

Smoleńsk Maze

**CRASH OF THE POLISH AIR FORCE ONE
SMOLEŃSK, RUSSIA, APRIL 10, 2010**

2014 STATUS REPORT

by

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Introduction

Early morning on April 10, 2010, the Polish Governmental Airplane Tu-154M (“Polish Air Force One”) departed from Warsaw, Poland, to Smolensk, Russia, carrying on board the highest level delegation of the Republic of Poland for the commemoration of the 70th anniversary of the Katyn Massacre. The official delegation consisted of the President of Poland, First Lady, all members of the Central Command of the Polish Armed Forces, parliamentary, government and Church officials, and representatives of the families of the Katyn victims. Upon entering the airspace of the Military Airdrome “Severny” in Smolensk, Russia, the Polish pilot made one reconnaissance approach to landing. At the decision altitude, he chose not to land and issued a command to “go around.” Seconds later, the Polish Air Force One crashed. The entire Polish delegation of the highest level perished less than a mile from the Severny Airdrome in Smolensk, Russia. All 96 people on board were killed; there were no survivors (“Smolensk Crash”).

Within minutes of the crash, the international media announced that pilot error led to the crash of the Polish Air Force One. This irresponsible rush to conclusion stands in contrast to a well-known rule that whenever the head of state dies in a plane crash the probability of sabotage is increased. This principle was proclaimed, *inter alia*, by Russia in connection with the investigation of the 1986 crash that killed President Samora Machel of Mozambique.¹ History shows that when the head of state dies in the airplane crash, invariably the sabotage is involved.² History also teaches that initial investigations of high profile plane crashes tend to be conducted under undue political pressure. Transparent, impartial in-depth investigations of high profile crashes are possible only years later.³

On December 19, 2010, Poland, acting as the state of operator and the state of registry that suffered fatalities of unprecedented significance, submitted its response to a draft of the Russian report. The Remarks of the Republic of Poland to the draft final report of the Russian Federation (“Polish Response”) pointed to a number of factual errors, omissions, misrepresentations and false premises in the draft Russian report. The Polish side also complained about the lack of Russian cooperation in the investigation by pointing out that out of 222 Polish inquiries for information Russia did not respond at all to 169. Most importantly, in its remarks the Polish side requested “the reformulation of causes and circumstance” of the Smolensk Crash.⁴

The Polish Response was submitted to the Russian side under intense political pressure, in the context of a visit of the Russian President Dimitri Medvedev to Poland. During this visit, President Medvedev urged the Polish side not to object to the Russian

¹ Russian Comments to the Report of South African Civil Aviation Authority "Report of the Board of Inquiry into the accident to Tupolev 134A-3 aircraft C9-CAA on 19th October 1986," p.155. <http://www.caa.co.za/resource%20center/accidents%20&%20incid/reports/OldReports/C9-CAA.pdf>

² M. Szonert Binienda “Badania Istotnych Katastrof Lotniczych, Polityczno-Prawne Studium Porównawcze,” II Konferencja Smoleńska, October 21-22, 2013, Warsaw, Poland, <http://konferencjasmolenska.pl/>; See also: M. Szonert Binienda, “Katyń, Smoleńsk i co dalej?” October 20, 2013, Klub Ronina, <http://www.blogpress.pl/node/17729>; (retrieved March 14, 2014).

³ *Ibid.*

⁴ The Polish Response was submitted in Polish and Russian languages and was posted on the internet in Polish only. The Polish Response was not officially translated into English. It was through the efforts of the families of the Smolensk victims that the Polish Response was translated into English and posted on the website of the Parliamentary Committee for the Investigation of the Smolensk Crash: <http://orka.sejm.gov.pl/ZespolSmolenskMedia.nsf/EventsByLink/ZSMK-9HBN83/%24File/Remarks-on-the-MAK-Report.pdf> (retrieved March 17, 2014).



[1] Russian President Dmitry Medvedev visits Poland in December 2010.
Source: PAP

findings.⁵ The Russian side ignored entirely the merits of the Polish Response and disregarded the Polish objections to the cause of the crash.

On January 12, 2011, the Russians announced their final report on the investigation into the Smolensk Crash at a press conference in Moscow (“Russian Report”).⁶ This high profile event was broadcast across the globe. The Russians put the blame for causing the crash squarely on the Polish pilots and the Commander-in-Chief of the Polish Air Force General Andrzej Błasik. The Russians went so far as to make groundless allegations that General Błasik, acting under the influence of alcohol, was not only present in the cockpit at the time of the crash but also interfered with pilots’ duty by forcing them to land.⁷ Indirectly, the Russian report also blamed late President Lech Kaczyński for exerting undue pressure on the pilots to land “at any means.”

One-sided arbitrary actions of the Russian Federation concerning the investigation of the Smolensk Crash violated the spirit of international cooperation, fundamental norms of any airplane crash investigation, and Annex 13 of the Chicago Convention accepted by Russia as a guiding framework for this investigation. The primary objective of the Smolensk Crash investigation was not achieved because the pilot error scenario upon which the Russians based their conclusions remains unsubstantiated. The Russian Report contains considerable bias by presenting unreliable information, replacing a solid technical analysis with a speculative psychological characterization of the Polish crew, and omitting important information in order to advance the pilot error scenario. As a result, the Russian Report presents groundless conclusions.

The United States has a direct interest in the investigation of the Smolensk Crash for several reasons. It shall be noted that a US citizen, Wojciech Seweryn from Chicago, Illinois, died in this crash. Also, among ten generals of the Polish Armed Forces who perished in the crash, five of them served as top NATO commanders. Among them was General Franciszek Gągor, who was next in line to assume central command of NATO forces in Europe. Furthermore, the following Polish generals who supported US military missions in Iraq and Afghanistan were killed in this tragedy: General Andrzej Błasik, Gen. Tadeusz Buk, Gen. Bronisław Kwiatkowski, Gen. Włodzimierz Potasiński, and Gen. Tadeusz Płoski. Moreover,

⁵ Grzegorz Wierchołowski, “Prokuratura spełniła życzenie Miedwiediewa,” April 13, 2011. <http://niezalezna.pl/13724-prokuratura-speelniła-zyczenie-miedwiediewa> (retrieved March 17, 2014).

⁶ Final Report Tu-154M, tail number 101, Republic of Poland, Interstate Aviation Committee, Aircraft Accident Investigation Report, <http://www.webcitation.org/5zf3RPdHw> (retrieved March 17, 2014).

⁷ This offensive allegation has been proven false beyond a reasonable doubt. The Polish Military Prosecutor’s Office on March 20, 2014, issued a statement that additional toxicological analysis that was conducted confirmed previous findings that General Błasik at the time of his death had no alcohol in his blood. http://www.npw.gov.pl/491-Prezentacja-53927-p_1.htm (retrieved March 18, 2014).

the USA played an important role in the investigation of the Smolensk Crash as a manufacturer of the Terrain Awareness Warning System (“TAWS”) installed in the Polish Air Force One. The TAWS system recorded data critical to the last phase of the fatal flight.

This Status Report does not address all the problems arising in connection with the Russian investigation into the Smolensk Crash but rather highlights the most important examples of mishandling of the investigation, the most representative violations of standard norms and procedures, and the most obvious flaws in the Russian Report and its conclusions.

I. Legal Maneuverings

In response to the Smolensk tragedy, President of Russia Dmitry Medvedev formed a State Commission⁸ to investigate the causes of the crash and appointed Prime Minister of the Russian Federation Vladimir Putin as the Investigator-in-Charge. For the first three days, from April 10 to April 13, the Polish and Russian sides had debated whether the investigation was to be conducted pursuant to the 1993 Polish-Russian agreement that regulates military aviation in the airspace of both contracting states.⁹ This bi-lateral agreement assured the Polish side a balance role in the investigation process but was challenged by Russia. During this crucial three-day period, the crash site was supervised by the Head of the Flight Safety Agency of the Russian Armed Forces.¹⁰

On April 13, 2010, by Order of Vladimir Putin as the Head of the State Commission, general supervision of the technical investigation was delegated to the Chairperson of the Interstate Aviation Committee (“IAC”). By the same order, a decision was made to conduct the investigation of the crash in compliance with Annex 13 to the Convention on International Civil Aviation.¹¹ Accordingly, on April 13, 2010, a decision was made to treat the Polish Air Force One as a civilian aircraft and hand over the investigation to the IAC, a Russian affiliate of the International Civil Aviation Organization (“ICAO”). The Polish public was informed that the investigation was conducted under the Convention on International Civil Aviation,¹² also known as the Chicago Convention.

It was not until the release of the Russian Report on January 12, 2011¹³ that the Polish public learned about the problem with the investigation. Only then it was revealed that the investigation was conducted not under the Chicago Convention but merely under Annex 13 to this convention. Only then the public learned that the Chicago Convention does not apply

⁸ Order № 225 of the President of the Russian Federation dated April 10, 2010.

⁹ Agreement between Ministry of Defense of the Republic of Poland and Ministry of Defense of the Russian Federation on terms of bilateral cooperation on military aircraft operations of the Republic of Poland and Russian Federation in the airspace of both parties, dated December 14, 1993. [http://static.presspublica.pl/red/rp/pdf/kraj/Porozumienie_z_14_grudnia_1993%20r._\(616%20KB\).pdf](http://static.presspublica.pl/red/rp/pdf/kraj/Porozumienie_z_14_grudnia_1993%20r._(616%20KB).pdf) (retrieved March 10, 2014).

¹⁰ Interstate Aviation Committee Air Accident Investigation Commission Final Report Tu-154M tail number 101, Republic of Poland; http://www.mak.ru/russian/investigations/2010/tu-154m_101/finalreport_eng.pdf (retrieved March 10, 2014).

¹¹ *Ibid.*, p. 7.

¹² Convention on International Civil Aviation dated December 7, 1944, <http://www.icao.int/publications/Pages/doc7300.aspx> (retrieved March 10, 2014). The decision to proceed according to Annex 13 of the Chicago Convention was accepted by Poland.

¹³ Final Report Tu-154M, tail number 101, Republic of Poland, Interstate Aviation Committee, Aircraft Accident Investigation Report, <http://www.webcitation.org/5zf3RPdHw> (retrieved March 17, 2014). Interstate Aviation Committee consisted of representative of former Soviet Republics.

to a state aircraft and therefore does not apply to the Polish Air Force One.¹⁴ As a result of this legal manipulation confusing a state aircraft with civil aircraft, the investigation of the Smolensk Crash was pushed into a legal limbo, depriving the Polish side of any enforcement, oversight and appeal mechanisms.

Although the investigation of the crash was forced outside the framework of any international law, a written declaration made by the IAC in the Russian Report to the effect that the investigation was conducted in accordance with procedures of Annex 13 to the Chicago Convention gave this investigation the appearance of professionalism and transparency. Unfortunately, the investigation was conducted in gross violation of standards and procedures of Annex 13 and basic international norms of any aircraft accident investigation. Overwhelming evidence exists that both, the provisions of Annex 13 and basic norms of aircraft accident investigation, were blatantly violated in every respect in the course of this investigation.

For all practical purposes, the most important investigation in the history of Poland was taken away entirely from the Polish hands. Professor Marek Żylicz, a legal advisor to the Polish State Aviation Commission known as the Miller Commission, revealed that provisions of Annex 13 and all basic standards of investigating the airplane crash were violated in all fundamental respects during the Russian investigation of the Smolensk Crash. Although Article 5.18 of Annex 13 provides that the State of Registry and State of Operator shall be entitled to appoint an accredited representative to participate in the investigation, and Art. 5.19 further states that the State of Registry and State of Operator shall appoint one or more advisers to assist its accredited representative, the Polish accredited representative and his advisers were effectively barred from participating in the investigation.¹⁵ Russia also violated Article 5.24 of Annex 13, which specifically assures the accredited representative and his advisers the right to participate in all aspects of the investigation.¹⁶ According to Prof. Żylicz, Russia also violated Art. 5.25 by denying the Polish experts any access to the investigation site, investigative activities, documents, reports and information.¹⁷ Also, the Russian side violated Article 3.2 of Annex 13,¹⁸ which provides that the state of occurrence, i.e. Russia, shall take all reasonable measures to protect the evidence and to maintain safe custody of the aircraft and its contents.

Four years after the crash, the black boxes, the wreckage of the plane, and electronic devices of the victims of the crash still remain in Russia despite numerous appeals for their

¹⁴ *Ibid.*, Art. 3 of the Chicago Convention states: a) This Convention shall be applicable only to civil aircraft, and shall not be applicable to state aircraft. b) Aircraft used in military, customs and police services shall be deemed to be state aircraft.

¹⁵ Annex 13 to the Convention on International Civil Aviation, International Standards and Practices, Aircraft Accident and Incident Investigation, http://www.cad.gov.rs/docs/udesi/an13_cons.pdf (retrieved March 10, 2014).

¹⁶ This right includes the right to: a) visit the scene of the accident; b) examine the wreckage; c) obtain witness information and suggest areas of questioning; d) have full access to all relevant evidence as soon as possible; e) receive copies of all pertinent documents; f) participate in read-outs of recorded media; g) participate in off-scene investigative activities such as component examinations, technical briefings, tests and simulations; h) participate in investigation meetings, deliberations related to analysis, findings, causes and safety recommendations; i) make submissions in the investigation.

¹⁷ Marek Żylicz, „Katastrofa Smoleńska w świetle międzynarodowego prawa lotniczego,” *Państwo i Prawo*, No. 4/2011; http://www.lex.pl/c/document_library/get_file?uuid=46a7828c-7e28-45aa-9309-0a4d58b833ed&groupId=2221015 (retrieved on March 10, 2014).

¹⁸ *Ibid.*, p. 3-1

return.¹⁹ By not returning the Polish property, Russia violates Article 3.4 of Annex 13, which provides that “the State of Occurrence shall release custody of the aircraft, its contents or any parts thereof as soon as they are no longer required in the investigation, to any person or persons duly designated by the State of Registry or the State of the Operator, as applicable.” To this day, this key evidence remains in Russia and some parts of the key evidence remain withheld from the investigation. For example, satellite pictures as well as the video recording from the Severny Airport at the time of the crash remain withheld from the Polish side.

II. Air Navigation

The work of the Flight Control Group ("FCG") is one of the most significant and most controversial aspects of the Smolensk Crash. The FCG is frequently identified as directly responsible for the Smolensk Crash because the actions and decisions of the FCG led the Polish crew to their death by falsely and repeatedly assuring the Polish pilots that the airplane was on course and on glide path.

Furthermore, the eastern direction for the approach to the Smolensk ‘Severny’ runway chosen for landing of the Polish Tu-154M should have never been allowed since this direction of the landing approach was specifically forbidden for this particular runway in fog and bad weather conditions.²⁰

Despite a series of fundamental problems with the performance of the FCG at the Severny Airport on April 10, 2010, including obvious violations of Russian Federal Regulations, the Russians found no errors, irregularities or violations of law in the operations of the FCG.²¹ Various analyses presented in the Russian Report address a number of ancillary issues but disregard the most important analysis of the FCG performance.



[2] Air Traffic Control Tower
Severny Airport in Smolensk
April 10, 2010

¹⁹ The following electronic devices were not returned to the Polish side: 1. Satellite telephone from the airplane; 2. Cell phone of the President of Poland, 3. Cell phone of Air Force Commander General Blasik; 4. Cell phone of Army Commander General Bronisław Kwiatkowski; 5. Cell phone of Minister Zbigniew Wassermann; 6. three Motorola Radio telephones; 7. Ten smart phones Black Berry; 8. 60 cell phones; 9. Twenty photograph cameras with memory cards; 10. Video camera with memory card and tape; 11. Industrial camera and two computers; 12. Top secret NATO documents.

²⁰ Interview with Sergei Wieriewkin, former deputy director of the International Airport Moskwa-Wnukowo. See: <http://www.naszdziennik.pl/index.php?dat=20110202&typ=po&id=po07.txt>, See also: <http://www.bibula.com/?p=31711>

²¹ According to the Russian Report (p. 116), the Flight Control Group actions during the approach did not contribute to the accident. Professional level of the FCG of Severny Airdrome in Smolensk complied with the regulations. The FCG, using the available equipment informed the crew on the aircraft position on approach down to the established decision altitude. The operation of the navigation aids and lighting equipment and the runway condition did not affect the accident causes.

A. “On course” “On glide path”

According to the Russian reading of the Cockpit Voice Recorder (“CVR”), the Air Traffic Controller made the following statements in the final stage of the Polish Air Force One fatal flight:²².

10:39:31 – “8, on course, on glide path”

10:39:52 – “on course, on glide path, distance 6”

10:40:14 – “4, on course, on glide path”

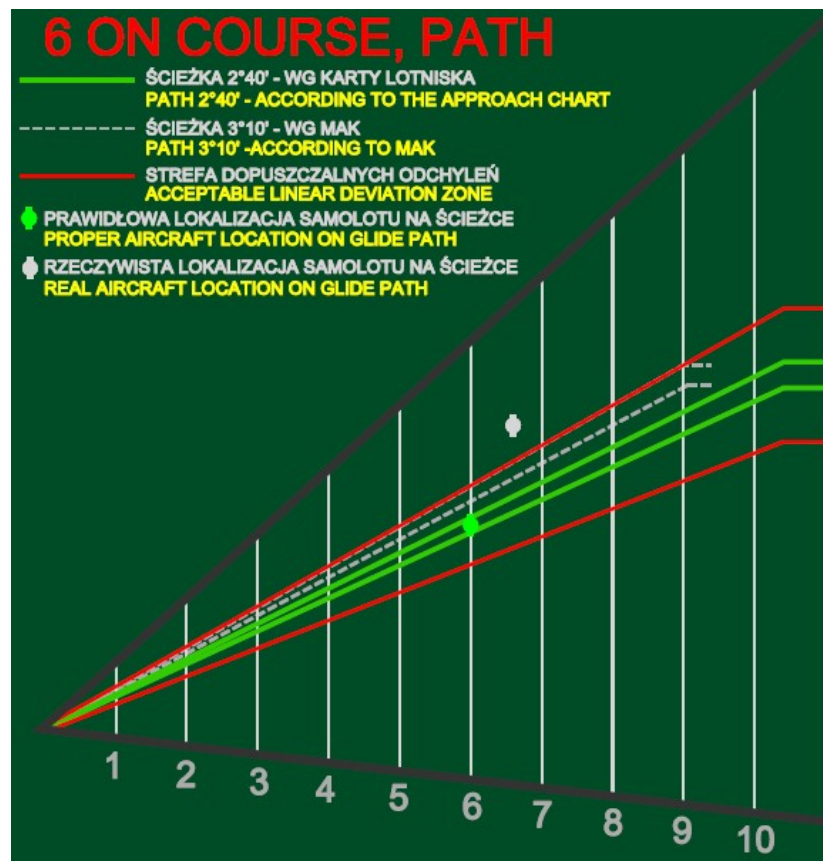
10:40:39 – “2, on course, on glide path”

10:40:56 – “control altitude, horizon”

10:41:03 – “go around”

10:41:05 – END of RECORDING

Contrary to the transcript above, the Polish Air Force One in his final approach to the Severny Airport in Smolensk was not on course and was not on a glide path at the times specified in the above transcript.



[3] The actual position of the Polish Air Force One versus the correct approach path at 6 km before the airdrome. Source: K. Matyszczyk

²² “Transkrypcja Rozmów Załogi Tu-154M – Zapis z Rejestratora Dźwięku MARS-BM,” Russian CVR transcript handed over to the Polish side on May 10, 2010.

B. Radar Video Recording

According to the Russian Report, the radar video recording related to the landing of the Polish Air Force One on April 10, 2010 was missing. “During the pre-flight preparation on that day only the operability of the recorder was checked with no assessment of the record quality. The analysis revealed that the record was not made due to twisting (bridging) of wires between the video camera and the video recorder. After the wires were insulated the video recording was resumed.”²³

Nevertheless, the Russian Report does include the location of the blips of the aircraft on the glide path. Such information could have come only from the reading of radar video-recording. Thus, the Polish side asked: “In light of the information about the missing video-recording of the process of approach to landing on the PRL indicator, the quotation of data related to the location of the blips of the aircraft on the glide path on the PRL indicator raises serious doubts.”²⁴ Accordingly, the Polish side requested explanation as to why a number of statements were included in the Russian Report that must have come from the reading of the radar video-recording if, allegedly, such recording was not made due to a malfunction. Similar issues arise in the Russian Report with respect to the reading of flight data recorders.²⁵

The following statements in the Russian Report refer to the data obtained from the radar video recording that allegedly was not made: “At 6 km the aircraft was actually higher than the glide path (considering the indication inaccuracy the aircraft blip was on the top boundary of the glide path tolerance area for glide path angle of $\sim 3^{\circ}10'$).”²⁶ Another statement also refers to the reading from the radar video recording: “At 10:40:39 the landing zone controller informed the crew: ‘2, on course, on glide path’. At that time the aircraft was at a height of about 115 m with reference to RWY 26 threshold, which was almost corresponding to the missed approach height. Considering the indication inaccuracies the aircraft blip on the radar was almost at the lowest boundary of the glide path tolerance area.”

The last sentence from the quote above is questionable in several important respects. First, it refers to the aircraft blip from the radar tape that allegedly does not exist. Second, the conclusion that the blip was “almost at the lowest boundary of the glide path tolerance” is grossly inaccurate, considering that the margin of error in this instance is in the range of 600 percent because the tolerance level²⁷ at the distance of 2000 meters is 7 meters while the variance in this case is 42 meters below the gliding path, which amounts to 600% error.²⁸ Therefore, the Russian conclusion that the aircraft blip on the radar was “almost at the lowest boundary of the glide path tolerance area” is grossly unreasonable and wrong given a

²³ Russian Report in English, p. 73.

²⁴ Polish Response in English, pp. 57-60.

²⁵ According to FSM data, the last value of magnetic heading was 267.1 degrees. The fact that this is the last available data point is confirmed by the comment in the Russian Report about the impossibility of computing the velocity of wind beyond this point. But the last point is about 215 degrees. What is then the source of data as to the aircraft’s magnetic heading after point of 267.1, considering that both FMS and FDR receive their inputs from the same sensors?

²⁶ Russian Report in English, p. 58. Similar statements which refer to detailed information about the location of an aircraft on the radar screen were made on pages 57-60 of the report.

²⁷ The tolerance levels of the Russian Federation as provided by the Federal Aviation Provisions regarding State Aviation Flights (“FAPPPGosA”) are presented in the Polish Response, p. 108.

²⁸ According to K. Matyszczak, at the glide path angle of $2^{\circ}40'$ error is 600%. If the Russians insist on using the glide path angle of $3^{\circ}10'$ in this scenario the margin of error would amount to 1,000%. (2000 distance \pm 6 m tolerance level, 60 m below the glide path: $60/6 \times 100$).

situation where the margin of error is 600%. Similar misleading statements are made with respect to the entire description of the gliding path.²⁹

On January 16, 2012, one year after the Russian Report was released, the Polish Prosecutor General announced that a possibility exists that the Polish side could receive audio and video recording from the operations of the Air Traffic Control on April 10, 2010, during landing of the Polish Air Force One.³⁰

C. Landing Charts & Glide Path

Another significant contradiction presented in the Russian Report relates to the analysis of landing charts. A test flight was performed at the Severny Airport on March 15, 2010, with the glide path angle of 2°40'. This glide path angle was used on the approach cards that were made available to the pilots of the Polish Air Force One flight on April 10, 2010. After the crash, on April 15, 2010, the Russian side performed a second fly-around test at the Severny airfield with the glide path angle of 3°12.3'. This second glide path angle was then selected for further calculations by the IAC. In its comments, the Polish side points out that "there has been no analysis regarding the path of 2°40' (±30) valid for the approach cards. The explanation for changes in the path of 2°40' to 3°12.3' may be an attempt to explain the lack of response from KSL [Landing Zone Controller] to the deviation of the Polish Air Force One position from the valid glide path outside the permissible tolerance."³¹

The lack of response of the Landing Zone Controller to the wrong position with respect to the glide path is further justified by the Russian Report as follows: "Thus, in the accident flight the landing zone controller saw the aircraft blip on the radar as being referenced to glide path of ~3°10'. The inaccuracy was about 0.5°, which is equal to the tolerance area range."

The analyses of the glide path of 3°10' do not correspond with the valid and published path of 2°40'. Furthermore, the information presented by IAC indicates that "the aircraft blip was outside of the permissible error area of the linear deviation, even for the path of 3°10', [the problem] which is not commented by the authors of the [Russian] Report." However, calculations carried out by the Polish side that take into account the position of the aircraft in relation to the glide path of 3°10' show that "at a distance of 3.3 km to the DS26 the permissible error of linear deviation is ± 28 m, i.e. with a tolerance of 1/3 of the value that is below - 9.33 m, KSL should have informed the crew of its wrong position on the path. The conclusion is that even before reaching 3 km, KSL continued to inform the crew of their correct position 'on the course and path', when in fact the flight of the aircraft was lowering, increasing its vertical distance from the path."³²

The Russian Report also includes the following statement: "At 10:39:10 the controller informed the crew that they were 10 km from the runway threshold and had reached the glide path entrance point." According to the Polish side, "informing the crew that at a distance of 10 km the aircraft had reached the glide path entrance point [means] that the KSL guided the aircraft according to the approach glide path angle 2°40' that was in force on cards."

In analyzing the last phase of the flight, the IAC decided to change the glide path angle from 2°40' to 3°12'. In fact, three different glide path angles 2°40', 3°10' and 3°12.3', are used throughout the Russian Report. According to the Polish Response, in the Russian

²⁹ Russian Report in English, pp. 153, 154, 162, 163, 164.

³⁰ This announcement was made one year after the release of the Russian Report.

http://www.polityczni.pl/nie_wiadomo_czy_w_kokpicie_tu.154_byl_gen_blasik.audio.51.6571.html

³¹ Polish Response in English.

³² *Ibid.*

Report “various angles of the descent path are referred to depending on the need for conducting the analysis, which gives the impression that the choice of path was dictated by the need to prove that on the radar screen the blip of the aircraft was always “on course.” In addition, there is a statement saying that in fact the flight crew performed the flight with an angle of 5°.” Therefore, the Polish side was forced to ask: what angle of the path should be used here if even the path of 5° did not cause distress and reaction of radar guidance controllers?”

According to the Polish side, when using the gliding angle of 2°40' the airplane was on gliding path only at a distance of 10 km from the landing beam and at a distance of 2.78 km while crossing the gliding path. At all other times in a distance from 9 km to 2.78 km from the landing beam, the margin of error was in the range from 200% to 600%. At a distance from 2.78 km to 1.48 km, the airplane was below the gliding path with the error ranging from 300 to 600%.

Even assuming the incorrectly applied gliding path angle of 3°10' used by the IAC, the airplane would have remained 75% of the time outside the gliding path. At a distance of 3 km from the airport beam, it was dangerously below the gliding path, exceeding the accepted margin of error by 10% and at 2.5 km to 1.95 km by 1000%. The Flight Control group reacted only at 1.45 km from the airport beam where the accepted error exceeded 1600%.

When the crew crossed 'level 101' the FCG did not alert the pilots about the problem but instead reassured the crew that they were on course and on the correct path, misleading the crew about the actual distance from the runway beam. The FCG did not correct this misleading information for at least 30 seconds.

Although the aircraft was for 29 seconds outside the zone – below the gliding path – Landing Zone Controller did not give the crew information about its incorrect position relative to the path, still incorrectly informing them of the correct position “on course and on path.” The command “Level 101” (10:40:53.4) was given about 14 seconds after informing the crew that they were “two, on course, on the glide path.” (10:40:39.9) The command “Level 101” was issued by Landing Zone Controller too late, when the aircraft's marker had already disappeared from the indicator (according to the testimony).

D. Violations by Flight Control Group³³

The process of preparation of the FCG and individual controllers is complex. Many tasks performed during such preparation demand high technical skills and good collaboration. All components of the system need to be calibrated and should be in good working conditions. This is the inter-related precisely codified control. The FCG tasks in preparation for flights are crucial. In the case of Polish Air Force One Flight 101, the radar was not calibrated, lights were broken, and radio marker was not working.

On April 10, 2010, three officers were assigned to FCG at the Severny Airport: Lieutenant Colonel Paul Plusnin as the Chief Air Traffic Controller (“CATC”) and two of his subordinates - Landing Zone Controller Capt. Victor Ryzenko (“LZC”) and assistant flight controller Major Sergei Lubancov. The close zone controller was not on duty that day. Thus, the group composition was in violation of the Federal Aviation Rules for the State Flights (“Federal Regulations”)³⁴ because the FCG must consist of a minimum of four members.³⁵

³³ “Zbrodnia Smoleńska - Anatomia Zamachu,” Wydawnictwo Antyk – Marcin Dybowski, 2011.

³⁴ Annex to the Command No. 275 of the Ministry of Defense of the Russian Federation dated 24 September 2004, hereinafter referred to as “Federal Regulations.”

³⁵ Par. 77 of Federal Regulations provides that the flight control group must consist of minimum four people. The group includes the flight control manager, assistant to the flight control manager, controller of the closer zone, and controller of the landing zone. Federal Regulations also provide

On April 10, 2010, there were only three people on duty at the Severny Airport and Lieutenant Colonel Plusnin acted as CATC and closer zone controller. Compounding different flight control functions is prohibited in Russia.³⁶ Thus, on April 10, 2010, the FCG group should not have accepted any flights.

On the day when the Polish Air Force One was scheduled to land, Col. Nikolay Krasnokutski was also present in the air flight control tower at the Severny Airport but was not assigned any official function. His presence at the control tower was not authorized, yet he conducted important communications and exerted pressure on the CATC Plusnin to clear the Polish Air Force One to the minimum descent altitude.

According to Federal Regulations,³⁷ CATC, his assistant, and LZC should undergo medical examination before the shift. As stated in the Russian Report, CATC Pavel Plusnin and LZC Viktor Ryzenko³⁸ underwent medical examinations and were authorized to perform air traffic control functions by a doctor on duty at the medical point JW 06755. However, according to the Russian controllers' testimony given to the Russian prosecutor on April 10, 2010, the medical point was closed at that time. Both controllers decided themselves that 'there were no obstacles to fulfill their duties' judging on their wellbeing.³⁹ Thus, the Russians disregarded vital information on the eligibility of the controllers to perform their duties that day at the Severny Airport.

Furthermore, no record exists which demonstrates that the controllers were authorized to work in difficult meteorological conditions. During questioning on April 18, 2010, Landing Zone Controller admitted it was only his second time in this role at the Severny Airport in Smolensk. His first shift took place on April 7. Within 12 months preceding the crash, he had handled this duty only nine times altogether. No documentation was provided to show that the Landing Zone Controller had ever been trained or authorized to operate and supervise the Precision Approach Radar RSP-6M2 System installed at the Severny Airport in Smolensk.

It is also evident that there was no military doctor on site at the Severny Airport in Smolensk that day even after the crash. Only the pathology doctor arrived at the crash scene. The mandatory test flight for weather conditions was not performed that day either. Such test flight was omitted allegedly due to the lack of an adequate aircraft and a crew assigned to such task. The CATC is responsible for directing such a test flight. Results of this flight should be included in the meteorological records. These records should also include a weather forecast report and results of the radar weather forecast. Such documents were not found at the Severny Airport that day. Federal Regulations also require a test flight to examine radio markers. Such test flight was not conducted that day. Furthermore, flights approaching the Severny Airport were allowed to descent to a minimum of 100 m (the lowest decision altitude for approaches without ILS), while the airport landing radar was only certified to 70 m. Thus, the traffic controllers were unable to perform their tasks during rapidly deteriorating weather conditions when heavy fog suddenly covered the airstrip.

CATC Plusnin violated Federal Regulations⁴⁰ by inadequately performing his duties in many important respects. He did not assign any alternate airport and did not know weather conditions at possible alternate airports. He did not familiarize himself with the weather

that based on commander's decision another 10 members can be assigned to the flight control group. Thus, FCG must consist of no less than 4 and up to 14 authorized people.

³⁶ See: Federal Regulations.

³⁷ Paragraphs 95, 101, 110 and 112 of the Federal Regulations.

³⁸ CATC Assistant Major W. Lubancev was also on duty that day.

³⁹ „Zbrodnia Smoleńska - Anatomia Zamachu,” Wydawnictwo Antyk – Marcin Dybowski, 2011.

⁴⁰ Par. 94 of Federal Regulations.

conditions at the Severny Airport and with activities of other airplanes in the vicinity of the Severny Airport. After the crash, he delayed the call for search and rescue services. The sirens went off 10-15 minutes after the crash. The absence of any reports documenting preparations by the FCG of the airdrome for the acceptance of the flights underscores the lack of preparation for the important VIP flight of the Polish Air Force One. The process of preparation before accepting flights is required as a matter of law.⁴¹ Another set of duties unsatisfactorily performed or not performed at all by Liet-Col. Plusnin relates to his second function as the closer zone controller.

The inadequate preparation of LZC Cpt. Ryzenki to a large extent could have been detected by CATC or closer landing zone controller - both positions held by Lt.-Col. Plusnin. Had there been a proper preparation, checking of the readiness of the systems, infrastructure, weather, and the team, the malfunctions and errors could have been avoided.

The scope of duty of LZC Cpt. Ryzenko is also defined by Federal Regulations. During flight preparations, LZC Ryzenko did not precisely determine the boundaries and order of receiving the crews in the landing zone. LZC Ryzenko and CATC Plusnin did not convey to each other information on target distances and where they would pass the plane to each other. As a result of the lack of clear division of responsibilities between the two of them, neither of them helped the pilot at the critical distance.

Furthermore, LZC Ryzenko did not undergo medical examination; did not check the location of the landing path using radio markers, and did not identify them on a radar screen because he directed the aircraft along an incorrect gliding path. Also, he incorrectly incorporated coordinates of the slope data on guiding indicators and did not notify CATC or the meteorologist of radar identification of the weather conditions on the approach course. LZC Ryzenko did not check the system parameters of radar equipment before the arriving flight and did not check the status of all the cameras and recorders because the equipment did not work.

The decision-making process of guiding the Polish Air Force One in Russia was as follow: Moscow Logics Center – Col. Krasnokutski – CATC Plusnin and LZC Ryzenko – Polish Flight 101. It shall be noted that CATC in the rank of Lieutenant Colonel had to deal with officers of a higher rank. In this instance, CATC Lt.-Col. Plusnin accepted the presence of unauthorized person of a higher rank Col. Nikolay Krasnokutski, the third colonel at the airport. Officially, CATC Plusnin should be independent as he is responsible for the flight safety, but on April 10, 2010, he dealt with persons of a higher military rank who interfered with his duty.

On April 10, 2010 Col. Krasnokutski violated a number of Federal Regulations several times.⁴² He should not have discussed the issue of whether to send the airplane to an alternate airport or to clear it to the minimum descent altitude with CATC Plusnin. Unfortunately, such discussion took place and Col. Krasnokutski, upon discussing the matter with Moscow Logics, ordered CATC Plusnin to clear Flight 101 to the minimum descent altitude. The number of violations committed in the decision making process on April 10, 2010, was massive and directly affected the quality of work of the FCG. The rapidly deteriorating weather conditions and irregular cast of air traffic control crew compounded the problems.

The flight control is no doubt one of the pillars of air traffic safety. Nevertheless, Ruben Jesajan, a member of the IAC, did not react when a member of his subcommittee

⁴¹ Par. 95 of Federal Regulations.

⁴² Par. 85 of Federal Regulations. Also, par. 99 of Federal Regulations states that: "The CATC shall not follow the command of higher-ranking officers if those commands remain in conflict with the provisions of the regulation of state aviation activities and do not assure flight safety."

offended all controllers in the world in order to shift the blame for the Smolensk Crash to the Polish crew. Oleg Smirnov publically stated that in the air traffic control tower in Smolensk "a chimpanzee" could sit "and mumble" and that would not have any effect on the flight.⁴³ Assuring safety of the airplanes, guiding and supporting the airplane crews, is within exclusive domain of the flight control specialists. Questioning this fundamental premise by the aviation expert investigating the Smolensk Crash demonstrates a significant disregard for the most fundamental principles of aviation safety. This attitude of the IAC members alone disqualifies the Russian Report on the investigation of the Smolensk Crash.

III. Rescue Operation and Medical Examination

According to the Polish Response, FTG officers did not immediately notify the Severny Airport emergency rescue units about the crash and did not convey the information about the crash to the Smolensk district rescue units. The first airport rescue units were called ten minutes after the crash. Thus, first fire engines arrived on the crash scene fourteen minutes after the crash. The first medical unit arrived seventeen minutes after the crash. Nevertheless, the Russians in charge of rescue and recovery operation immediately announced that nobody survived. This information was instantly forwarded to Poland even though the body of the President of Poland was found only four hours later. As a result of this hasty announcement that nobody survived, medical emergency vehicles were sent back without letting paramedic even see any victims. The rescue crew did not conduct any rescue operations and was ordered by the military officials to withdraw because all passengers died.⁴⁴ However, according to post-mortem reports at least one body was described as "warm" at the time the post mortem report was conducted.⁴⁵

Recovered bodies were moved to Moscow where the autopsies were conducted. Polish pathologists were not allowed to participate in the autopsies. There is no evidence that x-rays or microscopic slides that can be examined under the microscope or proper toxicology tests were done, all of which helps determine whether there was or was not an explosion on board. Explosion usually does harm to the lungs of the victims. According to Dr. Michael Baden, a renowned American pathologist, photographs and microscopic slides should have been taken during the autopsy to see whether there was any damage to the lungs. There is no information that such autopsies were conducted.⁴⁶

⁴³ See: Statements of Oleg Smirnov: "Nawet szympan nie przyczyniłby się do tragedii Tu-154," wp.pl, February 17, 2011, http://wiadomosci.wp.pl/kat,1342,title,Nawet-szympan-nie-przyczynilby-sie-do-tragedii-Tu-154,wid,13141614,wiadomosc.html?ticaid=1126ac&_tictsn=3 (retrieved March 17, 2014). If such statement was to be true then the world would not invest billions of dollars in air traffic services, traffic control, flight information service and air traffic management.

⁴⁴ A Polish cameraman arrived at the crash scene before any rescue crew and recorded Russian military men walking in-between debris immediately after the crash. Another private recording of the crash scene made immediately after the crash recorded military forces at the crash site as well as gun shots. This recording surfaced on the internet immediately after the crash and is considered original. See: "Story behind 1:24", http://smolenskrash.eu/news-62-story-behind-the-quot124quot.html#_Uyeo-PldUsw (retrieved March 17, 2014).

⁴⁵ S. Zagrodzki, „Weryfikacja oficjalnych raportów ustalających przebieg katastrofy samolotu Tu-154M z 10 kwietnia 2010 roku w oparciu o mapę dyslokacji ciał ofiar oraz analizę dokumentacji sądowo-medycznej i badań toksykologicznych niektórych ciał ofiar,” II Konferencja Smoleńska, October 21-22, 2013, Warsaw, Poland; <http://konferencjasmolenska.pl/> (retrieved March 17, 2014).

⁴⁶ Exclusive Interview with Dr. Michael Baden, Gazeta Polska, March 29, 2012; <https://www.youtube.com/watch?v=yI4dbLSvtK4>; (retrieved March 17, 2014).

According to Dr. Baden, Russians should have examined lungs and air passages with naked eye and under the microscope. If there was an explosion in the airplane, there might be tears in the lung that could be seen at the autopsy under the microscope. If there was a fire on the airplane before the crash, the passages would inhale carbon monoxide. The microscopic slides of the air passages can tell whether the person was breathing after explosion or after a fire. If there were pieces of a bomb device that were blown into the person they could be identified in part by X-rays taken after the crash. Normally X-Rays are done to all victims in all airplane crashes. The examiner conducting autopsy first should examine the skin, front and back sides, to check if there was any perforation. If there was any perforation, such area has to be dissected to check if there was some foreign body blown in even though it doesn't show on the X-ray. There is no record that all the above steps were taken by the Russians.⁴⁷

A number of bodies at the crash site were half naked, with no external clothing.⁴⁸ The description of the condition of the body made at the crash site frequently did not correspond with the description of the body included in medical protocols made in Moscow. Also, according to the families of the victims, the bodies were not cleaned in Moscow and some bodies did not have any marks of sections or autopsies.⁴⁹

It is a well-established principle that a post mortem report should provide an individual cause of death, precisely defined for each individual victim, and not merely as a member of a group of victims. The cause of death should be determined based on a dominant factor that led to death of that particular person. However, with respect to all victims of the Smolensk Crash, the cause of death was determined as "multiple injuries." Such approach proves that the medical examination was superficial, did not include a detailed analysis of the injuries, and there was no effort to categorize the contributions of various injuries to the death of that individual.

Due to unprecedented destruction of some bodies, it was not possible to collect blood and urine for testing from all the victims. But even in the instances where this material was collected, the full range of testing was not conducted in a timely manner. For example, only 16 victims were tested for carbon monoxide. Also, the process of collecting and protecting the samples for testing was inappropriate. Many samples were sent for chemical and toxicology testing more than two years after the crash. No testing was done on the victim's clothing described as burnt or charred.⁵⁰

Accordingly, no detailed autopsies were conducted. Some bodies were desecrated post-mortem, misidentified and ultimately buried in wrong graves. The families of the victims were not allowed to open caskets before the burial in Poland. Furthermore, the Polish prosecutors did not conduct any autopsies of the bodies upon their arrival in Poland, in direct violation of the Polish law. As a result, the families of the victims cannot be certain that their loved ones are buried in their family graves. The case of Anna Walentynowicz, the founding mother of the Solidarity Movement who died in the crash, serves as one of the most egregious examples of the unacceptable handling the bodies of the victims of the Smolensk Massacre. It also exemplifies the treatment of victims' families in cruel and inhumane manner.⁵¹ Another scandalous act that aimed at humiliating the Polish people was the

⁴⁷ *Ibid.*

⁴⁸ *Supra Note 45*, S. Zagrodzki, „Weryfikacja oficjalnych raportów.”

⁴⁹ Małgorzata Wasserman, „Dokumentacja medyczna sekcji zwłok śp. Z. Wassermanna wykonanej przez stronę rosyjską, a polskie dokumenty sekcyjne.” II Konferencja Smoleńska, October 21-22, 2013, Warsaw, Poland; <http://konferencjasmolenska.pl/> (retrieved March 17, 2014).

⁵⁰ *Supra Note 45*, S. Zagrodzki, „Weryfikacja oficjalnych raportów.” A piece of the charred human jaw that was found on the crash site outside the fire zone indicates explosion.

⁵¹ P. Styrna, “Smolensk—Inconvenient Tragedy.” SFPPR News & Analysis, April 22, 2012; <http://www.smolenskrashnews.com/polish-air-crash-an-inconvenient-tragedy.html>

leaking of a photograph of a naked mutilated body of the President of Poland Lech Kaczynski to the internet.

IV. Russian Investigation

A. Crash Site

The key evidence was not properly secured, identified, documented, and preserved. A methodology used for evidence identification was not defined, and a chain of custody for the key evidence was not preserved. The wreckage of the plane was subjected to destruction the next day after the crash. The crash site was left unprotected. Thus, personal belongings of the victims were stolen, including credit cards, and many parts of the aircraft went missing. Examples of manipulation and destruction of evidence at the crash site are presented below.

Debris Location Manipulated

Satellite pictures of the crash site taken by the GeoEye satellite demonstrate that the ground position of the plane's left horizontal stabilizer was moved between April 11 and April 12 over 20 meters closer to the first marks on the ground of the wreckage site. The new position from April 12 was considered as the original position in the Russian Report.



[4] Position of left horizontal stabilizer on April 11 vs April 12.
Source: K. Nowaczyk.

See also: Meeting of the Parliamentary Committee for the Investigation of the Smolensk Crash dated December 11, 2013, on the work of the subcommittee on medical and pathological reports; <http://www.smolenszczespol.sejm.gov.pl/zespolsmolensk.nsf/komunikat.xsp?id=68E88FE9550585E1C1257C400032B759> (retrieved March 17, 2014).



[5] Left stabilizer marked as item 33 in a new position. Source: Figure 35, Russian Report.

Systematic Destruction of Evidence

The destruction of the airplane debris took place the next day after the crash without assuring adequate documentation regarding the position of the debris, without photographing the original shape of the debris, and properly marking the fragments for future reconstruction. Instead, all windows in the fuselage were smashed immediately after the crash, large sections of the airplane were cut and crashed by heavy equipment, cables were cut and pulled out, heavy parts were further deformed and damaged by being dragged by excavator and heavy machinery, large areas of the crash site with smaller debris were bulldozed, some parts of the crash scene were quickly covered up with fresh soil or with concrete. Deformation of the tail of the airplane was 'repaired' before it was moved to the final storage site. Finally, largest airplane parts were moved to the concrete pavement of the airport and were left there without any protection for many months. Several tons of small parts were piled up nearby like trash without any order or protection.

In October 2010, the Polish press published photos showing the process of demolition of the wreckage of the Polish Air Force One at the Severny Airport in Smolensk right after the crash. Video footage of the Russian workers destroying the wreckage of the airplane on April 11, 2010, in particular breaking the windows and bulldozing the site, was shown in a documentary "Misja specjalna" by A. Gargas.⁵² Some of the scenes from this video and photographs made by the Polish reporters that day are reproduced below.

⁵² See: "Smoleńsk - Niszczenie Polskiego Samolotu" Misja Specjalna, TVP1, October 2010. <http://www.youtube.com/watch?v=Oeel3QTC8Ac>; (retrieved March 19, 2014). Breaking windows is of added significance because in searching for evidence of explosion glass from windows preserves the residue from explosives and information on pressure force to which the glass was subjected during the incident.



[6] Handling of the Wreckage of the Polish Air Force One on April 11, 2010.
Source: J. Gruszczyński

Dr. Jacek Gieras, an American scientist and IEEE fellow, points out that there is no evidence that any examination of the electrical equipment of the Polish Air Force One took place at the crash site or anywhere else. After the destruction of the electrical system it is extremely difficult to determine whether the electric system of Tu-154M operated correctly in the last seconds of the fatal flight or whether it could have contributed to the explosion in the wing.⁵³

Before all body parts of the victims were recovered and fragments of the airplane were collected, a concrete pavement was poured over some parts of the crash site and a concrete road was constructed over it.

⁵³ Jacek F. Gieras, "Evaluation, Investigation Techniques and Possibility of Malfunction of Electric System of Tu-154M," *Materiały Konferencyjne, Konferencja Smoleńska* October 22, 2012, Komitet Organizacyjny Konferencji Smoleńskiej, Warszawa, 2013, p.55.
<http://www.konferencja.home.pl/materiały/05.pdf> (retrieved March 17, 2014).



[7] Destruction of windows in the fuselage on April 11, 2010
Source: A. Gargas

[8] Cutting of the wing, April 11, 2010
Source: A. Gargas



[9] Cutting electric wires, April 11, 2010; Source: A. Gargas



[10] Wreckage of the Polish Air Force One on the pavement of Severny Airport.

Many trees and shrubs were cut down in the vicinity of the crash site, grass was burnt and top soil was removed, especially near the location of Terrain Awareness and Warning System (TAWS) number 38, which was hidden in the Russian Report.



[11] TAWS #38 area: satellite photo from April 12, 2010 (top) and June 24, 2010 (bottom); the lack of normal growth can be observed on the June photo in the area of TAWS # 38. Source: K. Nowaczyk

After many requests of the Polish side, large parts of the wreckage were fenced off and covered by tarp. Later, a plywood structure was constructed over the wreckage of the plane. For the second anniversary of the Smolensk Massacre, Russia released photographs of freshly washed and nicely painted fuselage of the wreckage with new windows installed.⁵⁴ There was no attempt to reconstruct the airplane.

Crash Site Unprotected

Despite immediate large scale cleaning efforts with the use of bulldozers and heavy earth moving equipment, the crash site was left unprotected and wide open to visitors. As a result, personal belongings of the victims were stolen, money was withdrawn from credit cards stolen from the victims, and cell phones of some victims were used after the crash. The onlookers were able to pick up fragments of the airplane, sections of victim clothing or their

⁵⁴ „Nowe Zdjęcia Wraku Tupolewa” 10 kwietnia 2012, Fakt.pl; <http://www.fakt.pl/Nowe-zdjecia-tupolewa-Wrak-tupolewa-w-Smolensku,artykuly,153886,1.html>

personal belongings. Even human body parts or bone fragments were collected many months after the crash by the public.⁵⁵



[12] Crash Site Unprotected; Source: K. Nowaczyk

Unusually Large Number of Small Debris

Six months after the crash, a team of Polish archeologists was finally allowed to examine the crash site. The Polish experts found ten thousand small pieces of debris on the surface, including 28 pieces of human remains, and identified with metal detectors sensing up to 20 cm deep another twenty thousand fragments of metal pieces hidden in the soil up to 20 cm deep. Using several drills, they confirmed that near the location of every small metal fragment there were on average another six non-metal fragments. Some metal fragments were exposed to high temperature. The large number of small debris and characteristics of the debris are typical to explosion.⁵⁶



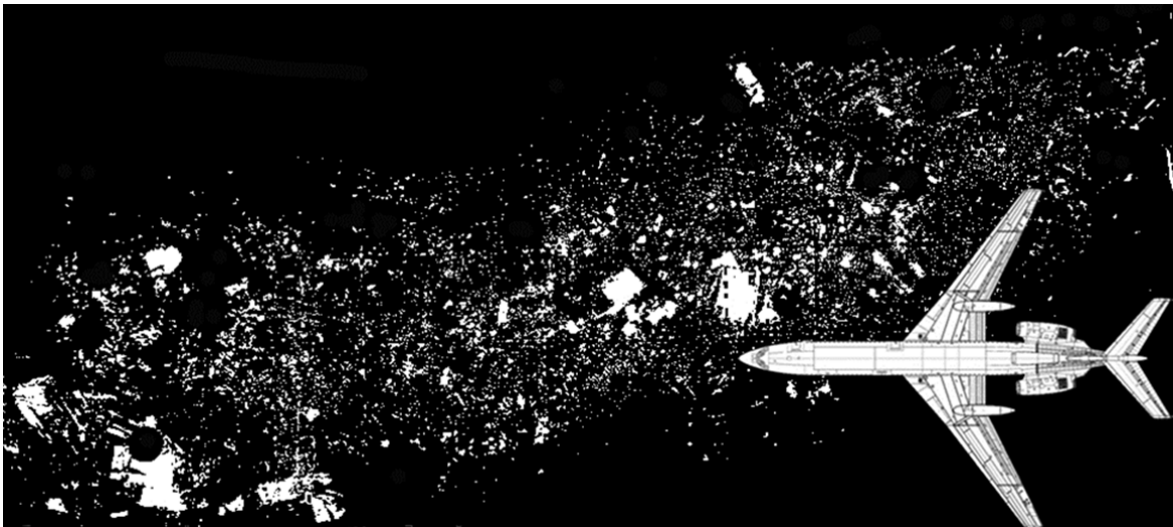
[13] Example of a piece of debris found before the main crash site by Polish archeologists 6 months after the crash.

The Polish team was limited in its search only to the area of airplane's contact with the ground. A Russian team that prepared a crash scene report based on the inspection conducted on the day of the crash covered the entire area of debris starting several hundred meters before the contact with the ground. This report describes many fragments located before the contact with the ground, including fragments located before a birch tree that supposed to cause the crash. The evident disintegration of the

⁵⁵ „Wycieczki znajdują na miejscu katastrofy rzeczy ofiar,” TVN24, May 5, 2010.
<http://www.tvn24.pl/kontakt,9/wycieczki-znajduja-na-miejscu-katastrofy-rzeczy-ofiar,211928.html>

⁵⁶ G. Szuladziński, Raport 456: „Niektóre Aspekty Konstrukcyjno-techniczne Smoleńskiej Katastrofy,” Analytical Service Pty Ltd, May 2012; retrieved on March 14, 2014 at:
<http://www.smolenszespól.sejm.gov.pl/zespolsmolensk.nsf/dokumenty.xsp>

airplane before the contact with the birch tree, several hundred meters before the first contact with the ground, was never addressed or explained. Only large parts were recovered by the Russian team. The rest was either covered up or picked up by the public.



[14] Map of debris found on the main crash site reconstructed from the Polish Archeologists Report. Source: Smolensk Report 2013, Visualization by K. Nowaczyk.

B. Witness Testimonies

Witness testimonies were changed, in particular with respect to air traffic controllers. In a statements made on April 10, 2010 before the Russian prosecutor, Landing Zone Controller stated that the medical unit was closed on the day of the crash. The statement was as follows:

“I felt good on 10 April 2010. Around seven o'clock that day, Plusnin and I underwent a medical examination at the Military Health Facility unit 06755: [Translator's Note: before the word “underwent” the word “did not” is added / as a result of which it was concluded that I was in good health / Translator's Note: the deleted words are deleted in the original protocol], since there was nobody at the medical unit, but as I already stated, I felt good and nothing happened that would affect my ability to carry out my official duties.”⁵⁷

The above statement is inconsistent with Par. 1.5.3 of the Russian Report entitled “Details of the ground crew.” In the table regarding CATC under “Medical examination before shift,” the following text appears: *At 05:15, authorized for air traffic control by the doctor on duty of Military Unit 06755*, while in the table regarding Landing Zone Controller under “Medical examination before shift” the following text appears: *At 06:50, authorized for air traffic control by the doctor on duty of Military Unit 06755.*⁵⁸ Accordingly, this testimony was manipulated.

Also, it shall be noted that sudden unexplained deaths surround the investigation of the Smolensk Massacre. Several people connected with the investigation died in unexplained circumstances. The most alarming was a sudden unexplained death of the Pilot-in-Command

⁵⁷ Polish Response in English, p. 33.

⁵⁸ *Ibid.*

of the Polish Yak 40 airplane that landed at the Severny Airport less than one hour before the crash of the Polish Air Force One. Remigiusz Muś, age 42, was found dead in the cellar of his apartment building on October 28, 2012, soon after testifying for the Polish prosecution. As the last pilot to land successfully before the fatal crash, Muś was one of the most important witnesses in this investigation. Another member of the Yak 40 crew received death threats and a request for his protection was submitted to the Polish Military Prosecutor's Office in January of 2014.⁵⁹

C. Lack of Cooperation with the Polish Side

The total lack of cooperation with the Polish side by the Russian authority during the investigation process has been already described in Chapter 1 in connection with the violations of Annex 13 to the Chicago Convention. The withholding of a complete set of satellite pictures as well as the video recording from the Severny Airport from the time of the crash was discussed in Chapter 2. Disregarding the Polish Response by the Russians in their final report is discussed in Chapter 5 below. However, other examples of lack of cooperation with the Polish side in the investigation of the Smolensk Crash should be mentioned as well.

Russian officials seized all black boxes and other recorders at the crash site and ignored the request of the Polish Ministry of Defense not to open black boxes without the presence of the Polish officials. The Russian investigators conducted preliminary investigation of the black boxes on their own, while telling the Polish officials otherwise.

The key data from the flight data recorder ("FDR") was either not provided to the Polish side or presented in unreadable format. One of the black boxes K3-63 is officially listed as missing. This armored K3-63 analog recording device precisely documented many key flight parameters such as altitude, speed, and most importantly the crucial G-force, i.e. record of any shock against the airplane.⁶⁰ Essential reports, including a detailed survey of the crash site, description of airplane debris, a toxicological analysis of the remains of the victims were not provided to the Polish side by the time the Russian Report was released. The Polish representatives were barred from taking part in the rescue operations, fly-around survey of the crash site, depositions of flight control group members, and were prevented from conducting the autopsies of the victims in Moscow, just to name a few examples.

V. Russian Report

The Russian Report was released at a press conference in Moscow on January 12, 2011, in manifest disregard of the Polish objections submitted to the Russians on December 19, 2010 in the Polish Response.⁶¹ The Russian Report also disregarded as much as 80% of comments submitted by the Polish side pursuant to Annex 13. At the press conference broadcast live globally, IAC Chairperson Tatiana Anodina also accused the Commander-in-Chief of the Polish Air Force - late General Andrzej Blasik - of pressuring the pilots to land "at any means." At the press conference, Chair Anodina also stated that Gen. Blasik not only

⁵⁹ „Wniosek o objęcie ochroną por, Artura Wolsztyna, „Zespół Parlamentarny ds. Badania Przyczyn Katastrofy Smoleńskiej, January 30, 2014, retrieved March 30, 2014.
<http://www.smolenski.zespol.sejm.gov.pl/zespolsmolensk.nsf/komunikat.xsp?id=A6DE444E1AFA8293C1257C71003006CC>

⁶⁰ "Lost in Action; Mysterious Story of K3-63 Recorder," Freepl.info, January 17, 2013;
<http://freepl.info/3679-lost-action-mysterious-story-k3-63-recorder> (retrieved March 17, 2014).

⁶¹ Polish Response in English, *Supra* note 4; See also: <http://freepl.info/uploads/pdf/Remarks-on-the-MAK-Report.pdf> (retrieved March 10, 2014).

was in the cockpit at the time of the crash but also had high level of alcohol in his blood.⁶² However, forensic testing performed by the Polish side conclusively ruled out any alcohol in the blood of General Blasik or any of the crew members at the time of the crash. The Polish side also ruled out the presence of Gen. Blasik in the cockpit.⁶³

The Russian Report includes numerous contradictions, omissions, fabricated statements, manipulations and illegible data, just to name the most obvious problems. The "psycho-emotional" analysis of the pilots is overemphasized while the technical analysis of the final stage of the flight is deemphasized. The key section of the report that describes the final moments of the flight is based on speculations not properly verified by scientific evidence, accordingly is inadequate and wrong. The entire document does not meet the basic standard of an airplane crash investigation report. According to a Russian aviation expert, this document appears to be written by an illiterate person who is interested only in finding a proof of a pilot error.⁶⁴

A. Omissions

The Russian Report omits many important issues, including proper analysis of the last phase of the flight, role of the air navigation services and facility, performance of the air traffic control group, and the analysis of airplane incident history. Similarly, no explanation as to the cause of the unusually extensive damage to the airplane is provided and the lack of survivors is not examined. A request for the air test at the Severny airdrome on the day of the crash was disregarded, and an inquiry regarding suspicious activities in the airspace of the Severny airdrome on the day of the crash was ignored. Credible terrorist threat alerts reported on the eve of the crash were not considered, and other known threats against the victims of the Smolensk Crash were ignored. No in-depth analysis of the crash site was presented and no discussion on the conditions of the bodies was provided.

Furthermore, the mechanical failure of the aircraft was ruled out from the outset of the investigation and the possibility of a technical malfunction was not examined. Most importantly, a major malfunction of the airplane during the inter-continental flight from Poland to Haiti on January 23, 2010, was not even mentioned in the Russian Report. During this flight the airplane experienced serious problems with autopilot and the steering systems. From the time the aircraft returned from general overhaul performed in Samara, Russia, in December 2009, to the time of the crash three months later, eleven serious mechanical failures of the aircraft were recorded.⁶⁵

Findings from the first inspection of the crash scene on April 10th and 11th 2010 conducted by Russian prosecutors were not incorporated into the Russian Report. The

⁶² "A forensic test found ethyl alcohol in the blood of the Polish Air Force Commander in a concentration of 0.6 pm." IAC presents Final Report; <http://1tv.ge/news-view/21774?lang=en> (retrieved March 24, 2014). "Russians blames Polish crew in Kaczynski air crash." <http://www.foxnews.com/world/2011/01/12/russia-blames-polish-crew-kaczynski-crash/> (retrieved March 24, 2014). "Drunk Polish Official responsible in Kaczynski's Crash," <http://www.novinite.com/articles/124063/Russia%3A+Drunk+Polish+Official+Responsible+in+Kaczynski+Crash> (retrieved March 24, 2014).

⁶³ Communiqué of the Main Military Prosecutor's Office dated March 20, 2014. http://www.npw.gov.pl/491-Prezentacja%20nowa-53927-p_1.htm (retrieved March 24, 2014).

⁶⁴ „Były Szef lotniska Moskwa-Wnukowo: Raport MAK pisany jakby przez analfabetę,” Bibuła Pismo Niezależne, 1 lutego 2011, <http://www.bibula.com/?p=31711>; See also: P. Falkowski, "Pytajcie Krasnokutskiego o katastrofę Ila," Nasz Dziennik, February 2, 2011, Nr 26 (3957).

⁶⁵ Łukasz Orłowski, „11 usterek w trzy miesiące,” TVN24, July 21, 2010; <http://www.tvn24.pl/wiadomosci-z-kraju,3/11-usterek-w-trzy-miesiace,140532.html>

document was hidden over several years and when leaked to the public it revealed many discrepancies with the Russian Report.

B. Contradictions

Topography of Terrain

The Russian Report ignores the evidence from the CVR, which proves that the Polish crew knew the topography of the terrain in the vicinity of the Severny Airport very well. The IAC disregarded clear statements made by the Polish pilots regarding the lowering of the terrain before the airport beam clearly spelled out in the CVR transcript. According to the transcript, one minute before the crash and 5 km before the airport beam (that is 3 km from the lowering of the terrain), the Co-Pilot reminded the Pilot-in-Command (“PIC”) about the lowering of terrain.⁶⁶ In direct contradiction to this evidence, the Russians concluded that the Polish pilots lacked the knowledge of the terrain topography. Such conclusion also disregards the information that the PIC landed at the Severny Airport as co-pilot three days before the crash.

Other Contradictions

According to the Russian Report, the airport lighting system was working properly at the Severny airfield at the time of the crash. This conclusion stands in direct contradiction to the statements contained in the Russian Report which indicated that four out of eight rows of lights were turned off. Other contradictions, for example with respect to radar video recordings and with respect to FDR readings are discussed in the Air Navigation and Manipulations sections of this report.

C. Manipulations and Misrepresentations

Many presented facts, allegedly based on data from the black boxes, Cockpit Voice Recorder, etc., were manipulated or misinterpreted. The analog black box K3-63 was allegedly never found while data from digital black boxes was presented in the illegible format, time scales on charts presenting data from black boxes were arbitrarily changed. The location of debris on the crash scene was manipulated; CVR read-out was inaccurately interpreted to fit the political message of blaming the President of Poland, Commander in Chief of the Polish Air Force, and the best Polish pilots.

Problems with Flight Data Recorders

Although there were five data recorders on the plane, the Polish side does not have any reliable data from the last seconds of the fatal flight. The main flight data recording system **MSRP-64** made in Russia consisted of the catastrophic tape recorder **MLP-14-5** installed in the tail of the airplane and operational data recorder **KBN-1-1** installed near the cockpit. This MLP-14-5 recorder found by the Russians on the day of the crash showed signs of being subjected to high temperature even though it was recovered outside the fire zone. **ATM QAR** quick access data recorder was made in Poland and collected the same data as the Russian MSRP-64 recorder plus additional engine data. **MARS-BM** was a digital 4-channel sound data recorder. This CVR recorder was found near the marks of the first contact with the

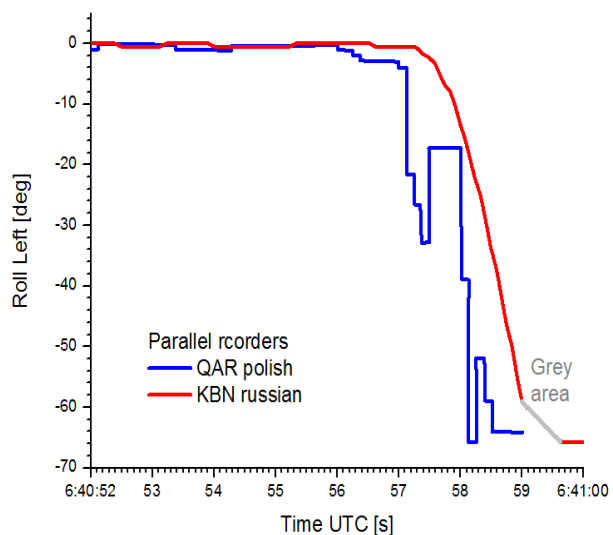
⁶⁶ CVR Transcript, Polish Prosecution: Second Pilot: 6:30:46 (Najgorsze, ze tam – nie? jest dziura)
„The worst is that there... is a hole.” <http://www.npw.internetdsl.pl/Dokumenty/IES-odczyt1.pdf>;

ground on the day of the crash. The **K3-63** recorder located in the center of the airplane to record speed, acceleration and altitude data, was the only analog recorder. Out of the five, this data recorder allegedly was never found.

The Russian Report is based on the data obtained from the data recorder KBN-1-1 made in Russia. A Polish copy of this recording ends several second short of the last minute, thus becomes useless in the analysis of the last phase of the flight. The most important last half second of the data obtained from a quick access data recorder ATM-QAR/R128ENC made in Poland was deleted and replaced with additional 2 seconds of poor quality data from the catastrophic data recorder MLP-14-5. As a result, the only data available to the Polish side from the last seconds of the flight is that from the catastrophic data recorder MLP-14-5 of very poor quality.⁶⁷

Arbitrary Alterations

Data recovered from some of the aircraft's recording devices have been subject to arbitrary alterations and some of the data from FMS and TAWS logs have not been included in the Russian analysis at all. Figure 15 shows an example of significant differences between recorded values by Russian KBN recorder (red) and Polish QAR recorder (blue). Both recorders are collecting data from the same sensors.

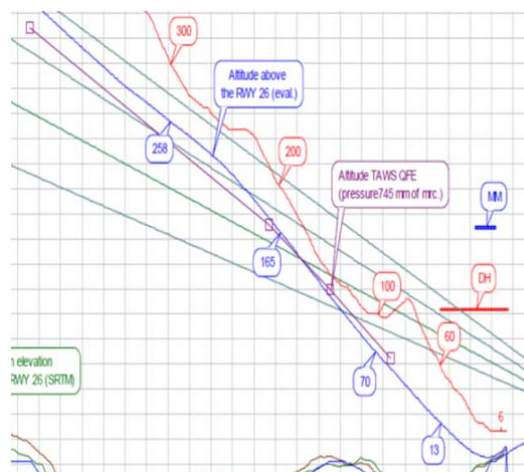


The grey area at the bottom of the graph in Figure 15 indicates a place where the Russian analytic program WinArc32 used by IAC removed “uncertainly” data points. [15]. Recorded left roll from parallel recorders. Source: K. Nowaczyk

Hidden TAWS#38 – “Landing Event”

The Russian Report omits TAWS #38 event landing completely. See Figure 16.⁶⁸ The blue line (TAWS baro-altitude) does not contain any explicit information from TAWS #38 or any of the FMS logs. The last mark on the blue line indicates TAWS #37.

Data from the aircraft's Flight Management System (FMS) and Terrain Awareness and Warning System (TAWS”) have been recovered by



[16] No TAWS 38 in the Russian Report

⁶⁷ See: Marek Dąbrowski, “Podsumowanie i kierunki dalszych badań nad zachowaniem samolotu. Dane, możliwości i problemy badawcze.” II Konferencja Smoleńska, October 21-22, 2013; <http://www.konferencjasmolenska.pl/>, (retrieved March 28, 2014). Limited data was available to the Polish investigation. File MLP-14-5B did not contain data from April 10. File MLP-14-5A contained flight data from April 7, 8 and 10, but the critical data of April 10 was of poor quality, so no useful data could be extracted.

⁶⁸ Figure 16 corresponds with Figure 46 of the Russian Report.

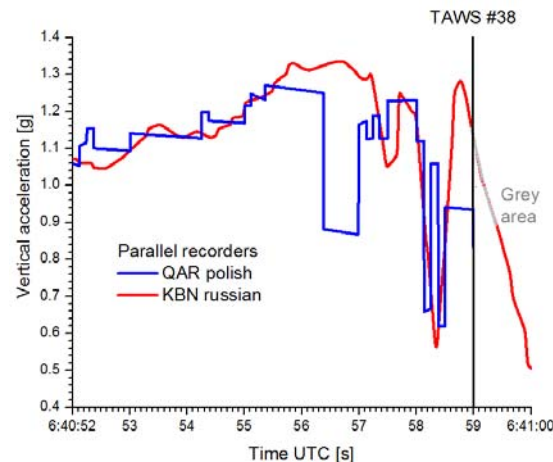
a team of experts working for the US instruments' manufacturer – Universal Avionics Systems Corporation based in Tucson, Arizona. The decoded logs from these devices were made publicly available by the Polish Investigation Committee on September 5, 2011.

The Russian Report only mentions these logs without releasing their contents. It does not even mention TAWS log No. 38 or any of the Fault Logs. But TAWS 38 located 115 meters in straight line after the birch tree proves that the aircraft could have not collided with the birch tree blamed for causing the crash. Thus, the omission of this indicator made the official scenario of a collision with the birch tree possible.

Furthermore, according to recovered FMS data, the moment when the central memory system stop recording any further data occurred when the aircraft was at the altitude of 17 meters and its geographical position was about 50 meters from the area of initial impact with the ground.

Vertical Acceleration Ignored

Figure 17 shows a vertical acceleration chart from the Russian Report (red line),⁶⁹ and the same data from the Polish QAR recorder (blue line). Both graphs show two peaks occurring in very fast succession, on the order of one tenth of a second. They both occur before TAWS #38, around 200 m before crash site. These strong changes of acceleration must have been caused by a powerful downward-acting force but are not explained in the Russian Report.



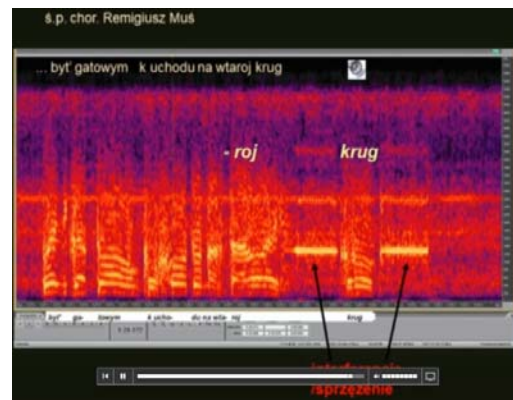
[17] Vertical acceleration from Russian and Polish black boxes. Source: K. Nowaczyk

D. Fabricated Documentation

Problems with Acoustic Readings

The Polish side made four attempts to copy CVR in order to obtain the correct reading of the last seconds of the flight. Each copy made by the Russian side was of a different duration and none of these recordings provides reliable information of the last seconds of the flight.

Numerous problems have been raised in connection with the acoustic reading of the flight data recorders. The problems range from different lengths of the same recording, the lack of professional analysis of acoustic image of the recording, incorrect read-out and interpretation of the recordings to fundamental problem with the reliability and integrity of the flight data



[18] Acoustic Analysis of FDR;
Source: A. Gruszczyńska-Ziółkowska

⁶⁹ Figure 17 corresponds with Figure 45 in the Russian Report.

recordings. As demonstrated by Dr. Gruszczyńska Ziółkowska, copies from the recorders available to the Polish side show signs of manipulation. This conclusion is based on the professional acoustic analysis.⁷⁰

Fabricated Statements

In the Russian Report, the following statement allegedly made by a member of the Polish crew is quoted several times: *“He will go crazy.”*⁷¹ This statement is used throughout the report to prove that there was pressure on the pilots to land coming from a third party, namely from the Main Passenger - President of Poland Lech Kaczynski. None of these statements was identified in the CVR transcripts made by two Polish scientific institutes.⁷² These non-existent statements were presented by Russians as proof that late President Kaczynski exerted pressure on the PIC *“to land at any means,”* thus contributed to the Smolensk Crash.

The words *“he will go crazy...”* were never uttered by the crew of the Polish Air Force One. Both the Polish Aviation Committee and the Polish Prosecutor's Office publicly concluded that no such statement was ever uttered by any member of the Polish crew. The Polish side unequivocally rejected any suggestions that the crew might have undergone any psychological pressure from any third party to continue descent. According to the Polish Response, *“the record of the on-board voice recorder located in the cabin of the aircraft Tu-154M (CVR) did not reveal any passage confirming the attempt to influence the actions of the crew by third persons, including the Main Passenger.”*⁷³ This position was presented by the spokesman of the Polish Main Military Prosecutor's Office on April 19, 2011, as follows: *“In the documents gathered thus far, there is no evidence whatsoever indicating that the crash of TU-154 was caused by undue pressure exerted on the crew of the TU-154.”* This position was further confirmed in March of 2014.⁷⁴

VI. Russian Conclusions Proven Wrong

A. Key Technical Findings Proven False

The most important technical findings presented in the Russian Report have been proven false beyond a reasonable doubt by independent international experts from the USA, Canada, Australia, Great Britain, Denmark, Germany, Poland and Russia. They all

⁷⁰ Anna Gruszczyńska-Ziółkowska, „Jak brzmi uderzenie samolotu w brzozę?”, II Konferencja Smoleńska, October 21-22, 2013, Warsaw, Poland, <http://konferencjasmolenska.pl/> (retrieved March 24, 2014).

⁷¹ Russian Report in English, p. 103: *A number of phrases recorded by the CVR (at 10:30:33 “Pan Director”: “So far no President’s decision what to do next” and at 10:38:00 unidentified voice 23: “He’ll go crazy if...”)* show that the PIC was in psychologically difficult position. It was obvious that in case of missed approach and proceeding to the alternate airdrome the PIC could have to face negative reaction of the Main Passenger. As the phrase *“He’ll go crazy if...”* was said during the final turn the PIC could have changed his previous decision and decided to take the risk of descending lower than the decision altitude hoping to finally establish visual contact with the runway and land. Document retrieved on March 17, 2014.

http://www.mak.ru/russian/investigations/2010/files/tu154m_101/finalreport_eng.pdf

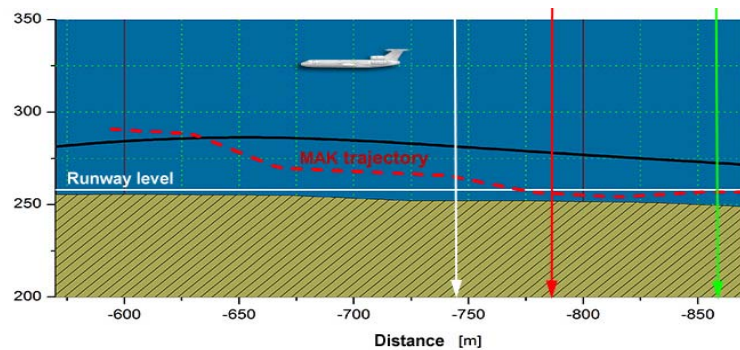
⁷² Zapis z rejestratora fonicznego, NPW, <http://www.npw.internetdsl.pl/Dokumenty/IES-odczyt1.pdf>

⁷³ Polish Response in English, p. 66.

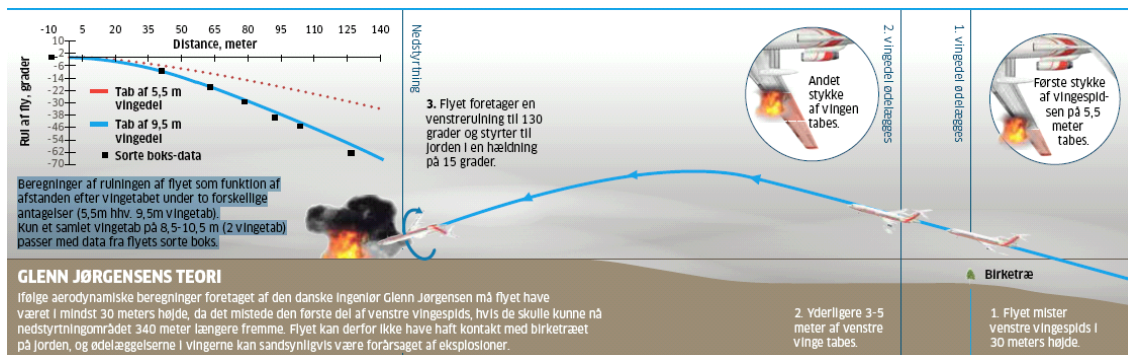
⁷⁴ *“No pressure on the Pilots; See: <http://www.tvn24.pl/-1,1699665,0,1,matprokuratura-nie-ma-zadnego-dowodu-na-naciski,wiadomosc.html>,”* (retrieved March 14, 2014).

collaborated with the Polish Parliamentary Committee for the Investigation of the Smolensk Crash for an extensive period of time. Also, experts from all over the world presented their findings at two scientific conferences on the Smolensk Crash that took place in Warsaw, Poland, in October of 2012 and 2013. Their findings invalidate the Russian scenario that the aircraft rolled over as a result of intensive left bank caused by losing a fragment of the wing in the collision with a birch tree.⁷⁵ The most important findings of the independent experts are as follow:

Vertical and horizontal trajectory presented by the Russians is wrong; (K. Nowaczyk, G. Jorgensen,) 76



[19] Russian trajectory vs. TAWS trajectory; Source: K. Nowaczyk



[20] Danish Engineer G. Jorgensen Rejects Russian Trajectory; Source: Ingeniøren, 02. 21. 2014.

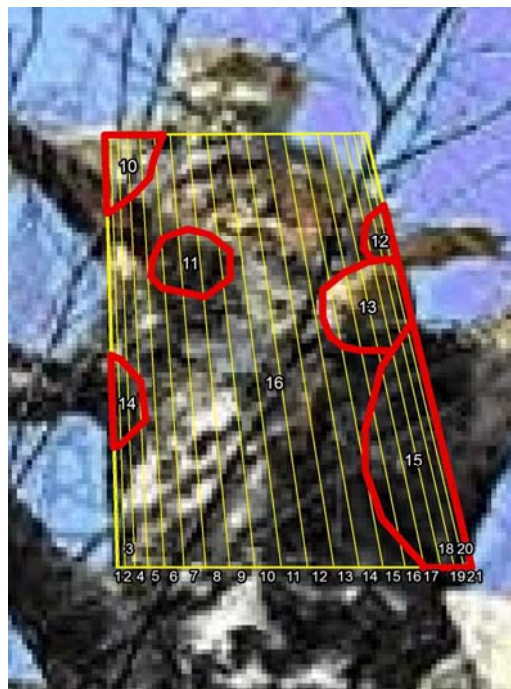
⁷⁵ “Danish Engineer Rejects Official Explanation behind Polish Plane Crash,” Ingeniøren, Feb. 21, 2014; See: http://smolenskrash.eu/news-91-danish-engineer-rejects-official-explanation-behind-polish-plane-crash.html#.UyMtl_lUsw; See also: <http://www.smolenskrashnews.com/what-happened-to-polish-president-plane-in-smolensk.html> (retrieved March 14, 2014).

⁷⁶ Kazimierz Nowaczyk, „Analiza materiałów źródłowych dostępnych w raportach MAK, KBWL LP i ekspertyzach ATM, UA S.C.,” II Konferencja Smoleńska, October 21-22, 2013, Warsaw, Poland, <http://konferencjasmolenska.pl/> (retrieved March 14, 2014).

According to computer simulations, the birch tree could not cut off the left wing; (Prof. W. Binienda). The birch tree was already broken before the crash. (Prof. C. Cieszewski).⁷⁷



[21] The birch tree that allegedly cut off the wing. Source: J. Gruszczyński, C. Cieszewski



[22] Strength of the birch tree reduced due to numerous knots. Source: C. Cieszewski.

Even assuming that the birch tree cut off the wing, as claimed by the Russians, the lift loss caused by the loss of the wing tip should not cause the plane to roll-over. (Jorgensen)⁷⁸

⁷⁷ Chris Cieszewski, Thomas R Jordan, Marguerite Madden, Roger C Lowe, Arun Kumar, Pete Bettinger, "Spatiotemporal analysis of broken tree signatures on high-resolution satellite imagery," II Konferencja Smoleńska, October 21-22, 2013, Warsaw, Poland, <http://konferencjasmolenska.pl/>
See also: C. Cieszewski, "Ocena właściwości drewna brzoźowego za pomocą spektroskopii NIR I SilviScan dla próbek z Polski, USA i Smoleńska," Materiały Konferencyjne, I Konferencja Smoleńska, October 22, 2012, Warsaw, Poland. <http://konferencjasmolenska.pl/> (retrieved 3/9/14).

The wreckage of the plane, shape of debris and conditions of the bodies point to explosion in mid air. (G. Szuladzinski, J. Obrębski, S. Zagrodzki).



[23] A piece of debris characteristic of explosion: Source: Analytical Services Pty Ltd



[24] A piece of debris showing signs of explosion; Source: Prof. J Obrębski.

Finally, a self-evident photograph showing a large part of the fuselage at the crash site proves beyond a reasonable doubt that the fuselage first opened up in the air, then

⁷⁸ Glenn Jorgensen, "Selected Aspects of the Polish Air Force One Crash," II Konferencja Smoleńska, October 21-22, 2013, Warsaw, Poland, <http://konferencjasmolenska.pl/>. See also: numerous presentations and articles at: <https://www.youtube.com/watch?v=YpXqt3NK04Y>; and <http://www.doomedsoldiers.com/russian-smolensk-crash-report-challenged.html>; See also: Danish press: <http://ing.dk/artikel/dansk-ingenioer-afviser-forklaring-paa-polsk-flyulykke-166464>, (retrieved March 14, 2014).

inverted in the air, and hit the ground in the inverted position. Thus, the wreckage fell to the ground inverted with both side walls of the fuselage bent outside. One wall of the fuselage was turned outside to the left and the other wall was turned outside to the right. According to Prof. W. Binienda, this configuration of the fuselage at the crash site is only possible as a result of explosion in mid-air.⁷⁹



[25] A part of the fuselage inverted and opened up. Source: Polish Parliamentary Committee

The fuselage burst into many pieces. The front parts of the fuselage and the cockpit were not inverted while rear parts of the fuselage were found in the inverted position. All cargo was blown away from the cargo space. Gears were in revers position. All passenger seats disintegrated into pieces and the bodies of the victims were either found in small pieces, or without external clothing, or not found at all. Pieces of burnt human remains were found far away from the fire zone. The evidence points out to several explosions in mid-air at a low altitude as the only explanation of the type of damage documented at the crash site.

⁷⁹ Dr. W. Binienda, "Analysis of the Polish Governmental Airplane Crash in Smolensk, Russia, on April 10, 2010," ASCE Earth and Space 2012 Conference, Pasadena, California, April 15-18, 2012. <http://content.asce.org/conferences/earthspace2012/Plenarykeynotespeakers.html>. See: Video Presentation <https://www.youtube.com/watch?v=IOfaRO-yL0k>; (retrieved March 24, 2014). See also: Dr. W. Binienda, "Analysis of the Crash of the Polish Governmental Airplane TU-154M Flight PLF 101, Smolensk, Russia, April 10, 2010," Public Hearing on the Cause of Smolensk Crash, The European Parliament, March 28, 2012, <http://smolenskrash.eu/video>. See also: Zhang, C., Binienda, W.K., Horvat F.E., and Wang, W. "Application of Numerical Methods for Crashworthiness Investigation of a Large Aircraft Wing Impact with a Tree," MCFNS, Vol.5, Issue 1 (2013). <http://mcfns.com/index.php/Journal/article/view/153>. (retrieved March 14, 2014).

B. Immediate Cause of the Crash Groundless

According to the Russian Report, the immediate causes of the accident were: 1) the failure of the crew to take a timely decision to proceed to an alternate airdrome; 2) descent without visual contact with ground references to an altitude much lower than minimum descent altitude for go around (100 m) in order to establish visual flight; 3) no reaction to the numerous TAWS warnings, which led to: 4) controlled flight into terrain, aircraft destruction and death of the crew and passengers, 5) the presence of the Commander-in-Chief of the Polish Air Forces in the cockpit until the collision; 6) psychological pressure on the pilot-in-command to continue descent in the conditions of unjustified risk with a dominating aim of landing at any means.⁸⁰ As demonstrated below, each of the above claims has been proven wrong.

Alternate Airdrome, Role of Col. Krasnokutski

The transcript from the flight control tower demonstrates that CATC made several attempts to direct the Polish Air Force One to an alternate airdrome but was overruled by Colonel Krasnokutski. The transcript provides the evidence that Colonel Krasnokutski, an unauthorized person at the flight control tower, order CATC to bring the Polish Air Force One to the minimum descent altitude. According to the transcript, one hour before the crash⁸¹ Colonel Krasnokutski stated:

Smolensk is covered. There was no fog in the forecast. There was visibility 10 km. We gave all the permissions. And suddenly, out of nowhere, such things are happening. A trial approach he will make without discussion! To his minimum.

Twenty minutes before the crash, CATC Plusnin, after making numerous phone calls to send the Polish Air Force One to an alternate airdrome, summed up his efforts as follows:

Well, everybody tries to duck out! That is how I understand it.

Fifteen minutes before the crash (8:26am) Krasnokutski says to Plusnin:

Paul, you will clear to 100 meters. 100 meters and no discussion!

Col. Krasnokutski, who was an unauthorized person at the flight control tower, exerted pressure on CATC Plusnin to clear the Polish Air Force One to a minimum descent altitude of 100 meters. A Polish inquiry as to the role of Col. Krasnokutski remains unanswered.

Descent to an altitude lower than minimum to establish visual flight

According to all readings of the cockpit voice recorder,⁸² the PIC gave a clear command to "go around" at the minimum descent altitude of 100 meters, and the Co-Pilot repeated this command. The CVR transcript reads as follows:

8:40:51.7	N:	"One hundred"
8:40:51.9	PIC:	"Go around"
8:40:53.1	2P:	"Go around"

⁸⁰ Russian Report in English, pp. 182-183.

⁸¹ Col. Krasnokutski was not an Air Traffic Controller, thus was an unauthorized to give orders.

⁸² Naczelna Prokuratura Wojskowa; www.npw.internetdsl.pl/Dokumenty/IES-odczyt1.pdf

This transcript rebuts the allegation that PIC descended to an altitude lower than minimum in order to establish visual flight. The reading of CVR does not reveal any intent of the PIC to establish visual flight below the minimum descent altitude.

Lack of Reaction to TAWS warnings.

The first TAWS warning sounded at 8:40:42,4 am, that is less than one second after Landing Zone Controller proclaimed "two, on course, on glide path," and two seconds before the Second Pilot read "one hundred meters." Thus, TAWS warning went off at the time when the PIC made a decision to go around. However, after giving a command to "go around" the airplane began an accelerated descent. Thus, PIC's attention was on preventing the uncontrolled descent. Besides, PIC could justifiably disregard the TAWS signal as an erroneous warning since the Severny Airport in Smolensk was not in the TAWS database. Thus, erroneous warnings could have been expected.

Controlled flight into terrain led to the destruction;

There is no evidence whatsoever of an intentional action on the part of the pilots to establish a visual flight below the minimum descent altitude. To the contrary, the decision to "go around" was made properly and was confirmed by the second pilot. Furthermore, as presented below, CVR reading also provides clear evidence of PIC's state of mind preceding the crash that contradicts any intent on his part to establish a visual flight below the minimum descent altitude that could lead to a controlled flight into terrain. All the above circumstances as well as the unusually big destruction of the airplane and abnormal extent of casualties preclude any "controlled flight into terrain" scenario.

Presence of Commander-in-Chief of the Polish Air Force in the cockpit;

On January 16, 2012, the Polish Prosecutor General announced that the forensic experts from the Jan Sehn Institute of Forensic Research in Kraków conclusively determined that a voice on the CVR determined by Russians to be that of General Andrzej Blasik, Commander-in-Chief of the Polish Air Force, was in fact that of co-pilot Major Robert Grzywna. The voice of General Blasik was not identified on the CVR at all.⁸³ Shortly thereafter, the Polish Prosecutor General also disclosed that the body of General Blasik was found in the so-called Sector 1 together with 12 other bodies. Neither the bodies of the pilots nor the wreckage of the cockpit were found in this sector.⁸⁴ Accordingly, the key Russian arguments for the presence of General Blasik in the cockpit at the time of the crash to prove the hypothesis of pressuring the pilots "to land at any means" are false.



[26] Gen. A. Blasik
Commander-in-Chief
Polish Air Force

⁸³ See: "General-falsely-accused-of-pressurizing-Smolensk-pilots," Polskie Radio dla Zagranicy, Jan. 13, 2012, <http://www.thenews.pl/1/9/Artykul/82065> (retrieved March 14, 2014).

⁸⁴ "W strefie z kokpitem znaleziono trzynaście ciał; Nie było wśród nich pilotów," Wprost, Jan. 19, 2012; <http://www.wprost.pl/ar/288938/Oprocz-Blasika-wkokpicie-znaleziono-dwanascie-cial>

At the press conference announcing results of the Russian investigation, IAC Chairperson Anodina publicly discredited Polish General Andrzej Blasik by accusing him not only of being in the cockpit at the time of the crash but also of being under the influence of alcohol at the time of the crash. By doing so, she dishonored the memory of one of the best generals of the Polish Armed Forces in front of the entire world. On March 20, 2014, the Polish Main Military Prosecution Office released a statement that according to the expert opinion of the Sehn Institute of Forensic Analysis of February 14, 2014, Commander-in-Chief of the Polish Air Force General Andrzej Blasik, the entire crew of the Polish Air Force One, and all officers of the Government Protection Bureau were completely sober at the time of the crash.⁸⁵ On March 28, 2014, a resolution was submitted to the Speaker of the House in the Polish Parliament to honor by Parliamentary Resolution late Commander-in-Chief of the Polish Air Force General Blasik, whose memory was brutally and unjustly dishonored in front of the entire world.⁸⁶

On April 2, 2014, Bogdan Klich who served as Polish Minister of Defense at the time of the Smolensk Crash stated that the Russian Report was of purely political nature. According to Minister Klich, the purpose of the Russian Report was to humiliate Poland by presenting the top Polish General as a drunkard.⁸⁷ An advisor to Chairperson Anodina for political marketing named Igor Mintusow admitted in 2013 that some room for interpretation existed in the investigation into the Smolensk Crash and that flexibility was exploited to the advantage of Russia.⁸⁸

Psychological pressure on the PIC's decision to continue descent

In light of the above evidence, there is no reason to conclude that General Blasik was present in the cockpit at the time of the crash. Furthermore, there is no evidence of any conversation or exchange between the pilots and General Blasik during the flight. Hence, there is no evidence that General Blasik exerted any psychological pressure on the pilots to "land at any means." The only conversation between PIC and a passenger regarding landing took place at 15 minutes before the crash with Director of Protocol ("DoP"). The exchange was as follows:

PIC: Mr. Director, fog came out at this moment... In these conditions that we have right now we will not be able to land.
We'll try to make an approach, we'll make one approach,
but most likely nothing will come out of it.

⁸⁵ Komunikat Naczelnej Prokuratury Wojskowej, March 20, 2014; http://www.npw.gov.pl/491-Prezentacja-53927-p_1.htm

⁸⁶ „Kłamstwa, które dotknęły pamięć gen. Błasika muszą zostać sprostowane”. Czy Sejm stać na przyjęcie takiej uchwały?” wpolityce.com, March 28, 2014; <http://wpolityce.pl/polityka/189387-klamstwa-ktore-dotknely-pamiec-gen-blasika-musza-zostac-sprostowane-czy-sejm-stac-na-przyjecie-takiej-uchwaly>.

⁸⁷ Celem Raportu Anodiny była kompromitacja Polski i uderzenie w polskich pilotów,” Stanisław Żaryn, Wywiad, wpolityce.com, April, 2, 2014; <http://wpolityce.pl/smolensk/189695-bogdan-klich-celem-raportu-anodiny-byla-kompromitacja-polski-i-uderzenie-w-polskich-pilotow-nasz-wywiad>, (retrieved April 2, 2014). Klich believed that this brutal attack on Poland in fact discredited Russia and the Russian investigation.

⁸⁸ „Igor Mintusow doradca Putina zdradza: Uwagi o pijanym Andrzeju Blasiku to główna strategia MAK” January 14, 2013, wiadomości, wp.pl, <http://wiadomosci.wp.pl/kat.1342,title.Igor-Mintusow-doradca-Putina-zdradza-uwagi-o-pijanym-Andrzeju-Blasiku-glowna-strategia-MAK,wid.15250816,wiadomosc.html?ticaid=1127ab&ticrsn=3> (retrieved April 2, 2014).

So, please start thinking about a decision what we will do.
We don't have much fuel to hang around.
DoP: So, we have a problem.
PIC: We can hang around for half hour, then go to the alternate (airport).
DoP: Where is it?
PIC: Minsk or Vitebsk.

This exchange contradicts allegations that PIC's dominating aim was to "landing at any means" and refutes any allegations and charges of psychological pressure exerted on the PIC by his superiors. This type of conversation frequently takes place during VIP flights. Every such flight has a certain sense of urgency to complete the mission. The exchange between PIC and Director of Protocol demonstrates no pressure on the pilot other than that which is usually expected in normal circumstances for the VIP flight. In fact, this exchange serves as a proof of PIC's professional conduct.

Monitoring the Altitude

Allegations are made that the pilot failed to monitor altitude by means of a pressure altimeter during a non-precision approach. This conclusion was based on the assumption that General Blasik, who was believed to be present in the cockpit in the last phase of the flight, was the one who read altitude from the pressure altimeter. Thus, the pilots wearing the headphones did not hear his reading but instead relied on incorrect reading of the altitude. The January 2012 CVR expert report conclusively assigns the voice that reads the altitude from the pressure altimeter to the second pilot, thus repudiates the hypothesis that the pilots incorrectly monitored the altitude.

VII. Conclusion

The Russian Report is unprofessional, inadequate and fatally flawed. This document bears a resemblance to a political manifesto that serves as a Russian tool to humiliate Poland by presenting the top Polish General as a drunkard and the best Polish pilots as reckless novices. The Russian findings and conclusions have been proven wrong beyond a reasonable doubt. Objections to the Russian investigation into the Smolensk Crash are numerous and of fundamental nature. Facts presented herein demonstrate clear and convincing evidence of obstruction of justice in the one-sided and superficial investigation that violates basic norms of any airplane crash investigation, elementary standards of due process of law, and rights of the families of the victims. In response to such blatant violations of law, it is imperative to send a clear message to Russia that such practices are unacceptable.

The international community must not stand idle pretending that the truth about the Smolensk Crash is known. Supporting such illusion only invites more abuse of power and aggression. The Crimean crisis of 2014 is the result of the appeasing attitude of the world community in response to the gross violations of international norms in connection with the Russian aggression on Georgia in 2008 and Smolensk Crash of 2010. Turning a blind eye on the Smolensk calamity encourages Russia to carry out more bold actions against its neighbors.

The acute resemblance between Katyn of 1940 and Smolensk of 2010 must not be ignored either. The infamous Burdenko report on the Katyn Massacre from the Nuremberg Trial finds its modern equivalent in the Russian Report on the Smolensk Crash. The conspiracy of silence engulfs the open societies of 2010 with even greater grip than war-torn societies of 1943.

Among Smolensk victims is Wojciech Seweryn, a son of the Polish officer murdered in Katyn. Seweryn, who was a US citizen, dedicated his life to commemorate victims of the Katyn Massacre. Thanks to his determination and hard work, the Katyn Monument was erected in Chicago, Illinois. Seweryn's story serves as a grim reminder that injustice not remedied accumulates and expands until it bursts into another calamity. Therefore, it is imperative to stand up against sham investigation and the conspiracy of silence that loom over the Smolensk Crash. An independent international commission of inquiry into the Smolensk Crash, possibly under the auspices of the UN Council on Human Rights, should be established to assure a fair and impartial investigation of the unprecedented calamity that claimed the lives of the top pro-Western leadership of Poland and resulted in far reaching consequences for the world peace and security.



[27] Wojciech Seweryn at the Katyn Monument, Niles, Illinois. Source: A. Wójtowicz