

Triborder Radioactive Material Trafficking and Threat Environment

By Charles Streeper

Background:

The Triborder Area (TBA) in South America encompasses three states and is formed by three cities, Ciudad del Este, Paraguay; Foz do Iguazu, Brazil; and Puerto Iguazu, Argentina. This region covers only 1200 square kilometers and has a population of around 630,000 people, with estimates of around 22,000 people (Mostly Lebanese ~12,000 in Brazil and ~10,000 in Paraguay) of Arab descent.¹ The TBA is notorious for being a region of illicit trafficking, cross-border and organized crime, money laundering, arms dealing and has also been implicated as an area vulnerable to terrorist activity.



Map of TBA²

¹ These figures are merely estimates because they are based on a numbers provided by amnesty of illegal immigration that took place in 1998 in Brazil and similar uncertain numbers in Paraguay. These statistics do not in any way reflect a relation between the Arab population and extremism.

² Map provided by James Martin Center for Nonproliferation Studies.



TBA with major arteries from key cities
Sources: Library of Congress

There are lingering concerns about extraterritorial support and possible fundraising for Hizballah and Hamas through the Muslim communities in the region.³ Connections between the TBA and Middle East terrorist organizations have been corroborated by evidence such as an Argentine prosecutor's determination that the 1992 and 1994 bombings of Jewish targets in Argentina were conducted by Hizballah militants who infiltrated the region through the TBA.⁴ The TBA has also been designated by the U.S. Department of Treasury as posing a significant threat through a well-connected network that provides financial and logistical support to Hizballah.⁵ Al-Qa'ida has also been described as having ambitions in the region and has possibly

³ "2006 Country Report on Terrorism." United States Department of State: Office of the Coordinator for Counterterrorism. 13 Sept. 2007. Website:

<http://www.state.gov/s/ct/rls/crt/2006/82735.htm>

⁴ "Breakthrough in '94 Argentina bombing: Hezbollah militant named in attack on Jewish community center." The Associated Press. 9 Nov. 2005. Website:
<http://www.msnbc/id/print/1/displaymode/1098/>.

⁵ "Tri-Border Area: Hizballah Fundraising Network in Triple Frontier." Embassy of the United States. 6 Dec. 2006.
http://paraguay.usembassy.gov/hizballah_fundraising_network_in_the_triple_frontier.html

already infiltrated the area with terrorist cells.⁶ Recently, a leading weekly news magazine in Brazil, *Veja*, claimed that at least 20 operatives affiliated with either Al-Qa'ida, Hizballah, Hamas, Islamic Jihad, al-gama a al-Islamiyya, and Islamic Moroccan Combatants, Jihad Middle Battalion have been using Brazil as a safe haven for fundraising and inciting attacks worldwide. *Veja* also claimed a Lebanese citizen living in Brazil, Khaled Hussein Ali, is a member of Al-Qa'ida and is responsible for distributing propaganda and coordinating terrorists in 17 countries.⁷ Paraguay's former district attorney on drug trafficking and terrorism has corroborated these claims by proclaiming the TBA a zone of refuge for terrorists. What facilitates this threat is mostly Paraguay's, but to a certain extent all three state's, lack of counterterrorism and money laundering legislation, porous borders, ineffective customs and immigration controls, and corruption within all border related agencies and the judicial system.⁸

Radioactive Material Trafficking/Terrorism Cases:

For the most part, the high incidence of illicit trafficking and crime in the TBA has not led to increased terrorism or the smuggling of radioactive material. However, the absence of reported incidents does not preclude the existence

of the threat or undocumented incidents. As previously mentioned, the TBA's lack of effective border controls, corruption among politicians and other agencies, a weak legislative and regulatory framework in Paraguay and other issues may conceal cases of significant concern.

In one case, in July 2004, 18 sacks containing 600 kilograms (kg) of 75% Thorium (Th) and 7.8% Uranium (U)⁹ valued at \$500,000¹⁰ were discovered by Brazilian Federal Police during transport in Amapa Brazil. This incident was discovered by chance and only because an investigation was initiated into the illegal exploitation of land.¹¹ After further research it was found that three specialized and internationally networked groups in U trafficking were in charge of the mine and had purchased 1000 hectares containing no less than 50,000 metric tons of ore for \$1.2 million with plans to expand the exploration for U. Wiretaps on these three groups disclosed trafficking deals containing upwards of 10 metric tons with 8 more metric tons reportedly stored somewhere in Sao Paulo, far more than the 600kg that had been revealed solely by chance. Disturbingly, this network of criminals had noteworthy political and governmental connections such as Senator Papaleo Paes, of Amapa; the director of the National Department of Mineral Production, Jose Guimaraes;

⁶ Goldberg, Jeffrey. "In the Party of God: Hezbollah sets up operations in South America and the United States." New York, NY. 28 Oct. 2002. p.75.

⁷ Coutinho, Leonardo. "Documentos da CIA, FBI, e PF mostram como age a rede do terror islâmico no Brasil." São Paulo, Brazil. *Veja* 4 Apr. 2011.

⁸ US 2006 Country Report on Terrorism.

⁹ Ribeiro, Amaury, Jr.. "Contrabando: Perigo no Amapá (Contraband: Danger in Amapa)." Brasília, Brazil. *Noticiário de Imprensa da Aeronáutica (NOTIMP)*. Ed. 129. 5 Sep. 2006.

¹⁰ "Policía brasileña asegura cargamento ilegal de uranio y torio, usados en la industria nuclear; crean comisión para hallar yacimientos clandestine (Brazilian police confirm illegal cargo of uranium and thorium, used in the nuclear industry; develop commission for finding clandestine sites." Madrid, Spain. *EFE* 23 Aug. 2004. Website: <http://www.esmas.com/noticierostelevisa/internacionales/386805.html>.

¹¹ Each kilogram of the material confiscated contained 80 grams of U and 750 grams of Th.

and even included the principal prosecutor in charge of the case, Jose Cardoso. Front companies sold and exported the material to French Guiana at which point it was forwarded to other countries.¹² Although, this ore was not processed into yellow cake nor separated and enriched, it presents an example of the existence of a pathway for sophisticated and internationally connected smuggling networks that have the potential for the diversion and proliferation of radioactive or nuclear material.

Earlier in 1993, in an event similar to the 2004 case of trafficking Th/U, a man possessing a small amount of thorium was detained by police.¹³ It appears that this earlier minor incident was not taken as a signal by authorities to further investigate the possibility of other Th/U mining or trafficking.

The terrorist bombings in Buenos Aires of the Israeli embassy in 1992 and the Argentine-Israeli Mutual Association (AMIA) Jewish Center in 1994 resulted in 115 deaths with high numbers of casualties.



Aftermath of the AMIA bombing in Buenos Aires, July 18, 1994
Sources: Library of Congress/AP, BBC Mundo, December 23, 2000.

After a 12 year hiatus in determining the culprits for the attacks, Argentine special prosecutors indicted 8 Iranians and 1 member of Hizballah in the AMIA attack.¹⁴ Similar motives and culprits are believed to be behind the Israeli embassy attack and both attacks have been linked by Argentine authorities as originating from the TBA.¹⁵ In 2002, a drug trafficker who had lost a family member in the AMIA attack financed a sting operation through Argentina's Secretariat of State Intelligence (SIDE). The operation led to the divulgence of information on past and future planned terrorist attacks by Hizballah and makes mention of the plan of using ammonal (an ammonium nitrate, TNT, and aluminum powder high explosive) and an unknown "radioactive material" transported and exploded in a bus in front of the Israeli

¹² Rangel, Rodrigo. "O contrabando do urânio brasileiro: Investigação secreta da Polícia Federal desvenda quadrilha que extrai e envia material radioativo para fora do País (Brazilian Police, Intelligence Agencies Investigating Uranium-Smuggling Network)." Sao Paulo, Brazil. *ISTOÉ*. Ed. 1908. 17 May, 2006.

¹³ Zaborsky, Victor. "Export Controls in Brazil." December, 2003. Center for International Trade and Security. Based upon interview by author of report with officials from the Department of Federal Police at the Ministry of Justice, Brasilia, April 29, 2003.

¹⁴ US 2006 Country Report on Terrorism.

¹⁵ Fields, Jeffrey. "Issue Brief: Islamist Terrorist Threat in the Tri-Border Region." Washington D.C. *Nuclear Threat Initiative*. Oct. 2002. Website: http://www.nti.org/e_research/e3_16a.html#fnB2.

embassy.¹⁶ Although, the radioisotope to be used and more details of this event have not been revealed by this research, this incident serves as an example of how the TBA has provided sanctuary to a sophisticated international terrorist group with financing and connections and at least the capability and intended goal of discharging a radioactive dispersal device.

From a wider regional perspective, thefts of orphaned¹⁷ radioactive sources may also be vulnerable to acquisition by a terrorist group and routed through the TBA. For example, in 2005 a significant amount of radioactive cesium was stolen from an oil company in La Gloria, Columbia (North of Bogota). The material is still considered missing and Al-Qa'ida has been suspected of conducting the operation.¹⁸ A similar incident involving the insider theft of Cs-137 sources occurred at a Baker Atlas oil drilling source storage facility in Neuquén, Argentina. The perpetrators demanded \$500,000 and threatened to “make this city glow” if their extortionist demands were not met.¹⁹ In 2006, Venezuelan authorities reported 5 incidents²⁰ of theft

involving Iridium-192 and “highly dangerous” Cs-137 capsules. The Ir-192 capsules were discovered coincidentally during the rescue of a storekeeper kidnapped by three policemen.²¹ In a stunning revelation, following the recent Colombian incursion into Ecuador to kill top leaders of FARC (Revolutionary Armed Forces of Colombia); Colombia’s Vice President²² and national police chief both alleged that captured computer records from Raul Reyes, one of FARC’s top leaders, reveal Reyes negotiated the purchase of 50kg of uranium. The files also demonstrated FARC’s capacity to sell much more material, at 2.5 million dollars per kilo for future re-sale to an undisclosed third-party.²³ FARC is a notorious Colombian terrorist group with activities and connections in Ecuador, Panama and Venezuela. This is not Colombia’s first experience with illicit trafficking of uranium. In 2001, there was a case of 600 grams of enriched uranium (unknown enrichment level) found in led tubes in Bogotá. Also in Bogotá, in early 2006, an attempt to smuggle 13.5 kg of depleted uranium with fruit to be sold for \$300 million was thwarted by an intercept by the Central Intelligence of the Colombian Army.²⁴

Therefore, the minimal amount of radioactive material misuse in the TBA does not exclude the continent as a whole and the TBA might even be an operative

¹⁶ “Terrorismo y desestabilización: Informe Clasificado (Terrorism and destabilization: Classified Information).” Buenos Aires, Argentina. [SEPRIN](http://www.seprin.com/informe-17-04-02/clasificado.htm) (Servicio Privado de Información S.A).

¹⁷ April, 2002. Website: <http://www.seprin.com/informe-17-04-02/clasificado.htm>

¹⁸ The oft cited Goiania incident in 1987 resulting in the accidental exposure to numerous people from an orphaned Cs-137 source is one example of the vulnerability of sources even in states with significant export controls and sophisticated infrastructures for the security and safety of radioactive materials.

¹⁹ “Stolen Cesium Still Missing.” Cali, Columbia. [El País](http://www.elpais.com). 22 Nov. 2005.

²⁰ Siobhan Gorman. “Patagonia Crime Scene Plays Role in Nuclear-Security Bid.” New York, NY. [The Wall Street Journal](http://www.thewallstreetjournal.com). 9 Oct. 2009.

²¹ “Radioactive Material Stolen in Venezuela.” Issue 4. 2/2006 Monterey, CA. James Martin

Center for Nonproliferation Studies: International Export Control Observer.

²² “Venezuela: Second Radioactive Capsule Theft Reported.” Panama City, Panama. [ACAN-EFE](http://www.acan-efe.com). 4 Jan. 2006.

²³ “FARC ‘building dirty bombs’.” Capetown, South Africa. [Independent Online](http://www.independentonline.com). 4 March 2008.

²⁴ “Así describía el computador de 'Raúl Reyes' los vínculos de Hugo Chávez con las Farc.” Bogotá, Colombia. [El Tiempo](http://www.eltiempo.com). 3 March 2008.

²⁵ De Vengoechea, Alejandra. “Ejército Colombiano Descubre Tráfico De Uranio.” 2 March 2006.

area for groups attempting to steal radioactive material outside of the TBA.

Multilateral Anti-Terrorism and Radiological Cooperation with TBA States:

Several forums of anti-terrorism and radiological cooperation exist that could be used to approach radioactive material security issues with the three states comprising the TBA:

- 1998-Tripartite Commission of the Triple Frontier (US delegation was added as a participant in 2003 dubbed 3+1).
- 1998-99-Organization of American States through the Mar de Plata and United Nations General Assembly established the Inter-American Committee against Terrorism (CICTE).
- 2006- Brazil: Regional Intelligence Center in Foz do Iguacu.
- MERCOSUR (Southern Common Market): Security Commission
- Organization of American States-Committee on Hemispheric Security
- Cooperation on United Nations Security Council Resolution 1540
- Memorandums of Understanding between the US and South American states for the Megaports Initiative
- Latin American Regional Partnership

Conclusion:

Although there are very few documented cases of trafficking or diversion of radioactive materials in the TBA, the region has a demonstrated history of well networked smuggling of other illicit materials and being a safe haven for terrorist organizations, both of which might lay the foundation for future trafficking of radioactive materials. The expressed interest in radioactive materials by globally networked terrorist organizations in the region provides an opportunity for the prevention of terrorism. Up until the present, most of the radioactive material smuggled in the

region has not been of optimal quality for either a radiological dispersal device or a nuclear weapon. Nevertheless, as most expert studies have demonstrated, the impact of an explosion with any level of radioactive signature would be enough to induce panic and cause mass disruption.

According to the International Atomic Energy Agency (IAEA), the majority of illicit trafficking cases involving radioactive material come in the form of sealed radioactive sources.²⁵ Although, both Brazil and Argentina each have a proven track record of effective export controls on nuclear materials, the possibility of unaccounted for material, especially in the form of radioactive sources that are numerous and difficult for even developed countries to regulate, and the risks associated with the environment in which the materials are located should never be discounted.

Based upon the discussion above on the lawless environment, criminal infrastructure, and the fact that all cases of radioactive materials smuggling were discovered only circumstantially in the TBA, priority should be given to containing the current threat, and supporting current efforts, such as the Latin America Regional Partnership, at assessing and securing radioactive materials within all of South America.²⁶

²⁵ "IAEA Illicit Trafficking Database (ITDB) IAEA information system on incidents of illicit trafficking and other unauthorized activities involving nuclear and radioactive materials." Vienna, Austria. 2006 IAEA Fact Sheet. [International Atomic Energy Agency](#). 11 Sept. 2007.

²⁶ The Latin America Regional Partnership is supported by the Department of Energy's Global Threat Reduction Initiative (GTRI), the IAEA and the U.S. Department of State and was founded to identify, condition, and dispose of disused and unwanted radioactive sources. This activity is funded by the Nonproliferation and Disarmament Fund (NDF) at the State Department, as well as in-kind contributions from GTRI. The scope of

the Latin American regional partnership is intended to address radioactive sealed sources in five countries: Argentina, Brazil, Colombia, Uruguay, and Venezuela. Project implementation is coordinated with the IAEA Division of Nuclear Fuel Cycle and Waste Technology and the IAEA Office of Nuclear Security.