

Exhibit 11

Anatomy of a Terrorist Attack:
*An in-Depth Investigation Into the 1998
Bombings of the U.S. Embassies in Kenya
and Tanzania*

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About the Matthew B. Ridgway Center

The Matthew B. Ridgway Center for International Security Studies at the University of Pittsburgh is dedicated to producing original and impartial analysis that informs policymakers who must confront diverse challenges to international and human security. Center programs address a range of security concerns—from the spread of terrorism and technologies of mass destruction to genocide, failed states, and the abuse of human rights in repressive regimes.

The Ridgway Center is affiliated with the Graduate School of Public and International Affairs (GSPIA) and the University Center for International Studies (UCIS), both at the University of Pittsburgh.

This working paper is one of several outcomes of Professor William W. Keller's "Anatomy of a Terrorist Attack" Capstone course from the spring of 2005.

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An In-Depth Investigation
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Figure 7: A Nissan Atlas Refrigerator Truck similar to the vehicle used in the Dar es Salaam, Tanzania bombing

According to The Federal Bureau of Investigation (FBI) lab results, the main explosive used in both attacks was trinitrotoluene (TNT)²⁰³. Traces of aluminum powder were found at the bomb factories in Dar es Salaam, signifying that al Qaeda attempted to increase the thermal effect²⁰⁴. An aluminum powder/TNT mixture forms an explosive known as tritonal²⁰⁵. This explosive is used as a substitute for TNT because of its exceptional blast effect, thermal effect, and increased sensitivity. This mixture created an additional 78 feet of blast area²⁰⁶ and over 130 additional feet of fragmentation area, over TNT alone.

The FBI has no open source information regarding the acquisition of the explosives however, the TNT and detonators²⁰⁷ were believed to be obtained as far back as 1996 in Tanzania. The TNT used in the bombings was stored in rice bags at the bomb factories. The TNT was then grounded down at these bomb factories, at which time aluminum powder was added.

The power source for initiating the electrical VBIED consisted of batteries located in the firing pack stored on top of the explosives in the back of the trucks. The switch to detonate the VBIED was located in the cab of the truck. The type of switch used was not determined; however, the switch was most likely some type of “push button” or “toggle” switch.

The Bomb Factory / “Putting the Components Together”

Both trucks were put together in a very similar manner, according to the trial transcripts of East African al Qaeda suspects. In Tanzania the bomb factory was a rented house located at 22 Kidizalo in the Ilala District in Dar es Salaam. This house, like the house in Nairobi, had a high wall to help conceal the activities. Khalfan Khamis

Appendices

Mohamed rented the house and was the key individual for putting together the explosive device. The house also had grinders, which were used to grind the TNT so that it could be mixed with the aluminum powder. Khalfan learned about explosives in Afghanistan, at the Sadeek Camp, where he attended a basic and advanced explosives course.

Prior to assembly a welder, Julius Kisingo, modified the Nissan Atlas by drilling holes in the back of the cab so wires could be run from the cab to the refrigeration section of the truck. The refrigeration component had been removed from the truck prior to his arrival. He also welded frames in the back of the truck to hold 19 oxygen cylinders, and built a large battery frame. The oxygen cylinders were for added fragmentation, which would increase the lethality of the explosion. In the middle of these oxygen tanks were the explosives, contained in wooden boxes. On top of the explosive was the battery pack with wires leading up to the cab of the truck. These wires led to a switch in the cab where Hamdam Khalif Allah could detonate the explosive device. This explosive device was constructed in about ten days; however, there was communication between the Dar es Salaam and the Nairobi bomb factories by June, which indicates that there was preparation and coordination.

Mohamed Odeh, who has been a member of al Qaeda since 1992, received explosives training in Afghanistan under the instruction of Abdel Rahman, who is considered a bomb technician. Mohamed Odeh, with the help of Mohamed al-Owhali, constructed the VBIED. Grinders were used to produce the same TNT/Aluminum powder explosive mixture.

The VBIED they constructed had a net explosive weight in the range of 1,500 pounds, according to FBI investigators. The wiring of the explosive device was connected to batteries in the back of the truck, and the explosives were contained in wooden boxes. The wires ran through a hole in the back of the truck leading up to the cab where Jihad Ali Azzam could detonate the explosive device.

On August 5th, Abdel Rahman showed up to make the final connection of the wiring between the bomb and the detonation device located in the passenger compartment.

Crime Scene Investigation

Federal agents were able to gather pertinent information from the bombing sites even though there was tremendous damage. The damage was not only from the debris but, in Nairobi, from a ruptured water pipe. This information included locating traces of explosives, parts of the vehicle, parts of the oxygen cylinders, and measuring the size of the crater²⁰⁸ created by the explosion. Investigators also found a Beretta pistol slide, which was believed