concern for NATO, so what threatens energy security and can precision strike capabilities engage those threats?

The last attribute is robustness, and I pulled it from one of the PSA goals which is to provide prudent alternatives in the event of enemy countermeasures. Think of the entire electromagnetic spectrum, and how we use it in the whole engagement cycle. We identify, characterize and track targets, we exercise command and control, we aim and guide weapons, we assess effects. We use visual, infrared, radar, laser, line-of-sight voice radio, satellite radio, datalinks, and GPS to accomplish these tasks. As Major General Davis said yesterday it is easier to thwart systems than to develop them, and today there exist capabilities to deny these parts of the E-M spectrum. How long have militaries used camouflage and concealment to deny visual observation? How do you retarget a long range strike weapon if the datalink is denied? Yesterday’s excellent presentation on technologies to operate in a GPS-denied environment addresses that one niche, but a successful precision strike system will be able to deal with other parts of the spectrum being denied as well.

In closing, I’ll ask for your forgiveness if you think I’m trying to tell the precision strike association what precision strike is. But, I’m a newcomer to this forum and sometimes a fresh perspective helps. There has been a lot of focus on the “bang” part, at least in Europe there is more work needed on the systems and policies for the before and after parts. The PSA vision statement challenges all to look at the entire engagement cycle, and not to focus on the traditional understanding of precision strike. For my last thought I’ll share something I heard at the NATO school--the advantage of technology isn’t just the technology itself, but the skillful exploitation of the opportunities it creates. With that I will turn it over to Group Captain Adlam, who will discuss the United Kingdom’s recent defense review.