



EXECUTIVE SUMMARY OF THE TECHNICAL REPORT.

The Subcommittee for Re-investigation of the Aircraft Accident at the Ministry of National Defense of the Republic of Poland (Subcommittee) hereby presents the technical report on the state of its investigation into the crash of the TU-154M Polish Air Force aircraft in Smolensk, Russia, on April 10, 2010 (Smolensk Crash), where all occupants on board died, including the President of Poland Lech Kaczyński

Important facts, information and circumstances presented in the technical report of the Re-Investigation Committee dated April 11, 2018 (Technical Report) were not taken into consideration in the reports of the Interstate Aviation Committee in Russia dated January 12, 2011, (MAK Report) and the Miller's Committee's report dated July 29, 2011 (Miller's Report). The findings of the Miller's Committee proved to be incorrect in light of the investigation conducted by the Re-Investigation Committee, and pointed to the wrong reason for the crash.

Therefore, the report of the Polish Committee on State Aircraft Accident Investigation on the Smolensk Crash dated July 29, 2011, is hereby declared null and void. Furthermore, the classification of the cause of the crash of the TU-154M aircraft in Smolensk, Russia, on April 10, 2010, as a Controlled Flight into Terrain due to pilot's error (CFIT) is hereby declared as invalid.

The Technical Report presents the following key findings:

1. Material evidence contradicting conclusions of the MAK Report and Miller's Reports has been left out by the previous investigation teams.
2. Important evidence was manipulated.
3. Hours after the crash important evidence was moved to new locations and reported as found there.
4. The wreckage of the TU-154M was treated in an improper manner violating the rules of proper crash investigation and jeopardizing the validity of the MAK and Miller conclusions.
5. An independent Polish investigation based on equal Polish and Russian access to crash site and evidence was not made possible by the actions of then Prime Minister of Poland Donald Tusk in the immediate aftermath of the crash. Actions then taken were in clear disregard of the valid bilateral agreement between the Republic of Poland and Russia of August 1993.
6. The previous Polish team of investigators under the authority of Minister Jerzy Miller were directed to perform a "non-standard" investigation during their initial meeting just days after the crash. Clear directives were issued to assure that the Polish investigation end with same conclusions as the (then ongoing) Russian investigation.
7. The Polish side was never given access to the original cockpit voice recordings (CVR) recordings. The many copies of CVR, all different in length and content, make them not trustworthy as evidence of what happened during the landing approach.
8. The Russian ATC gave misleading information of the position of the TU-154M during the final approach, leading the aircraft about 50-70m to the left side of the runway 26.
9. The pilots of Tu-154M made one and only one attempt of approach to landing. The decision to make the trial approach to landing was made correctly at safe height to perform a go-around according the procedures.



10. Upon issuing a command to “go-around,” the left wing tip was separated from the wing due to an explosion, about 80m-100m before the (birch) tree that Russians claimed had cut off the wing.
11. The loss of the wing tip by itself did not lead to the catastrophe and the effect on the tendency to roll by the loss of the wing tip can be fully compensated by a 5-8° sideslip of the aircraft.
12. Explosion(s) in the left wing first caused the left slats nr. 1 and 2 and later outer flap to separate from the wing. Loss of left wing flaps made it impossible for the pilots to avoid the disaster.
13. The aircraft hit the ground, inverted with a left roll of about 130°, a vertical speed of about 12m/s and a forward (horizontal) speed of about 75m/s.
14. When the fuselage was in the air more than 6m above the ground, it exploded violently with at least one epicenter near the galley area.
15. The fuselage explosion sent the left passenger door nr. 2 (823) to the ground with a vertical speed of more than 120m/s (or increasing its vertical kinetic energy more than 100x).
16. Clothes of 35 victims were violently torn off.
17. Bodies of a large group of occupants in the vicinity of the galley were heavily fragmentized.
18. No evidence supports the presence of the Commander of the Polish Air Force General Blasik in the flight deck area at the time of the crash.
19. Further investigations are needed to research all aspects of the disaster including a medical investigation.

SUMMARY OF THE EVIDENCE OF EXPLOSIONS (included in the report).

1. Post explosive destruction on the wing and its pieces.
 - a) Post explosive curls of more than one turn.
 - b) Deformation of pieces due to high internal pressure.
 - c) Dispersion of many pieces in all possible directions with reference to the direction of flight (also to the back and sides).
 - d) Identification of the internal parts of the wing hanging from treetops.
 - e) Destruction of slats and parts of the nose of the detachable part of the wing by internal pressure.
2. No traces of hitting a terrain obstacle (birch tree) on the leading edge of the left wing.
3. Experiments conducted by the Subcommittee confirm the possibility of the wing being cut with an explosive material. The experiment conducted produced damages analogical to those observed in the case of the destruction of the TU-154M wing.

The explosion of the central wing box (pic37) was the key reason for the destruction of TU-154M before hitting the ground. The explosion in that place, destroyed the box, meaning the fragment of the left center wing, together with the front spar and soothed ribs. The spar flew 70m west. The third spar was destroyed as well.

An explosion in the fuselage destroyed Salon 3, killing all passengers inside and throwing the body parts over the entire crash site. Body parts were found in the area before the fuselage made contact with the ground. The explosion wave blew out the left passenger door, ramming it 1 meter into the ground and



blew out thousands of pieces of the galley, which were scattered over 1/3 of the crash site. The explosion wave destroyed the part of the center wing and curled the left and right side of the aircraft outwards, with the roof to the outside. Tail section with three engines was severed by the explosion wave backward significantly reducing its kinetic energy.

1. Numerous pieces were sootied and burned and spread over 100m before the plane hit the ground.
2. The aircraft struck at a shallow angle and disintegrated into tens of thousands of pieces
3. No crater from a 76 ton plane hitting soft soil sliding up to 150m can be seen on the crash site.
4. A total destruction of all seats. The armrest, frame, and seating disintegrated.
5. The internal part of the aircraft is completely without floor panels and insulation.
6. The left passenger door speed that rammed 1m into the ground was 10x higher than the speed of the aircraft (12m/s), i.e. its vertical kinetic energy was increased by 100 xs.
7. The sides of the central part of the fuselage, right above the place of explosion are curled outwards.
8. The destruction of the galley, being close to the epicenter, was scattered in small fragments over an area of 1300m².
9. Characteristic body damage:
 - a) Total defragmentation of dozens of bodies sitting in the Salon 3 near the center(s) of the explosion and their dispersion over the entire crash site.
 - b) Small body pieces at the beginning of the crash site (1/3 of the entire crash site) before the fuselage made contact with the ground.
 - c) Numerous large burn-injuries of bodies found outside of the fire zones.
 - d) Clothes were completely or nearly completely torn off a large number of the bodies (35).
10. Analysis performed by CLKP experts in the fall 2010 concerning a massive presence of traces of explosive materials, especially present on the seats of Tu-154M.