

THE LITVINENKO AFFAIR: A CHRONOLOGY, SOME TENTATIVE CONCLUSIONS, AND SOME SPECULATIONS

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NOT FOR CITATION!

The following is based on a draft I submitted to the above-mentioned working group. The draft served as the basis for a discussion of the Litvinenko Affair that took place at Berkeley on the evening of December 12, 2006. I modified the latter two sections based on the substance of the discussion that evening, at which point members of the group, along with a few other colleagues, looked over the chronology and analysis and made suggestions and additions. The chronology is derived from a variety of secondary sources, mostly newspaper and magazine articles available on the Internet. Most of these were written in English, although some were in Russian and German. Anyone wishing to use a date or fact claim in what follows for publication purposes should get independent confirmation (which is easy enough using the web) – please do not cite this product itself given the tentative nature of the material we are dealing with. Also, I have tried to be careful not to over-reach in the “tentative conclusions” and “speculations” sections. There are obviously a great many facts about the case that cannot be known at this point from public sources –ergo, the emphasis is on “tentative” and “speculation” rather than “conclusion.” Finally, what follows has not been carefully proofed, and I have not gone over transliterations to make them consistent. I am posting this in the hopes that it will prove of use to those interested in the affair.

I. CHRONOLOGY (THROUGH DEC. 18, 2006)

1988. Aleksandr V. Litvinenko enters service with the KGB. Initially works in counter-intelligence (Third Chief Directorate of the KGB (Military Counter Intelligence). Eventually attains rank of Lt. Col. and becomes part of a FSB unit that deals with organized crime (Analysis and Suppression of the Activity of Criminal Organizations (URPO). After 1991 Litvinenko works in a counter-terrorist unit of the FSB (back then FSK) specializing in the infiltration of organized crime groups.

6/7/94. Failed assassination attempt on Berezovsky results in decapitation of his driver but Berezovsky is unhurt. Litvinenko assigned to case, become friendly with Berezovsky.

BACKGROUND INFO ON private protection agencies staffed by former security officials in post-Soviet Russia. During the early/mid-1990s, the privatization of state assets leads to a privatization and compartmentalization of state powers as well. A major rearrangement of state security organs gets underway with a fundamental of the KGB in 1992. As a result, some 20,000 officers are dismissed between 1991 and 1992, flooding the nascent market for private protection services with thousands of unemployed professionals highly skilled in the use of violence. The Ninth Directorate of the KGB is transformed into the GUO (Glavnoye Upravlenie Okhrani), responsible for the safety and communications of the Russian government and is made independent from the FSB. Compared to the Ninth Directorate, the staff of the GUO is increased some 50-100 percent (totaling some 10,000). In 1996, Yeltsin signs a decree reorganizing the GUO into the FSO (Federal Protection Service). The FSO and the PSB (Presidential Security Service) are under the direct control of the president. The FSO is a powerful institution with a range of rights and powers, including the right to conduct searches and surveillance without warrants, make arrests, and give orders to other state agencies. Sokolenko and Lugovoi (for background on Sokolenko and Lugovoi, see below) retire from the GUO in 1996, when it is restructured. The restructuring takes place the same year the Yeltsin's chief bodyguard, Aleksandr Korzhakov (head off the PSB), is sacked, and the PSB loses most of its powers. More broadly, during this period a federal law legalizes private protection agencies and leads to the creation of new entities, and in 1998 an order is issued by the Interior Ministry

allowing policemen to provide private security services for commercial organizations. By then, some 10,800 private security agencies in Russia have absorbed nearly fifty thousand former officers of the state security agencies and law enforcement organs. Former military expertise or work experience in the security organs brings with it not only proficiency in the use of violence, but also potential contacts and access to restricted information that former members of the state organs could use as so-called *kompromat*. Former senior officials in the KGB became heads of various security services. For instance, Argus, the biggest private security provider in Moscow, is headed by Iuri Levitski, former head of Vympel, the one-time KGB antiterrorist unit. Namakom, a private security and consulting company, is managed by Ivanovich Drozhov, the former head of the KGB Department S, the branch that handled the so-called illegals, undercover agents working abroad without diplomatic cover. Major companies even internalized protection on a large scale. Gazprom, the biggest natural gas company in Russia, has a 20,000 strong private protection company headed by a former KGB colonel, Viktor Marushchenko. According to the executive director of the Association of Russian Banks on Security Questions, by 1995 half of the managers of independent security services consisted of former KGB employees, the other half came from the Interior Ministry and military. The war in Chechnya and the weakening of state control over a vast arsenal of weapons from Soviet times also provided a constant supply of arms for these agencies. In a Washington Post op-ed piece by Peter Finn of 12/12/06, Olga Kryshtanovskaya, director of the Center for the Study of Elites in Moscow, is quoted as follows: "If in the Soviet period and the first post-Soviet period, the KGB and FSB [people] were mainly involved in security issues, now half are still involved in security but the other half are involved in business, political parties, NGOs, regional governments, even culture. Kryshtanovskaya analyzed the biographies of 1,016 leading political figures and found that 26 percent had reported serving in the KGB or its successor agencies. She claimed that a closer look -- examining unexplained gaps in résumés, unlikely career paths or service in organizations affiliated with the KGB -- suggests a figure of 78 percent.

12/97. Litvinenko later claims he is approached by an FSB superior at this date and asked to kill Berezovsky.

3/27/98. Berezovsky requests a meeting with the FSB director Nikolai Kovalev. Tells Kovalev that he had been contacted by Litvinenko a week earlier and that Litvinenko had asserted that members of URPO planned to assassinate Berezovsky. It is later reported that Litvinenko and three of his FSB colleagues had already informed Yevgenii Savostyanov, deputy head of the Presidential Administration responsible for special services, of the plot. However, when Kovalev orders them to write a report, they refuse on the grounds that their comments about plot were "frivolous." The FSB begin its own investigation. In May FSB investigators conclude that the accusations against the URPO leadership were groundless.

11/13/98. Berezovsky writes an open letter to the newly appointed FSB director, Vladimir Putin, repeating the accusations from March. Then, on a visit to Tbilisi in his capacity as CIS Executive Secretary, Berezovsky claims that Russia's General Prosecutor's Office and the FSB were criminal organizations.

11/17/98. Litvinenko, then a Lt. Col. in the FSB, together with four other FSB officers in the Directorate for the Analysis of Criminal Organizations (the director of the Seventh Department, Lt.-Col. Aleksandr Gusyk, Maj. Andrei Ponkin, Col. V. V. Shebalin, Lt. Konstanin Latyshonok, and German Shcheglov), hold a news conference accusing the head of URPO, Maj-Gen. Evgenii Khokhlov, and his deputy, Cpt. Aleksandr Kamishnikov, of ordering them to assassinate Berezovsky. When Litvinenko refuses, he claims he was told he was foiling "patriots of the motherland from killing the Jew who has robbed half this country." The participants also claim that there was a plot to kill Mikhail Trepashkin, an FSB agent who had made allegations against the agency, and another to kidnap the brother of a Moscow-based businessman Umar Dzhabrailov, an ethnic Chechen. Litvinenko argues that some FSB units "have been used by certain officials not for constitutional purposes of state and personal security but for their own private political and material purposes, to settle accounts with undesirable persons, to carry out private political and criminal orders for a fee and sometimes simply as an instrument to earn money." The agents assert that the plots had all been aborted before Putin took over as FSB head in August. Yeltsin spokesperson Dmitrii Yakushin announces that Yeltsin "is seriously worried by the latest media reports that F.S.B. officials have allegedly committed illegal actions." Later rumors surface that Litvinenko organized the news conference at the urging of Berezovsky and that he was paid for his efforts. In November 2003, one the participants, Andrei Ponkin, announces that he had heard that Litvinenko had received \$1.5 million

from Berezovsky. After the press conference, Litvinenko and a number of his colleagues are hired by the Executive Secretariat of the CIS, then under the leadership of Berezovsky. Litvinenko is arrested twice, in March and November 1999, spending some nine months under the arrest.

Already after Litvinenko fled Russia for Britain in June 2000, the court tried him in absentia and recognized him guilty of misuse of the office and illegal purchase and storing of firearms and ammunition (all charges concern 1997).”

Litvinenko said he had been ordered in December to kill Boris Berezovsky, the financial tycoon who controls the ORT television network and is close to President Boris N. Yeltsin.

11/19/98. Despite reports that he had dismantled the service's organized crime unit on the grounds that it was unprofessional, Putin reacts angrily to the charges made by Litvinenko and the others at the 11/17 news conference. In a TV interview this day, Putin denies Berezovsky's accusations, saying that he had known Berezovsky for many years and that he respected him. But he then adds: “Boris Abramovich: do your job. Boris Abramovich is the CIS Executive Secretary, isn't he?” Also notes that some of the officers had been Berezovsky's personal bodyguards.

11/20/98. BNY calls Putin and demands that Berezovsky's accusations be treated seriously. Orders that the case be referred to the procuracy. Putin is also told to submit a report on the whole case by 20 December 1998.

Late 1998. Litvinenko is dismissal from the FS. He finds work as an adviser of the CIS Executive Secretariat, headed by Berezovsky.

Spring 1999. Litvinenko is arrested on charges of abusing duties as FSB officer while in Kostroma. Litvinenko colleagues who supported his accusations are also fired from the FSB and some find jobs on Berezovsky's staff. Litvinenko spends eight months in pretrial detention in Lefortovo Prison. Charges against him are dropped in November 1999 for lack of evidence, but he is rearrested immediately. He is released in December 1999 and ordered not to leave town.

10/2000. Litvinenko flees Russia through Ukraine and Turkey with wife Marina and son Anatoly. Alex Goldfarb meets him in Turkey. Goldfarb later says: “I brought him to the U.S. Embassy at the end of October in Ankara. We just walked in and said here's the F.S.B. colonel, and they are not interested.” Goldfarb is a longtime Berezovsky associate who was a microbiologist at Columbia University in the 1970s and became prominent in the late 1980s by helping dissidents leave the USSR.

11/1/2000. Litvinenko makes it to London but again foreign intelligence services are not interested in him. He resumes his association with Berezovsky, who had arrived some months earlier seeking asylum. Apparently with some financial support from Berezovsky, he lives in a modest row house in white-collar Muswell Hill in north London, but moves easily in security and former espionage circles, frequently visiting Berezovsky's offices in Mayfair. Is an active member of the anti-Putin Russian émigré community in London. Reportedly also maintains contact with former FSB colleagues like Mikhail Trepashkin, who is jailed in October 2003 for betraying state secrets while investigating the 1999 apartment bombings.

5/14/2001. Litvinenko is granted asylum in UK.

2002. Litvinenko publishes a book, "The F.S.B. Blows up Russia," accusing the Russian secret service of orchestrating the 1999 explosions in apartment buildings that led to the second Chechen war.

2004. Litvinenko publishes another book, “The Lubyanka Criminal Group” arguing that Putin was personally involved in organized crime before becoming president.

2/13/04. Former president of the breakaway state of the Chechen Republic of Ichkeria, Zelimkhan Yandarbiyev, is assassinated in Qatar. Two Russian citizens are arrested in Qatar, tried, and convicted for the murder. Russian authorities admit that they special services agents. They are released five months later as part of an apparent deal between Qatar authorities and Moscow.

9/2004. Litvinenko supporters arrange for him to address British legislators, whom he tells that the Russian agents were “getting more aggressive, threatening my relatives.” Says he knows of 32 Russian spies working in England: “They follow us and prepare provocations and our liquidation.” He later asserts that bottles containing burning liquid were thrown at his apartment two weeks after his appeal to Parliament.

6/11/04. Litvinenko is prosecuted in absentia in a military court south of Moscow on charges of abuse of office.

12/15/2004. Ukrainian presidential candidate Viktor Yushchenko is poisoned with dioxin. Litvinenko is quoted as follows: “The view inside our agency was that poison is just a weapon, like a pistol. It's not seen that way in the West, but it was just viewed as an ordinary tool.” Claims that there is a secret FSB laboratory in Moscow that specializes in the study of poisons. Argues that Yushchenko was probably poisoned by the Ukrainian security service with help from FSB. Notes cases in recent years of drugging and poisoning political figures in Russia.

-- BACKGROUND INFO ON POISONINGS: A Russian banker, Ivan Kivelidi, and his secretary, died in 1995 after using a telephone apparently dosed with poison. The Chechen-based militant Khattab was killed in 2001 after opening a poisoned letter. Ivan Rybkin, who disappeared for several days in February during his race against Putin, accused the FSB of drugging him. In September 2004, Anna Politkovskaya lost consciousness after drinking tea aboard a flight to Beslan -- she later asserts that FSB agents plane had poisoned her. Roman Zepov, Putin's former head of security, died of apparent radiation poisoning in St. Petersburg in 2004. Russian MP and human rights activist Yuri Shchekochikhin died suddenly from a mysterious illness in 2003. The illness caused his skin to fall off and his organs to swell up. Relatives charged that the official inquiry into his death was compromised and sent a skin sample to London for analysis, which revealed traces of thallium. Vil S. Mirzayanov, a Russian dissident scientist living in New Jersey, claims that a secret unit inside a Moscow chemical institute studied had dioxin for many years while developing defoliants for the military.

7/5/06. The Duma passes a draft law giving the Russian president the right to use the armed forces and secret services abroad to fight international terrorism. Putin asked parliament for broader anti-terrorist powers after the abduction and murder of five Russian diplomats in Iraq. The previous week he ordered Russian special forces to hunt down and “destroy” the killers. Russian dissidents abroad fear the law will be used to target them as “enemies of the state.”

9/20/06. Yuri Shvets, a former FSB agent now living in the US, later reveals that on this date he delivers a dossier to Litvinenko that Litvinenko had commissioned on behalf of a British company or group of companies considering a major investment in Russia. (See the entry below for 12/16/06.) Shvets asserts that the dossier implicates, inter alia, a high level figure in the Putin administration, and that Litvinenko later told him that he, Litvinenko, had given the dossier to Lugovoi “within two weeks.” Shvets says Litvinenko did so because he trusted Lugovoi and because he wanted to “to develop his own network of sources in Russia through Lugovoi.” Shvets believes the Lugovoi was an FSB informer who “rushed” back to Moscow to deliver the dossier to the FSB, which then provided it to the unnamed administration official, who then organized the assassination of Litvinenko for having blocked a major business deal worth “hundreds of millions of dollars.”

10/06 According to a later report in The Times of London, Litvinenko travels to Israel weeks before he is poisoned to hand over a dossier on the Yukos oil affair to Leonid Nevzlin, an exiled oil “oligarch” and Yukov executive. Nevzlin is quoted confirming the article.

10/7/06. Anna Politkovskaya is killed.

10/16/06. Lugovoi and Kovtun fly to London from Moscow. This appears to be the first time Kovtun meets Litvinenko. Lugovoi is quoted saying in an interview on Dec. 1 (a Friday): “Dimitrii [Kovtun] and I flew to London from Moscow on October 16 on a Transaero flight. We stayed at the Parks hotel in

Knightsbridge. We met with Litvinenko in the afternoon in Bond Street and went to a meeting at Erinys, the security firm which recently developed an interest in Russia.” Litvinenko had introduced him to Erinys. “After the meeting we had lunch at the [Itsu] sushi bar in Piccadilly, a place where Litvinenko liked to go to. Then we parted. On October 17 we met again with Litvinenko in the afternoon. We went together for a meeting at another security firm. After the meeting we went back to the hotel where I had a meeting with an old acquaintance while Litvinenko waited for us downstairs. Then we went for dinner with him in Chinatown.” Later Lugovoi, attempting to show that Litvinenko could have been poisoned before 11/1, says: “Litvinenko, my business partner Dmitri Kovtun, and I were in London on Oct. 17 at a meeting in the office of Erinys. Traces of radiation could have been left there after this visit.”

10/17/06. Lugovoi and Kovtun fly back to Moscow, also on Transaero.

-- Kovtun and Lugovoi indicate later that they had known Litvinenko for 10 years. Lugovoi later says they were not close friends but business partners. According to a lengthy interview with Kovtun, Lugovoi and Sokolenko on Ekho Moskvyy the day after Litvinenko dies, the three (Kovtun, Lugovoi, and Sokolenko, who accompanies Lugovoi to London on 10/31) met in the 1980s at a Soviet military command school, where students were known as Kremlin Cadets. They also report that they were childhood friends who grew up in the same neighborhood and whose fathers both worked for the Defense Ministry.

BACKGROUND ON LUGOVOI, KOVTUN, AND SOKOLENKO

-- Lugovoi attends the Supreme Soviet Higher Military Command School in the 1980s, where many students went on to serve in the KGB. Joins KGB in 1987 and goes on to become a member of the Ninth Department of the KGB, or the Kremlin Regiment, which provided security for high-ranking Communist Party officials. Leaves the service in 1996 and becomes head of security at ORT, the state television network that until Putin’s presidency was largely controlled by Berezovsky. He is arrested in 2001 and imprisoned for over 12 months on charges of having plotted the escape of a Berezovsky associate, former Aeroflot deputy general director Nikolai Glushkov, from a Moscow hospital where he had been in police custody. He is also accused of embezzling millions of dollars from Aeroflot and wiring the money to accounts in Switzerland belonging to Berezovsky. He is convicted in 2004 but is released for time served. Lugovoi says he had known Litvinenko for at least a decade, dating back to when Litvinenko worked for the FSB and was assigned to Berezovsky after the 1994 assassination attempt. In 2006, Lugovoi expanded his business dealings to include a company based near Moscow that makes mead and kvas. One report describes his as “a kind of mini magnate in the Russian soft drinks industry.” Lugovoi and Kovtun attended the Supreme Soviet Higher Military Command School together. Berezovsky later states that he comes to suspect Lugovoi of being involved with the FSB because, despite having been jailed and his previous association with Berezovsky, his business in Moscow was doing very well.

-- Kovtun is a 41-year-old Russian who was a student in the 1980s at the Supreme Soviet Higher Military Command School. Kovtun says he served in Czechoslovakia and Germany after leaving the academy. Settles down in Germany and marries a German woman, whom he later divorces. He has lived in Germany since 1994. He describes himself now as a business consultant. How wealthy he is remains unclear.

-- Sokolenko joins the KGB in 1990 and also becomes a member of the Ninth Directorate. Retires the same year (1996) as Lugovoi and becomes involved in private security. Sokolenko’s company is called the Ninth Wave, apparently an allusion to the former KGB Directorate as well as a maritime expression for the worst wave in a sequence. He claims he does not know Litvinenko.

10/25/06. Lugovoi, apparently with up to four colleagues, returns to London on a BA flight 873 from Moscow. British investigators reportedly believe that Po-210 was flown into London from Moscow on this flight. Later reports indicate that they think as many as five suspects were on the plane. There are no reports that traces of Po-210 have been found in London that were deposited prior to this date.

-- Lugovoi checks in to the Sheraton Park Lane hotel. He later states: "In the evening [of the next day, October 26] I met with Litvinenko in the lobby of the hotel and we had a drink together at the bar."

10/27/06. Litvinenko states that he met again in the hotel bar with Litvinenko in the evening. "Then early in the morning the next day October 28] I flew back to Moscow on BA, the flight which leaves either at 8 or 9am." Traces of Po-210 are later found at the Sheraton Park Lane hotel where he stayed.

10/28/06. Lugovoi returns to Moscow in the morning.

-- Kovtun lands in Hamburg on a flight from Moscow and is picked up in a BMW, which later tests positive for radiation.

10/29/06. Kovtun spends the night in Haselau, about 16 miles north of Hamburg, at the home of his former mother-in-law. The BMW was found at that location and initial tests detected radiation in the house.

10/30/06. Kovtun goes to an administrative office for foreigners in Hamburg. Radiation is later detected on his file card, which he signed. Neither the employee in the room nor the room itself tested positive. Kovtun has a German residence permit and is still registered as a Hamburg resident, but he has not lived permanently at his listed address in an apartment building on Erzbergerstrasse for a couple of years. Kovtun's former wife lives in the same building on Erzbergerstrasse where he was registered.

10/31/06. Lugovoi flies into London from Moscow, this time with his family, ostensibly to watch a soccer match between Arsenal and CSKA Moscow (which brings hundreds of Russians to London as spectators). The match takes place on the evening of 11/1. Litvinenko checks into the Millennium Hotel.

-- Kovtun spends the night on his ex-wife's couch. Police later find traces of radiation on the couch.

-- Vyacheslav G. Sokolenko, in a telephone interview, says he joined Lugovoi and his family on the trip to London beginning Oct. 31 to see the soccer game. However, he says he does not meet Litvinenko at the Millennium Hotel the next day. Declines to discuss his relationship with Lugovoi except to say they were old friends.

11/1/2006. The probable date that Litvinenko is poisoned.

-- At 6:40AM Kovtun takes a Germanwings flight from Hamburg to London and registers at the Millennium Hotel along with Lugovoi. The plane is examined later at the Cologne-Bonn airport, but no contamination is detected. (Police assert that had Kovtun showered, he might have washed away any traces of Po-210. They also noted that the plane had been thoroughly cleaned.) Upon arriving in London, Kovtun meets with Lugovoi and Sokolenko. All three had known each as students at a Soviet military school in the 1980s and had both gone into private security work after the Soviet dissolution.

-- Kovtun and Lugovoi claim they visited Erinys before returning to the Pine Bar at the hotel to meet Litvinenko.

-- At around 3PM Litvinenko meets Mario Scaramella and they go to the Itsu sushi bar. Scaramella says he has a drink but nothing to eat and that Litvinenko has sushi. Litvinenko says later he started to feel ill within hours of the meeting. He confirms, "I ordered lunch, but he ate nothing." "He [Scaramella] appeared to be very nervous. He handed me a four-page document which he said he wanted me to read right away. It contained a list of people, including an FSB officer, who were purported to be connected with the journalist's [Politkovskaya] murder." According to the British HPA, Scaramella ingests or inhales a "significant" amount of polonium at some point, although much less than Litvinenko.

BACKGROUND ON SCARAMELLA. From 2003-2006, Scaramella, 36, works as a consultant to the Mitrokhin Commission, an Italian parliamentary body set up by center-right politicians to investigate ties between Russian intelligence and Italy. Transcripts of telephone calls between Scaramella and Senator Paolo Guzzanti, the commission chairman and a member of Berlusconi's Forza Italia party, show that the Commission was intent on proving before this year's elections that Prodi was a KGB agent. Scaramella has claimed to be a professor at the University of Naples, which says it has never heard of him. He was caught on a tape bragging that Berlusconi was considering him for a top job at the United Nations, but he later admits he never met Berlusconi.

-- From approximately 4:30-5PM Kovtun and Lugovoi meet Litvinenko at the Pine Bar of the Millennium Hotel. Speaking later in his interview with Ekho Moskvyy, Lugovoi says that he and Kovtun discussed business with Litvinenko for 20 to 30 minutes. Kovtun, in the presence of Lugovoi and Lugovoi's wife, tells Der Spiegel in an interview on Dec. 2, reported on Dec. 11: "He did not order anything. We did not pour anything for him." They agreed that both green tea and gin were drunk in the bar. Kovtun asserts: "The portions in the West are very small so we ordered four to six glasses of gin but we also drank tea, green tea." Litvinenko declined the gin but agrees to tea. They then leave to get ready for the soccer match that evening.

-- Litvinenko visits at some point that day (apparently after meeting with Scaramella, although this is unclear) Berezovsky's offices and the offices of the security firm Erinys.

-- 7:30PM. Litvinenko returns home; his wife later states that he tells her he is feeling ill before they go to bed.

-- 7:45PM. Kovtun and Lugovoi attend the Arsenal vs. CSKA-Moscow soccer match.

11/3. Litvinenko checks into a hospital in Barnet, north London.

11/11/06. Litvinenko in interview with BBC says he has been poisoned.

11/12: British police interview Litvinenko for first time. (Another report says police are not informed until 11/16.)

11/17/06. With health deteriorating, Litvinenko is transferred to University College Hospital.

11/19/06. British papers break story of Litvinenko poisoning, initially thought to be by radioactive thallium.

11/20. First article on Litvinenko poisoning appears in NYT. Moscow rejects claim that it was involved.

-- Scotland Yard begins an investigation under its antiterrorism unit.

-- Litvinenko is transferred to intensive care. A photograph of Litvinenko looking like he is at death's door is released and widely circulated.

11/22. Hospital doctors express their doubts that Litvinenko was poisoned with thallium. The Health Protection Agency (HPA) is unable to identify the material that killed Litvinenko and refer the analysis to the specialists at the Atomic Weapons Establishment (AWE) at Aldermaston, which provides warheads for the UK nuclear deterrent. AWE scientists reportedly have a very difficult time identifying the substance as well, and only manage to because they had some experience with Po-210 for use in a nuclear triggering device.

11/23. Litvinenko dies. Friends claim he made a deathbed statement accusing Putin of ordering killing. Litvinenko also apparently indicates that he converted to Islam several days before his death. Police investigating the affair characterize it as an “unexplained death.”

-- In a letter dated 11/23 but released later, imprisoned former FSB agent Trepashkin says, “Back in 2002, I warned Alexander Litvinenko that they [the FSB] set up a special team to kill him.”

11/24: Litvinenko statement is read by Alex Goldfarb to the press.

-- Former acting PM Yegor Gaidar falls ill on trip to Ireland. Survives, returning to Moscow for treatment. Later writes article for the FT saying he was poisoned and that his poisoning and that of Litvinenko were doubtless the work of enemies of Russia and the Russian president. Some in Ireland express doubts about whether Gaidar actually was poisoned. No formal diagnosis has been released.

-- British government's top security committee, COBRA, meets to discuss the situation. The Foreign Office says it has raised the case with the Russian Embassy.

-- Authorities announce that radiation from a rare radioactive substance, polonium-210, killed Litvinenko.

-- Alarm spreads in London as radiation traces are found initially in three London locations, all visited by Litvinenko: the Itsu sushi bar on Piccadilly, the Mayfair Millennium Hotel, and Litvinenko's home in the white-collar Muswell Hill neighborhood of north London.

-- BACKGROUND ON POLONIUM-210 (Po-210). Po-210 is extremely radioactive and toxic, with a half life of some 138 days. It has industrial uses (e.g., as an anti-static agent in brushes used for photographic printing) and could be produced in commercial or institutional reactors. Making the “significant quantities” described in Litvinenko's body would require a nuclear reactor that could bombard the metallic element bismuth with neutrons. In the form used in the suspected poisoning, it would have required high-grade technical skills and a sophisticated scientific process to produce, probably within a nuclear lab. Other means of producing it are too laborious, expensive, and/or dangerous. By weight it is about 250 million times as toxic as cyanide. A particle smaller than a dust mote can be fatal. To be fatal it must be swallowed, inhaled, or injected; the alpha particles it produces cannot penetrate the skin. Unlike most other forms of radiation, it emits alpha, rather than gamma, radiation. The material is difficult to handle because it tends to seep through non-welded seals such as a screw cap, stopper, etc. Alpha-emitters are not picked up by normal radiation-detection devices, so it would be relatively easy to take the substance across a border. Most of the world's Po-210 is produced in Russia in Chernobyl-type RBMK reactors. Sergei Kiriienko, head of Rosatom, asserts later that all Po-210 produced in Russia is sold to US suppliers through a single distributor. There are reports that the FSB has used it to trace counterfeit currency, and that accordingly the FSB maintains a supply. Dr. Paul M. Wax, vice president of the American College of Medical Toxicology, reports that at a 2002 conference in Volgograd, Russian scientists told him research on the use of polonium as a poison had been conducted.

11/25/06. Scaramella makes a statement claiming the Kremlin is behind the killing.

11/27/06. British authorities announce radiation traces are found at other locations. Scaramella is taken into protective police custody. According to a later report in The Daily Telegraph: “Clear traces of the radiation were found on the floor of a room, thought to be in the Millennium hotel in central London, the source said, as well as on a light switch in the same room. The traces were so strong that they indicated the actual source of the radiation was present, not a secondary source such as excretions from Mr. Litvinenko's contaminated body... The assassins were so bungling that they dropped the polonium on the floor of a London hotel room, a senior government source told The Daily Telegraph yesterday.”)

11/29/06. BA announces that three of its flights have been linked to Litvinenko and that radioactive traces have been found on two of these. Flights of interest are Moscow-London BA875 on 10/25 (the date Lugovoi and Kovtun flew to London); BA872 London-Moscow on October 28 (date Lugovoi and Kovtun

return to Moscow); BA873 London-Moscow on 10/31 (the date Lugovoi flies to London), and BA874 London-Moscow on November 3 (the date Lugovoi returns). One or two other aircraft are being investigated in Russia.

11/30/06. U.K. Home Secretary John Reid announces that traces of radioactivity have been found in around a dozen locations.

-- The head of the Russian state atomic energy agency Rosatom, Sergei Kiriyenko, tells Rossiiskaya Gazeta that Russia produces only 8 grams of Po-210 a month, all of which is sold to U.S. companies through a single authorized supplier. Says nuclear reactors such as the Russian RMBK or the Canadian CANDU were needed to make polonium.

12/1/06. Postmortem carried out on Litvinenko.

-- Scaramella, who had had tests in Italy but because the specialists involved were unable to detect Po-210 is flown to London, tests positive for Po-210 and is hospitalized. Doctors say he is "well," with symptoms less serious than the ones that led to Litvinenko's hospitalization. Medical spokesman says he "shows no symptoms of radiation poisoning." Traces of Po-210 are found in the urine of Litvinenko's widow Marina.

-- Goldfarb says he has given British police scans of letters written by a jailed former Russian intelligence officer (presumably Trepashkin) showing the existence of a secret squad targeting Litvinenko and others.

-- Ireland's nuclear watchdog assists police investigating Gaidar's mystery illness.

12/2/06. A Daily Telegraph article states, "Scientists at Aldermaston have been able to identify the Po-210 as manmade and it is believed they have identified a Russian reactor as the probable source."

-- Yuri Shvets (see entry below for 12/16/06) gives an interview to the AP saying he knows the name of the person who organized the Litvinenko assassination.

12/3/06. Nine British investigators go to Moscow to interview Lugovoi and others. Lugovoi is quoted as saying he was exposed to radiation, contrary to his previous claims.

12/4/06. British investigators are barred from interviewing Trepashkin.

-- Russian Foreign Minister Sergei Lavrov says the case is hurting diplomatic ties with Britain. Italy says it will ask Putin to assist the British police in investigating the poisonings. Britain's Health Protection Agency says two more hotels in central London have been checked for radiation.

-- An article in The Australian reports that a former bodyguard to Russian President Vladimir Putin was also apparently murdered in Sep. 2004 with a poison that produced symptoms remarkably similar to those that killed Litvinenko. Roman Tsepov died, aged 42, in 2004 after suffering severe radiation sickness brought on by a mystery substance he had ingested with food or drink. The nature of the poison is still the subject of speculation. Tsepov, nicknamed King of the Shadows, is said to have had several powerful enemies but the identity of his killer has never come to light.

12/6/06. Scotland Yard declares Litvinenko's death a murder.

-- Kovtun is questioned by Russian officials, in the presence of British investigators, at a Moscow clinic where he was undergoing tests for radiation. The British investigators are blocked from questioning Lugovoi.

--Scaramella walks out of the hospital with minute traces of radioactive poisoning but is otherwise perfectly fine. Had claimed to have been hit with five times the lethal dose of Po-210.

12/7/06. Litvinenko is buried at Highgate Cemetery. Funeral is attended by about 50, including Berezovsky, Zakaev, and Goldfarb.

--Kovtun checks into a Moscow hospital for radiation poisoning. Interfax reports that he had fallen into a coma, but his lawyer denies the report. His condition remains unclear.

-- Russian prosecutors open probe into Litvinenko's murder and what they characterize as the attempted murder of Kovtun. Russia's Prosecutor General Yuri Chaika's office says it plans to send investigators to London as part of the inquiry. The move to open a criminal investigation in Russia would allow suspects to be prosecuted in Russia, but Russian officials have said it would be illegal to extradite any suspects in Litvinenko's killing.

-- In London, seven employees of Metropolitan Hotel test positive for traces of Po-210.

12/10/06. Lugovoi is questioned in his Moscow hospital for three hours by British authorities. Kovtun is believed to be at the same hospital, which once treated victims of the Chernobyl nuclear disaster. Lugovoi says the results of his medical tests would be known later in the week but that he is unlikely to make them public. Tells RIA Novosti that Kovtun, who was interviewed by British and Russian investigators last week, was "feeling normal."

-- French police report obtained by The Associated Press says that Yevgeny Limarev, who reportedly provided documentation to Scaramella regarding a plot to assassinate Scaramella and Litvinenko shortly before the latter was poisoned, has disappeared from his home in the French Alps with his wife and teenage daughter. Scaramella says he had shown Litvinenko materials from Limarev suggesting that Russian agents were involved in the Politkovskaya murder. The materials reportedly implicate the Honor and Dignity group of Russian security veterans. The group's head, Valentin Velichko, rejects the allegations as nonsense. Goldfarb reveals that he had giving Limarev a \$15,000 grant in 2002 for an anti-FSB website.

12/10/06. Mikhail Trepashkin, an imprisoned former agent of the F.S.B., releases a statement through The Sunday Telegraph claiming a former FSB colonel poisoned Litvinenko. The agent in question, according to Trepashkin, appeared masked alongside Litvinenko in the 1998 news conference. Rossiiskaya Gazeta claims that of the two men who appeared in masks before the media, one was definitely Lugovoi and the other may have been Kovtun.

12/11/06. German police report that they have detected radioactive trail in Hamburg that tracks Kovtun over a four-day period. Kovtun, who had been living in Germany, began spreading traces of Po-210 in Hamburg soon after he arrived on an Aeroflot jet from Moscow on Oct. 28. A BMW used to pick up Kovtun at the Hamburg airport on October 28 had traces of Po-210. "Contamination was also found in a second car, a Chrysler," on a couch and a pillow in at the apartment of his former wife where he spent the night; at the house of his former wife's mother, and on a document he signed in a meeting at the immigration office in Hamburg two days later. Kovtun's ex-wife, her current partner, and their two young children also test positive for traces of Po-210. Hamburg's Chief Prosecutor Martin Koehnke says there is reason to suspect that Kovtun may have been among those responsible for Litvinenko's death. An official from the Federal Office of Radiation Protection says that polonium could have spread to Kovtun's hands if he mishandled a container of the substance, but he adds, "If it did come out of a container, it was very carelessly done."

12/12/06. Interpol begins an investigation into the case.

-- Kovtun tells Spiegel TV: "The only explanation for the traces of polonium I can give is that I brought them with me from London when I met Alexander Litvinenko there on October 16, 17 and 18."

-- The Russian media quote unnamed officials as saying that Russian police will focus on the theory that Kovtun and Lugovoi were engaged in the smuggling nuclear materials and may have been trying to shop illicit polonium to anti-Kremlin émigrés in London. They suggest Russian detectives will seek interviews with Berezovsky and Zakayev, both of whom have been granted political asylum in Britain.

-- Lugovoi says in an interview with Moskovsky Komsomolets that he and Litvinenko were poisoned on October 16. "Who told you that the contamination took place on November 1? It took place much earlier, on October 16." Lugovoi supports his claim by asserting that he and Litvinenko visited a London-based security firm where traces of polonium were later found only in mid-October, but did not go there on November 1. [Lugovoi presumably has the firm Erinys in mind and is trying to show that the poisoning did not take place at the Millennium bar meeting; however, he may be unaware that Litvinenko apparently visited the office of Erinys on 11/1, and that they stated to Der Spiegel that they visited Erinys before meeting Litvinenko at the Pine Bar.] Lugovoi's comments echo those made earlier by Kovtun.

-- German police source tells Berliner Zeitung, "Alongside several other versions behind this crime, we are seriously considering the possibility that Litvinenko's death could have been connected to the illegal trade in nuclear materials." Berliner Zeitung quotes experts among German law enforcement officials as estimating that the dose of Po-210 believed to have caused Litvinenko's death was worth about \$25 million. The newspaper also refers to speculation in the Russian press that Litvinenko could have been involved in plans by Chechen separatists to create a "dirty bomb."

12/14/06. In an telephone interview from the hospital with the German newspaper Sueddeutsche, Lugovoi denied any friendship ties with Litvinenko and says their relationship was purely a business one. He adds: "We met ten years ago. I don't even remember how. One is for sure, we did not meet because he was an FSB employee and I was also serving there. I never served in the FSB. These are also lies."

12/15/06. Russian Defense Minister Sergei Ivanov tells foreign journalists that Litvinenko did not have access to information that could have compromised high-placed officials and describes him as someone with "not much intellect." He then adds, "For us, Litvinenko was nothing. We didn't care what he said and what he wrote on his deathbed."

12/16/06. A former major in the KGB now living in the U.S., Yuri Shvets, gives an interview to BBC Radio-4 in which he asserts that Litvinenko was poisoned because he was in possession of a dossier incriminating an unnamed "powerful" person in Russia who is close to Putin (the interview is available on the BBC Radio-4 website). He later asserts in a telephone interview reported by the Moscow Times on 12/22/06 that the dossier implicated "a very highly placed member of Putin's administration" had likely prompted the poisoning. Shvets says in the radio interview that he had compiled the eight-page dossier as part of a due diligence investigation for a British company or group of companies considering a major investment in Russia. He speculates that Litvinenko was murdered because he showed the incriminating dossier to Lugovoi, who was an FSB informant, and that Lugovoi then returned to Moscow and delivered the dossier to the FSB, which delivered it to the unnamed administration official, who then ordered the hit. He also reveals that he has handed the dossier over to British investigators who had interviewed him recently, and that they had already been aware that the dossier implicated the unnamed official. Shvets reportedly served in the KGB from 1980-1990 and was based in Washington in 1985 to 1987. He moved to the US in 1994 after falling out with his former employers. He now works for the Center for Counterintelligence and Security Studies, based outside of Washington in Alexandria, VA, together with Oleg Kalugin, also a well-known former FSB agent and target of FSB hostility. According to the Moscow Times, Shvets was awarded a \$400,000 contract from Berezovsky in 2002 to transcribe audiotapes implicating then-Ukrainian President Leonid Kuchma in the killing of journalist Heorhiy Gongadze. In response to Shvets's accusations, Lugovoi tells the Moscow Times: "Now I understand that this is just the latest traitor who has run from who knows where." The Moscow Times also reports that a business partner, Von Gerhke-Thompson, shares e-mails with them that indicate that Shvets had worked for a number of Russian companies, including Rosneft (chaired by Kremlin deputy chief of staff Igor Sechin) and an oil and gas venture, Babaykov Foundation (with links to former Russian Prime Minister Viktor Chernomyrdin).

-- An article in The Daily Telegraph identifies a Department V (the V apparently stands for the former special KGB unit Vympel) inside the FSB as a potential supplier of Po-210. The unit is charged with guarding Russia's nuclear facilities and is also a rapid response force against nuclear terrorism. The article asserts that Vympel has a veteran group similar to Honor and Dignity and runs a private protection agency

called “Lubyanka.” Mark Galeotti, an organized crime researcher at Kees University, comments in the article: “It used to be a hit squad and maybe it is still used as such, but its main function is as a rapid reaction group to counter nuclear theft and terrorism. As such it has some training in various isotopes, although they would not be true specialists, and it runs operations at nuclear facilities, which may well have given members the opportunity to access polonium in a more subtle way than sending an order from Moscow.”

12/18/06. Gazeta.ru reports that sources in the “power structures” have asserted that the Po-210 that killed Litvinenko may have come from a secret FSB installation in the south of Moscow known as NII-2 (Nauchno-Issledovatel’skom Institute-2). They also claim that the Po-210 was probably produced in the Russian city of Sarov.

-- British investigators meet with Kovtun and question him a second time. The London Times asserts that sources in British security report that Russian investigators have not asked Kovtun and Lugovoi certain questions posed by the British.

-- Interfax reports that the British investigators have completed their investigation in Moscow and are preparing to leave for the UK.

II. THREE TENTATIVE CONCLUSIONS

1. It seems likely that Litvinenko was deliberately poisoned with Po-210 at both the Itsu Sushi Bar and the Pine Bar at the Millennium Hotel.
 - a. The alternative possibilities are that it was an accidental poisoning or Litvinenko may have been poisoned somewhere else and at another time, such as the meeting on October 16.
 - i. The possibility that it was an accidental poisoning seems highly unlikely given the size of the dosage as well as the apparent locations (a sushi bar and hotel bar). Why would so much Po-210 have been present in a sushi restaurant and a bar in London and ingested or inhaled by accident, and how could it have been ingested in such a massive quantity if the poisoning was not deliberate?
 - ii. The “poisoning on October 16” line offered by Lugovoi and Kovtun seems very unlikely. If it were true, there would be a Po-210 trail all over London given the length of time involved. The police have found no evidence of poisoning before 11/1 according to the press. Also, it is clear that Lugovoi and Kovtun have an interest in asserting that the poisoning took place earlier.
 - b. The evidence suggesting that there was an attempt (possibly successful) to poison Litvinenko at the Itsu restaurant is that (1) traces of Po-210 were found at the restaurant, and Scaramella has reportedly tested positive as well -- it is difficult to come up with a plausible explanation for how this could have happened given that the Itsu bar meeting took place before the Pine Bar meeting unless a poisoning attempt was made at the Itsu sushi bar first; and (2) the fact that the police have reportedly found no evidence of contact with Po-210 by Litvinenko before then, including no evidence in the car he took to London that morning, whereas there are multiple places where Litvinenko visited after the Itsu and Pine Bar meetings where Po-210 has been detected. There is, however, no evidence that Lugovoi and Kovtun were at the Sushi bar, and given the fact that Litvinenko knew them both, it seems very unlikely that they could have been the deliverers of the poison at the sushi bar.
 - c. The evidence suggesting that Litvinenko was poisoned the Pine Bar at the Millennium Hotel is (1) the presence of Kovtun and Lugovoi; (2) the fact that we know that Kovtun and Lugovoi had been in contact with Po-210 for days before the meeting; (3) the reported discovery of a highly contaminated teacup at the bar (although the report is unconfirmed), and (4) the fact that, while none of the employees at the Itsu sushi bar have tested positive for traces of Po-210, ten employees of the Pine Bar *have* tested positive.
2. It seems highly likely that the Po-210 came from a nuclear reactor based in Russia.

- a. It is very difficult to obtain such a large quantity in general, and there is a report that UK authorities have identified a reactor they think it came from that is based in Russia.
 - b. Most authorities apparently consider it very unlikely that that amount of Po-210 could have been obtained from commercial sources.
 - c. Po-210 is not produced in the UK at all, so it must have been smuggled in.
3. The simplest explanation for the poisoning is that the deliverer at the Pine Bar was either Kovtun or Lugovoi, or both acting in collusion, possibly with the assistance of Sokolenko or the unnamed colleague or colleagues who came to London on the October 25 BA flight. However, an alternative possibility cannot be ruled out, which is that some other party delivered the poison at both at the Itsu restaurant and the Pine Bar, and that Lugovoi and Kovtun were deliberately contaminated beforehand so they would be blamed for the poisoning.
- a. It seems clear that both Kovtun and Lugovoi were exposed to Po-210 before 11/1. German investigators have concluded that Kovtun left traces of Po-210 beginning no later than 10/28 upon his arrival in Hamburg from Moscow. Substantial traces of Po-210 were found at the hotel where Lugovoi, et.al., stayed during the 10/25 to 10/28 visit, as well as on the plane that brought Lugovoi to London. Po-210 was therefore brought into London no later than 10/25. Kovtun may have brought in another batch on 11/1, or he may have been contaminated by exposure earlier.

III. SOME TENTATIVE SPECULATIONS: “WHO DONE IT?”, “WHY POLONIUM?”, AND SOME OTHER INTRIGUING MYSTERIES

1. Who organized the killing? The following possibilities suggest themselves.
 - a. The perpetrators were acting on the own because of some issue with Litvinenko (e.g., a business deal gone bad, or a desire to keep him from revealing some secret).
 - i. The motivation here would be simple revenge, or possibly a desire to kill Litvinenko in a spectacular fashion in an effort to deter others from crossing the perpetrators.
 - ii. This seems unlikely, given the difficulty and risk associated with obtaining Po-210, and since there are much easier ways to kill someone if your objective is simply murder.
 - iii. The claim that the group was involved in smuggling nuclear materials and that the murder was a deal gone bad also seems unlikely. Again, why would Litvinenko have been poisoned with a massive dose (reportedly from 10 to 20 times more than is needed to kill someone) of a very rare and valuable material? Why use Po-210 to kill him given that the smugglers presumably had an interest in keeping their transaction a secret? Nor is there any evidence of any other Po-210 present in London that might be available for sale.
 - b. The perpetrators were acting as agents of Berezovsky.
 - iv. The motivation presumably would be to sour relations between Russia and the West, or to unleash a sequence of events that somehow will lead to regime change in Moscow, or to enable some kind of act of nuclear terrorism by the Chechen resistance. The fact that Lugovoi had worked for Berezovsky as a security specialist for ORT makes this scenario less implausible than it would be otherwise.
 - v. This seems possible but unlikely given that Berezovsky would be taking a huge personal risk that such an elaborate plot would lead back to him, particularly since Lugovoi had ties to him. It is also difficult to see how Berezovsky could have gotten the Po-210. The notion that Berezovsky was supporting some kind of act of nuclear terrorism by the Chechen resistance also seems implausible – if it was organized by elements of the Chechen resistance, why not engage in nuclear terrorism inside Russia, given that is where the main enemy resides as well as the risks of transporting the material out of the country. The notion that this was an elaborate conspiracy by Berezovsky or his allies to deal a decisive blow to Russia’s relations with the West or to Putin’s political position also seems implausible because, among other things, it assumes that Western

investigators would conclude that Putin was behind without any real evidence. Nor is it clear that the murder of Litvinenko would undermine Putin's domestic position – on the contrary, it might make Putin more popular to an electorate interested in order and asserting Russian state interests. Moreover, Putin has less than two years left in office, and he is very likely to serve out his term – why take such a risk to undermine a lame duck.

- b. The perpetrators were agents of some unknown organized criminal group, an oligarch other than Berezovsky, or some other private actor motivated by purely private concerns.
 - i. The motivation here would presumably be revenge or a desire to silence Litvinenko. Certainly there are a great many people who have a motive to kill Litvinenko for purely personal reasons since he seems not only to have been devoting himself to exposing dirty state secrets but also to blackmailing people in an effort to make ends meet in London.
 - ii. Again the problem with this scenario is the use of Po-210. Why would someone intent on killing Litvinenko for essentially personal or business reasons use such a dangerous, dramatic, and difficult method, not to speak of such a valuable product? It also would have been difficult for a non-state group to obtain that much Po-210. Nor has there been any evidence as of yet in favor of this scenario. What criminal group or oligarch?
- c. The perpetrators were agents of the Russian state, acting with or without Putin's knowledge but serving in their official capacity.
 - i. The motive here would be silencing a "traitor" and an "enemy of the state."
 - ii. The problem with this scenario is that doing something like this without full authorization of Putin would be a huge personal risk. It might lead to a fierce reaction from a president who would not want subordinates undertaking such a fraught operation without approval or who felt it was contrary to Russian interests and/or immoral. There would also be considerable risk that the plot would be revealed. And the consequences for the Russian state would be politically catastrophic if it came out that this was an official operation. All this also makes it unlikely that Putin would have ordered the operation.
 - iii. The argument offered by Shvets that Litvinenko was poisoned because he possessed a dossier on someone high up in the Kremlin seems increasingly plausible, however. The motivation would presumably be revenge, since repressing the Shvets dossier seems unlikely to have been the outcome of the assassination -- slow death from radiation poisoning would give Litvinenko plenty of time to hand the dossier over to the press or to British investigators; moreover, there would be no guarantee that others (e.g., Shvets, as Shvets claims) did not possess a copy of the dossier, and if they did, they could be expected to turn it over to investigators of the assassination.
- d. The perpetrators were the agents of some "rogue" private group, or a rogue element within the FSB, or a group that includes both private and governmental "security" specialists. It is also possible that the perpetrators were blackmailed by such a group into carrying out the assassination.
 - i. The motivation here would be clear: a desire to punish a "traitor" and "enemy of the state" in a more-or-less spectacular fashion, thereby sending a powerful message to Russia's "enemies" at home and abroad.
 - ii. The evidence supporting this scenario, particularly where rogue agents in the FSB are involved, is considerable. First, prior to his deathbed statement (assuming those words actually were uttered by Litvinenko), Litvinenko repeatedly asserted that he was being targeted by agents of the FSB for assassination. Second, the organs clearly identified Litvinenko (along with Berezovsky, Zakaev, and others in London who were said to have formed an anti-Russian "terrorist cell") as "enemies" (to the point where the FSB reportedly used Litvinenko's portrait for target practice), and there appears to have been a general view within the organs that deaths would be a good thing for Russia and a case of justice served. Third, reports of a special FSB unit

devoted to developing poisons and their antidotes, and of FSB use of Po-210 to trace counterfeit currency, suggests that FSB agents had the opportunity to obtain to Po-210. (It also seems likely that the perpetrators acquired the Po-210 rather than purchased it, given the high cost.) Fourth, the murder of other “enemies of the state” (e.g., Politkovskaya) suggests (although it does not prove) that there are people in Russia engaged in murder for political rather than private reasons. Finally, this version squares with the decision to use Po-210.

- e. A combination of the above two scenarios – someone in the Kremlin orders the hit after Lugovoi informs the FSB of the Shvets dossier, and agents in the FSB are happy to carry it out because they view Litvinenko as a traitor and enemy of the state.
4. Why use Po-210? Two possibilities seem most likely.
 - c. It may be that the organizers of the plot believed that Po-210 would not be detected by British authorities and that it therefore would not be traceable. (Although that raises the question of why administer such a high dose, which would presumably make detection more likely).
 - d. The perpetrators assumed that the Po-210 would have been identified by the British, and that the murder would cause an even greater sensation by virtue of the method used, in which case the point would have been to send a clear signal to other Russian “traitors” and “enemies.”
 2. Why were Lugovoi and Kovtun so careless with the Po-210 as to contaminate themselves, to the point where they apparently ingested some and ended in hospital, and also risked the health of their families? Three possibilities suggest themselves.
 - a. The organizers of the plot, including Lugovoi and Kovtun, may not have been aware of how dangerous Po-210 was or how difficult it is to keep it contained. This might also explain why they used such a massive dose – they simply were not fully aware of the properties of what they were working with.
 - b. The organizers of the plot may not have told Lugovoi and Kovtun how dangerous and traceable Po-210 was, perhaps because they did not want to deter them from carrying out the murder.
 - c. Lugovoi and Kovtun are not the perpetrators but are being framed by some unknown group that organized the killings without Lugovoi’s and Kovtun’s involvement.
 3. Why are there at least two trails of Po-210 coming into the UK (on 10/25 when Lugovoi on the BA flight, and again on 11/1 in the early morning with Kovtun)? Three possibilities seem most likely.
 - a. The plotters may have decided for some reason to bring two (or possibly more – there are reports that British investigators believe there were three separate deliveries) separate deliveries of Po-210 (although it is difficult to see why).
 - b. Kovtun was contaminated before he arrived in Germany but he was not delivering Po-210 to London for use in the poisoning – in which case there would have been one delivery but two (or more) trails.
 - c. Kovtun and/or Lugovoi were contaminated during a “dry run” of some sort in Moscow prior to October 25 but were unaware of the contamination. Again, this would explain the presence of two or more trails despite there being only one delivery of poison.
 4. Why were there apparently two separate poisoning attempts (the Itsu restaurant and the Pine Bar)?
 - a. The perpetrators may have opted for redundancy.
 - b. The perpetrators may have felt the first attempt was unsuccessful, in which case they wanted to make sure that the poisoning would “take.”