The Path towards Strengthened Safeguards: Experiences in Iraq, South Africa, and North Korea

This video series is a collection of dialogues centered on the immense role played by the IAEA, and in particular how the Agency supports nuclear nonproliferation through the practice of safeguards. This current update is a chronicle of events during the 1990s, Iraq, South Africa, and North Korea, that led to the development of the Additional Protocol.

7.5 First UNSCR 687 inspection in Iraq

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Demetrius: We had a very old plane, Romanian airlines – flew from Vienna to Bucharest, there were about 35 people on the first team, because you had to be joined by people who would take care of not stepping on bombs – the whole area was heavily bombed - so we flew with them, the whole group to Bucharest, filled the plane, stopped at Cyprus, filled the plane, and arrived in the middle of the night in a faraway airport in Iraq...

Rich: Habaniya.

Demetrius: Yes, Habaniya. It was selected on purpose so we'd be far away from the population of Baghdad, so they wouldn't see planes from UN flying over. They'd see buses that brought people to hotels. Next, problems started. Under the arrangement, there were already some UN people, they set up some telephones so we could communicate amongst ourselves. They gave us some Jeeps. These were really old Jeeps – I tell you – you could feel the whole dust of Baghdad in your nostrils every time you got into that Jeep. Then we went to a site for the first time – the site was known to the Agency because inspectors were going there, heavily escorted, to only 2 - 3 facilities on that site. This was Tuwaitha¹ site. It had very peculiar characteristic – it had very high berms, 30-40 meters, around the site. The idea of the berms was to prevent anti-aircraft missiles by Israel or anybody else, which had been the situation back in 81 at the Osirak reactor. The problem with the berms is that the inspectors didn't know what was happening behind the berms.

When we were making preparations for the team to go, we were asked to get maximum information, and while we were getting information of where we were going, what was happening, what were suspicions of different sites. We decided the first instance, we needed to take control over all nuclear material in Iraq. As was in the declaration from Iraq. We said we would do that (Tuwaitha) and one more center – Tarmiya – it was chemical plants and physical heavy plants with lots of electrical power – so these 2 would be enough for the first 2 weeks.

So we went to that site and asked to see the HEU, and asked to see the Iraqi materiel. And then started our first experience with the wishy washy Iraqi side. Everybody was doing whatever they could, distractions, to try to have a smooth operation towards us but not to provide everything that was to be provided. And we remember the guy who always put his hand over the wrong side, on the right instead of left, and so we knew he was lying.

Rich: He had a Michigan State PhD.

¹ <u>http://isis-online.org/isis-reports/detail/development-of-the-al-tuwaitha-site-what-if-the-public-or-the-iaea-had-over/9#images</u>

Demetrius: But he was under instruction to do his job, not to reveal. So we had a lot of discussions, until we managed to find out where they had the spent fuel. The spent fuel, because they were being bombarded, they'd been ordered to move it to another location, outside Tuwaitha, so they found a location – a farm between Tuwaitha and Baghdad – and they put it in pools there, filled with water, and they transferred the SNF² over there while bombing was going on. For whatever reason, the birds in the sky missed it completely. They had no idea what was going on there. And I think that if it was not the way that we started discussing with them about future cooperation, the problems that might exist, the importance of getting at least the Nuclear Material in the hands of the Agency, we pressured them to come clean on this part. In the last few days it was Tom Canada who went over there, and to find in the agricultural area, the homes with the spent fuel, to make measurements. In the meantime a group had gone to Tarmiya – they got lots of pictures, finding it was strange things happening in Tarmiya. When they came back they said it was a chemical plant nothing to do with nuclear, but then of course started taking samples, but we put it as part of the high priority. So when we came over here and took pictures, there was Gugul – the guy who came from the time of the Manhattan project, who...

Rich - there were two guys from Oak Ridge - Jerry Nickels, and this Gugul.

Demetrius: I can still see him – sitting on the 28^{th} floor in the offices of the Action Team. looking at the photographs, and he started putting the photographs on the table, separating them into two piles. One set of the photos was the big facility, where they had huge high ceilings, and the other was a smaller facility with smaller area. And he said, "here, they were going to do enrichment up to 5%, and here they would go higher. This is the typical set up, what we did at Oak Ridge." So he identified that Tarmiya was a very interesting area for us. We started getting more faith in what intelligence was coming out with intelligence of the Americans, imagery. Before we left for the site with our team, we reached agreement that I could have one picture of Tuwaitha from the sky, that would permit me to brief the people before they went there. Because what we'd seen is that behind the berms was a huge area, that no one had touched before, and it was the new development area. It was sort of divided like the Russian area where their reactors were, and the new area with their own things, the fabrication area. So the surprise was also that what we saw at Tarmiya fit with some of the stuff we found at the development area at Tuwaitha. We saw huge magnets, they said they were physics experiments – nothing to do with separating uranium, but other isotopes... And this part was there in the physics building, and there was another building where we found a lot of samples of uranium. And it was chemical labs and a lot of uranium there, and that's where finally it came out that they were doing UCl4, which was part of preparation for the targeting, which they wanted for the separations. So the results were accelerated, we put more pressure on them.

² Spent Nuclear Fuel