

INTERNATIONAL COURT OF JUSTICE

**APPLICATION OF THE INTERNATIONAL CONVENTION FOR THE SUPPRESSION
OF THE FINANCING OF TERRORISM AND OF THE INTERNATIONAL
CONVENTION ON THE ELIMINATION OF ALL FORMS OF RACIAL
DISCRIMINATION**

(UKRAINE V. RUSSIAN FEDERATION)

REJOINDER

SUBMITTED BY THE RUSSIAN FEDERATION

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TABLE OF CONTENTS

VOLUME VIII

Annexes 177-216

- Annex 177 Reuters, *Ukraine rebel commander says will not pull out of Donetsk* (10 July 2014).
- Annex 178 U.S. Agency for International Development, *Ukraine, 2023*.
- Annex 179 Ned.org, *National Endowment for Democracy.Ukraine*.
- Annex 180 The World, *Who Were the Maidan Snipers?* (14 March 2014).
- Annex 181 BBC News Ukraine, *The Maidan Shooting: a Participant's Account* (13 February 2015).
- Annex 182 Intentionally omitted
- Annex 183 Intentionally omitted
- Annex 184 Intentionally omitted
- Annex 185 BBC News, *Ukraine crisis: Transcript of Leaked Nuland-Pyatt Call* (7 February 2014).
- Annex 186 Reuters, *Special Report: Flaws found in Ukraine's probe of Maidan massacre* (10 October 2014).
- Annex 187 Sputnik International, *Incidents With Russian Reporters in Ukraine in 2014-2017* (31 August 2017).
- Annex 188 Unian.ua, *Military warehouses with weapons burn in Lvov* (19 February 2014).
- Annex 189 KPHG, *Ukraine follows Russia in dubious 'State treason' arrests* (16 February 2015).
- Annex 190 Human Rights Watch, *Ukraine Foreign Journalists Barred or Expelled* (1 September 2017).
- Annex 191 The Guardian, *Rebel Leader Alexander Zakharchenko Killed in Explosion in Ukraine* (31 August 2018).
- Annex 192 Deutsche Welle, *Alexander Zakharchenko: The Latest Ukrainian Rebel Leader to Face an Abrupt Death* (2 September 2018).
- Annex 193 European Pravda, *No pressure over Concessions: Kuleba on Negotiations with Germany's Foreign Minister* (7 February 2022).
- Annex 194 Uryadovy Kuryer, *On the Future of Donbass in Terms of Numbers* (21 July 2018).
- Annex 195 Interfax-Ukraine, *Rada Appoints Next Elections to Local Self-Govt Bodies for Oct 25* (15 July 2020).

- Annex 196 NBC News, *MH17 Investigators Face Huge Challenges in Ukraine 'Combat Zone'* (18 July 2014).
- Annex 197 Expert report of Mr Akash Rosen, 26 May 2019.
- Annex 198 CNN, *Kerry: 'Drunken separatists' interfering at MH17 crash site* (24 July 2014).
- Annex 199 DNA, *Ukrainian investigators found 196 bodies at #MH17 crash site* (20 July 2014).
- Annex 200 The Dutch National Police, *Official Report Concerning Disclosed Intercepted Conversations*, 16 December 2019.
- Annex 201 Financial Express, *What are they trying to hide, cries Barack Obama even as Malaysia Airlines MH17 bodies, black boxes handed over* (22 July 2014).
- Annex 202 Stuff, *MH17 wreckage 'cut into pieces'* (23 July 2014).
- Annex 203 New Straits Times, *MH17: Captain Eugene Choo Jin Leong at his final resting place* (4 September 2014).
- Annex 204 Dutch Safety Board, *Draft Final Report. Crash of Malaysia Airlines Flight MH17, May/June 2015*.
- Annex 205 AstroAWANI, *#RememberingMH17: The Funeral Of Wan Amran Wan Hussin* (3 September 2014).
- Annex 206 New Straits Times, *MH17: Two more remains to arrive on Sunday: Liow* (22 August 2014).
- Annex 207 BBC News, *MH17 crash: My revealing fragments from east Ukraine* (16 April 2015).
- Annex 208 RT, *Serial numbers of missile that downed MH17 show it was produced in 1986, owned by Ukraine - Russia* (17 September 2018).
- Annex 209 Federal Bureau of Investigation, *Richard Reid's Shoes*.
- Annex 210 The New York Times, *Explosive on Planes Was Used in Past Plots* (30 October 2010).
- Annex 211 The Kyiv Independent, *British instructors train Ukrainian military to operate NLAW tank killers (PHOTOS)* (25 January 2022).
- Annex 212 Reuters, *Ukraine holds military drills with U.S. forces, NATO allies* (20 September 2021).
- Annex 213 Gallup, *Russian Language Enjoying a Boost in Post-Soviet States* (1 August 2008).
- Annex 214 Opinio Juris, *Kevin Jon Heller, MH17 Should Be Framed as Murder, Not as a War Crime* (11 August 2014).
- Annex 215 Intentionally omitted

Annex 216 *5.ua, Kharkov Stena Pub Terrorist Attack: Prosecutors Demand 12 Years' in Prison for Accused Bomber – Details (27 September 2019).*

Annex 177

Reuters, *Ukraine rebel commander says will not pull out of Donetsk* (10 July 2014)

Ukraine rebel commander says will not pull out of Donetsk

Maria Tsvetkova

DONETSK Ukraine (Reuters) - An enigmatic Russian leading separatist rebels in the eastern Ukrainian city of Donetsk made a rare appearance in public on Thursday to say he would not abandon the city though he defended his decision to pull out of the stronghold of Slaviansk.

Pro-Russian separatist fighters gesture from an armoured missile launcher at a checkpoint on the outskirts of the eastern Ukrainian city of Donetsk, July 10, 2014. Ukrainian forces regained more ground but sustained further casualties on Thursday in clashes with separatists, while two Western allies urged Russia's Vladimir Putin to exert more pressure on the rebels to find a negotiated end to the conflict. REUTERS/Maxim Zmeyev (UKRAINE - Tags: POLITICS CIVIL UNREST MILITARY CONFLICT TPX IMAGES OF THE DAY)

Igor Girkin, a Muscovite who has the nom de guerre of Igor Strelkov, has been criticized by some other rebel commanders for withdrawing from Slaviansk last weekend and allowing government forces to savor a major victory.

Hundreds of his men headed south to Donetsk, the region's main industrial center, after the rout and are digging in now in the city of more than 900,000 people as government forces appear to be preparing a blockade to break their resistance.

Asked by a journalist if he would make a similar tactical withdrawal from Donetsk to save people's lives, the reason he gave for quitting Slaviansk, the 43-year-old Strelkov said simply: "No".

Alexander Borodai, the "prime minister" of the self-proclaimed "people's republic" seated alongside him, added: "Where would we go? We will defend the territory of the Donetsk People's Republic."

Strelkov, who disclosed on Thursday he had been a colonel in Russia's Federal Security Service - the successor agency to the KGB - has been on Ukraine's 'most-wanted' list since he began marshalling rebel forces against the Kiev government in April.

While he commanded forces in Slaviansk, the town became a citadel of fierce resistance and at least two government military helicopters were brought down in the area by rebel fire.

HERO STATUS

Said to have a penchant for historical battle recreations and enjoying the profile of an elusive adventurer dropping casually in and out of conflict zones, Strelkov began to take on hero status in rebel quarters.

But this reputation has been dented by the Slaviansk withdrawal and retreat to Donetsk in which, Strelkov admitted on Thursday, he lost a tenth of his men.

On Thursday, the moustachioed Strelkov, dressed in combat fatigues with an antiquated pistol strapped to his hip, spoke without emotion as he defended the move in which rebels broke out from a government noose around Slaviansk.

“Militarily, the reason for withdrawal of the garrison from Slaviansk was obvious. My conscience is absolutely clear,” he said. “More than 90 percent of the force got out of Slaviansk and safely got to Donetsk.”

The need to justify the withdrawal from Slaviansk may have been his main reason for appearing before representatives of the world’s media on Thursday.

He gave few details about his past though he said he left Russia’s FSB service with the rank of colonel.

But he said he had battlefield experience as a volunteer fighter in Moldova’s rebel enclave of Transdnistria and in Bosnia. He had also fought, he said, in Russia’s former rebellious region of Chechnya.

He said he had been specifically asked to lead the separatist rebellion in Ukraine’s Russian-speaking east - but would not say by whom specifically.

“I was asked to help in organizing a force, to lead a group which was ready to rise up in rebellion,” he said, saying only that the approach had come from people with whom he had been serving with in Crimea which Russia annexed from Ukraine in March.

“They considered I could do this successfully, more successfully than they could, and I agreed to their proposal and so I came to the territory of Ukraine,” he said.

Writing By Richard Balmforth; Editing by Robin Pomeroy

Annex 178

U.S. Agency for International Development, Ukraine, 2023.

Ukraine | U.S. Agency for International Development

Ukraine's commitment and capacity to progress towards self-reliance is hampered by an ongoing two-front war -- against Russia's full scale aggression on the one hand, and against its internal legacy of corruption on the other -- with deep consequences for the future of Europe, regional stability, and the United States, for whom a strong and free Europe is a cornerstone national security goal.

USAID's [2019-2024 Country Development Coordination Strategy](#) calls for a specific focus on anti-corruption efforts, countering the impacts of Russia's aggression, and promoting economic development and energy security in Ukraine. USAID will also continue to support efforts to strengthen democracy and good governance, improve health care systems, and mitigate the effects of the conflict in the east.

Since the start of the war on February 24, 2022, USAID has provided \$9.88 billion in development and humanitarian assistance.

Official USAID solicitations occur only through www.grants.gov and www.fbo.gov

Annex 179

Ned.org, *National Endowment for Democracy.Ukraine*



Ukraine



AHALAR Center for Humane Technologies

NGO Strengthening

\$35,230

Furthering Ukraine's Democratic Transition

To increase civil society's influence on Ukraine's democratic transition by facilitating cooperation between NGOs and the media. AHALAR will organize three training seminars for 60 representatives from the media and civil society, a four-day study trip to Warsaw for 12 participants focusing on successful examples and best practices of cooperation between civil society and the media in the Polish context, a small grants competition and an online networking platform at www.activarte.org.ua.

Alliance Center

Accountability

\$24,758

Promoting Accountability in Eastern Ukraine

To increase the accountability of local governments in eastern Ukraine. The Donetsk-based Alliance will conduct four workshops and convene eight working groups to strengthen the capacity of newly formed local civic councils. The events will focus on using tools and strategies for networking, monitoring and advocacy campaigns to help the councils be more effective in engaging and influencing local government activities. Alliance will also develop and maintain a resource library to disseminate information and best practices and hold a three-day final conference for 30 council members.

Association of Ukrainian Law Enforcement Monitors

Human Rights

\$38,334

Monitoring Human Rights Compliance by Law Enforcement Agencies

To promote Ukraine's adherence to international human rights standards. The Association will conduct three trainings in Ukraine's regions for a total of 60 NGO activists, monitor human rights violations by the police, and publish the results in its annual report, as well as develop recommendations to prevent future abuses. The Association will also print and distribute 300 copies of the report in Ukrainian and English.

Center for International Private Enterprise

Developing Market Economy

\$357,707

Building Advocacy Momentum

To build the capacity of Ukrainian business associations and improve the entrepreneurial climate through coalition-based advocacy. CIPE will build the skills of reform-minded business leaders through training seminars, workshops and small grants designed to stimulate advocacy on targeted issues. CIPE will also support partner business associations to advocate for improvements in the entrepreneurial environment with a focus on reducing corruption and improving public-private dialogue.

Center for Research on Social Perspectives in the Donbas

Freedom of Information

\$34,995

Supporting Independent Regional Media

To continue disseminating independent information about and for Ukraine's regions. The Center will maintain its popular news website, OstriV (www.ostro.org). NED support will cover the costs of three correspondents, including two in the Donetsk region and one in Kyiv, who will produce more than 100 analytical and 5,000 informational items for the website. Assistance will also be used to cover a portion of the Center's basic operating costs.

Center for Society Research

Human Rights

\$24,850

Promoting Freedom of Assembly

To promote greater awareness of the freedom of assembly. As part of a larger, national advocacy campaign, the Center will monitor freedom of assembly throughout the country, including the reaction of the authorities, and disseminate the results of its monitoring via a website.

Center UA

Accountability

\$22,600

Promoting the Accountability of Public Officials

To increase the accountability of public figures in Ukraine. The Center UA will continue to operate its unique interactive website, Vladometr.org (Powermeter), which monitors, documents and assesses promises made by politicians, officials and prominent public figures.

Cherkasy Regional Organization of Committee Voters of Ukraine

Accountability

\$22,000

Promoting Civic Activism and Government Accountability in Central Ukraine

To promote civic activism and government accountability in the Cherkasy region. The Cherkasy CVU will hold five workshops for activists and local councilors on increasing cross-sectoral communication, improving interaction between voters, civil society and local government, and working with the public to solve pressing local issues. The CVU will also conduct a campaign to monitor local councilors, MPs and mayors of major cities from the region that will analyze pre-election platforms of those elected officials and assess their performance since the elections. Results will be posted on a special section of the CVU's website, deputat.ck.ua.

Chernihiv City Youth Organization Educational Center "Initiative"

NGO Strengthening

\$28,270

Promoting Local Activism in Chernihiv Region

To strengthen civil society in the northern Ukrainian region of Chernihiv. The Initiative will organize a series of nine workshops and trainings for NGO representatives, journalists and members of district councils from seven districts in the Chernihiv region to resolve local problems through inter-sectoral cooperation. Following the trainings, six teams of participants will receive small grants to address local challenges. The Initiative will also publish seven issues of its newspaper and convene a final conference.

Chernivtsi Committee of Voters of Ukraine

Accountability

\$33,650

Promoting Accountability in Southwestern Ukraine

To foster government accountability and transparency in southwestern Ukraine. The Chernivtsi CVU will monitor the activities of city council deputies in the Chernivtsi and Khmelnytsky regions, produce four monitoring reports and publish them in its Krok Zakhid newspaper with a print run of 1,600 copies. It will hold seven roundtables to advocate for creating legal norms on public participation in self-governing bodies and to foster relations between deputies and the public. The CVU will also convene seven training seminars and produce 600 copies of an advocacy manual for deputies, and launch an information campaign to promote public participation in local communities. During the campaign, the CVU will survey 2,000 people and disseminate 1,500 copies of a "how to" booklet on civic activism.

Chernivtsi Society "Ukrainian People's House in Chernivtsi"

NGO Strengthening

\$25,020

Enhancing Civic Journalism and NGO Cooperation

To develop the communication skills of youth activists and enhance cooperation of NGOs in the Chernivtsi and Kirovohrad regions. The Society will organize a four-month course in civic journalism and a media competition for 70 youth leaders, as well as produce a website, guidebook and two issues of its Toloka (Community) newspaper. The NGO will also organize a study tour for the eight most promising participants and bring together 100 activists for a final conference.

Coalition of Cherkassy Youth NGOs "Moloda Cherkaschyna"

NGO Strengthening

\$31,855

Promoting Youth Activism in Central Ukraine

To strengthen youth involvement in civil society by enhancing a network of activists and organizations in central Ukraine. The Coalition will organize two networking seminars and a six-day training for approximately 50 youth activists in four regions of central Ukraine: Kremenchug, Cherkassy, Kirovohrad and Poltava. The Coalition will also conduct an information and monitoring campaign on youth policy in the four regions, along with four civic actions developed by participating young activists

Dniprovsky Center for Social Research

Freedom of Information

\$23,830

Promoting Freedom of Information and Accountability in Dnipropetrovsk

To increase access to independent news and information in Ukraine's eastern region of Dnipropetrovsk. The Center will continue producing its online newspaper Novyi Format (www.nf.dp.ua), which features regional news and analysis in Ukrainian and Russian. The Center will monitor the activities of elected officials, conduct an opinion poll, and convene three roundtables to strengthen the professionalism of 20 journalists and NGO representatives. The Center will also maintain and update its website on NGO developments in the region at www.dcsi.dp.ua.13-880

Donetsk Press Club

Freedom of Information

\$38,000

Fostering Freedom of Information in Eastern Ukraine

To increase the capacity of journalists and improve the professionalism of media in eastern Ukraine. The Press Club will organize 20 meetings covering important national and regional issues for journalists and media outlets throughout the Donetsk region. It will also convene six online workshops on solving pertinent local problems for 60 representatives of Donetsk-based NGOs, media, local authorities and experts. All activities will be publicized on the Club's website at <http://pclub.dn.ua>.

Donetsk "Committee of Voters of Ukraine"

Freedom of Information

\$49,440

Promoting Civic Journalism in Eastern Ukraine

To promote civic journalism in the eastern Donetsk region. The Donetsk CVU will develop an online platform for civic journalism by holding a new media barcamp for bloggers and conducting a four-month school of multimedia journalism for 20 civic journalists. Twelve of the most promising participants will be selected to intern for six months at the CVU's portal, NGO.donetsk.ua. The CVU will also hold a public competition for reporting by civic journalists and bloggers on the "Unexpected Donbass."

Ilo Kucheriv Democratic Initiatives Foundation (DIF)

Democratic Ideas and Values

\$41,298

Stimulating Dialogue on Transition Processes

To stimulate informed debate and dialogue among civil society, government and the general public on issues relating to Ukraine's transition to democracy. Through three national polls, eight expert surveys, 10 roundtables, monthly bulletins and a quarterly scholarly journal, DIF will help ensure that Ukraine's leaders are informed about public opinion, while at the same time making the public aware about important policy debates.

Independent Association of Broadcasters

Human Rights

\$44,875

Promoting Youth Human Rights Awareness

To raise awareness of human rights, protect freedom of speech, and educate youth about the role of media in democratic society. The Association will organize its fourth annual Kinomedia Festival, which will include film screenings and public lectures at universities in nine Ukrainian cities. The Association will also conduct a short film contest, focusing on media freedom, democracy and human rights, for students and young professionals from throughout Ukraine.

Institute of Mass Information

Freedom of Information

\$36,450

Monitoring Freedom of the Media in Ukraine

To analyze current and pending legislation on the media and monitor violations of press freedom and attacks on journalists in Ukraine. The Institute will conduct independent field investigations into cases of extreme pressure or intimidation against journalists, publish an annual report on its monitoring, and disseminate the findings to media outlets and the public through three press conferences and its website, <http://imi.org.ua>.

Institute of Political Education

Accountability

\$38,500

Strengthening Local Democracy

To foster democratic local and regional government in Ukraine. The Institute will conduct three-day training seminars in the Lviv, Chernihiv, Donetsk and Kyiv regions for 125 newly elected local and regional councilors. The trainings will promote a better understanding of the role and responsibilities of an elected official and how to best address local needs.

Institute of the Republic

Human Rights

\$32,609

Promoting Freedom of Assembly

To promote of freedom of assembly. As part of a larger, national advocacy campaign to defend and advance this human right following the 2012 parliamentary elections, the Institute will conduct two training sessions for 24 campaign activists, organize six roundtables and six lectures in the regions on proposed legislation regulating freedom of assembly in Ukraine and the country's international commitments, convene three press conferences in Kyiv, and print and distribute 15,000 leaflets publicizing campaign events.

International Republican Institute

Accountability

\$275,000

Fostering Good Governance

To promote democratic governance practices in Ukraine. IRI will expand an innovative project model that has increased the capacity of the Cherkasy municipality to implement best practices in good governance. IRI will expose new municipalities to the innovative reform ideas currently being implemented in Cherkasy, and mentor the administrations in Ternopil and Ivano-Frankivsk during the reform process, bolstering existing demand for democratic reform amongst the citizenry, and developing the advocacy capacity of civil society to channel that demand.

Journal Krytyka Ltd.

Freedom of Information

\$33,304

Promoting Media Sustainability

To strengthen independent media and democratic ideas and values. The Journal will launch an online version of its prominent intellectual publication, which contains analytical pieces on important political, economic and social issues related to Ukraine's democratic transition. The new website, Krytyka Online, will also serve as a networking platform, attracting a new generation of readers and contributing to the journal's sustainability strategy. Endowment funds will be used to support the re-design and re-launch of the Krytyka website and networking platform at <http://krytyka.com>.

Kharkiv Human Rights Protection Group (KHRPG)

Human Rights

\$32,717

Providing Information and Analysis on Human Rights Issues

To promote and safeguard human rights. During a year in which Ukraine's human rights behavior will come under scrutiny while it holds the OSCE chairmanship, the KHRPG will produce a series of publications on human rights in Ukrainian, Russian, and English; maintain a virtual human rights library on its website www.khpg.org; and operate a separate website documenting and assisting victims of human rights abuses. It will also continue monitoring draft legislation and providing recommendations to lawmakers. Finally, the KHRPG will organize a School for Human Rights Leaders, enabling 40 activists from human rights organizations to develop management and financial skills.

Kherson City Association of Journalists "South"

Human Rights

\$31,195

Promoting Human Rights through a Documentary Film Festival

To cover the partial costs of its 10th annual human rights film festival, Docudays UA. The theme of this year's anniversary festival is 'Vybor – Yes!' (There is a Choice!). The unique event will again feature domestic and international human rights documentary films and will include public discussions and debates led by human-rights NGO representatives and experts. Endowment support will be used to cover part of the festivals' seven-day inauguration in Kyiv in March 2013.

Kherson City Association of Journalists "South"

Human Rights

\$42,429

Promoting Human Rights through a Traveling Film Festival

To raise public awareness of human rights. The Association will organize the traveling version of its 10th annual human rights film festival, Docudays UA, in 24 regions of Ukraine. The traveling festival will feature 25 domestic and international human rights documentary films and will include over 260 public discussions, seminars, performances and debates led by human rights activists and NGO representatives.

Kherson Committee of Voters of Ukraine

Accountability

\$40,310

Promoting Government Accountability in Southern Ukraine

To monitor the work of local and regional councils in southern Ukraine. The Kherson CVU will track the implementation of local election platforms and promises in the Kherson region. Focus groups in Kherson, Novokakhovsk, Kakhovsk, Tsurupynsk and Skadovsk will inform local citizens and officials about the monitoring program. The CVU will produce an analytical report, online postings, two special editions of a newspaper, and a summary booklet for distribution during four seminars, a roundtable and press conference.

Kherson Regional Charity and Health Foundation

Accountability

\$24,540

Fostering Accountability and Transparency in Southern Ukraine

To increase the accountability of local and regional authorities in the southern region of Kherson. The Foundation, which publishes the popular regional newspaper Vgoru, will increase citizens' access to information about the activities of local and regional governments by conducting and publishing a bimonthly newspaper supplement titled 'People and the Authorities.' The supplement will include columns focusing on different aspects of government performance and the activities of elected officials, as well as four in-depth investigative journalism pieces on pressing issues in the region's rural areas. All materials will be available online on the newspaper's website, www.vgoru.org.

Lion Society

NGO Strengthening

\$48,084

Promoting Local Activism

To continue promoting cooperation and local activism in central, southern and eastern Ukraine. The Society will organize 14 seminars for up to 220 local activists and representatives of local authorities to promote best practices in engaging local governments to resolve local issues. Sixteen promising participants from NGOs will take part in two, four-day study tours in western Ukraine, including two seminars in Lviv. The Society will also publish three brochures containing the seminar materials in print runs of 300 copies each and distribute them to local activists, community leaders, local government representatives and the media.

National Democratic Institute for International Affairs

NGO Strengthening

\$371,000

Building Capacity for Domestic Election Monitoring

To build the capacity of an indigenous monitoring initiative in Ukraine and promote a freer and fairer May 2014 presidential election. NDI will assist Opora in improving the governance, management, communications, strategic planning, and technical aspects of its election observation work by implementing a series of recommendations from an NDI-administered assessment.-020GG

New Generation Youth Organization

NGO Strengthening

\$33,879

Strengthening Local Civil Society in Rural Communities

To increase the capacity of civic initiatives in rural regions of southern Ukraine. The organization will hold two, three-day trainings, one in each of the neighboring Mykolaiv and Kherson regions, for 25 representatives of local NGOs. New Generation will work with 10 of the best participants to carry out work plans to strengthen their local organizations. To assist local groups with solving problems in their communities, New Generation will award eight mini-grants of up to \$700. A conference, bringing together all 50 participants, will be convened at the end of the project to facilitate an exchange of lessons learned and further collaboration.

Odesa Committee of Voters of Ukraine

Political Processes

\$44,085

Monitoring Local Government in Southern Ukraine

To monitor the work of local elected officials in southern Ukraine. The Odesa CVU will conduct two training seminars on monitoring for 10 activists. It will continue to monitor regional and local councils in Odessa, Kotovsk, Rozdilnyia, Bilhorod-Dnistrovsk, Izmail, Pozdilnyia Izmail, and Reni. To disseminate its findings, the CVU will produce and distribute 6,000 copies of the preliminary monitoring results and 12,000 copies of the final monitoring results in its bulletin IzbirKom, regularly publish related articles through local online and print media, including its website at www.izbirkom.od.ua, and convene three roundtable discussions.

Open Society Foundation (OSF) - Ukraine

Accountability

\$33,980

Promoting Legislative Accountability

To continue monitoring and publicizing the activities of deputies and political parties represented in the Ukrainian parliament. The OSF will publish quarterly monitoring reports, prepare two versions of its annual monitoring report, and a series of regionally-focused quarterly reports all of which focus on the performance of elected officials. All the reports will be available online at the OSF's website, www.deputat.org.ua, and distributed electronically to parliamentarians, NGOs and the media. It will also conduct nine regional public roundtables on the program for elected officials and NGO representatives.

Polissya Foundation for International and Regional Research

Accountability

\$20,000

Improving the Accountability Skills of Journalists

To increase the analytical skills of journalists so they can hold accountable deputies in the Chernihiv region. Polissya will conduct three trainings focusing on new media and analytical journalism for 12 local journalists. Each journalist will create a blog to monitor the fulfillment of electoral promises by local deputies. In addition, Polissya will produce and distribute an analytical report and convene two press conferences on the project.

Public Organization Telekritika

Freedom of Information

\$58,250

Promoting a Pluralistic and Balanced Media Environment in Ukraine

To foster transparency and promote the professionalism of the media sector. While serving as an independent resource to assist journalists, Telekritika will continue to monitor Ukraine's media outlets for censorship, restrictions on freedom of the press, and harassment and physical attacks against journalists. The monitoring results will be published on Telekritika's website (www.telekritika.kiev.ua) and in its print journal, Telekritika.

Regional Press Development Institute (RPDI)

Accountability

\$50,000

Promoting Government Transparency

To promote government transparency and accountability by improving the quality and responsiveness of government-run websites and e-governance initiatives. RPDI will monitor the effectiveness of 56 government websites, disseminate the findings of its monitoring, and work with government bodies on improving the sites' contents and performance. To mark the end of the three-year project, RPDI will produce a comprehensive analytical report and present it at a press conference in Kyiv.

School for Policy Analysis of the Kyiv-Mohyla Academy

Democratic Ideas and Values

\$52,650

Promoting Constitutional Reform

To promote constitutional reform. Building on previous NED-supported projects, which developed a series of proposals for constitutional reform, the organization will deepen public engagement and broaden debate on the issue by conducting a nation-wide poll, publishing a set of online informational resources, producing 1,500 copies of a brochure and a series of monthly articles, and convening a roundtable with 30 experts, government officials and NGO representatives.

Sumy Regional Committee of Youth Organizations

NGO Strengthening

\$49,866

Promoting Civic Activism in Northeastern Ukraine

To foster the development of civil society in rural areas of northeastern Ukraine. The Committee will work with its network of over 30 NGOs to increase civil society initiatives in the Sumy and Kharkiv regions. It will hold three trainings for 60 NGO activists, maintain its website at www.molod.sumy.ua, publish seven issues of its bulletin Spalakh, support five local initiatives through a mini-grants competition, and convene a regional conference for 30 activists. 2013-88

Ukrainian Catholic University

Human Rights

\$32,740

Promoting Religious Freedom

To promote freedom of conscience through an informed analysis of religious rights and obstructions to religious freedom. The Ukrainian Catholic University will continue to operate its Religious Information Service of Ukraine (RISU), an online news agency (www.risu.org.ua) that covers issues of church-state relations, religious rights, and conflicts between Ukraine's various faith-based communities. NED support will cover the costs of staff salaries, website development and maintenance, news correspondents, and two roundtables. The unique website will publish more than 2,000 articles and analyses during the coming year.

Ukrainian Center for Economic and Political Research Named After Oleksandr Razumkov

Democratic Ideas and Values

\$26,660

Analyzing Ukraine's Democratic Development

To continue publishing National Security and Defense, one of the most widely read policy journals in Ukraine. NED support will be used to produce two issues in 2013. Each issue, to be published in an edition of 3,000 copies in Ukrainian and 800 copies in English, will provide a thorough examination of issues of particular importance to Ukraine's democratic transition.

Ukrainian Center for Independent Political Research (UCIPR)

Political Processes

\$79,250

Promoting Transparency in Political Processes

To promote public discussion on democracy-related topics in Ukraine. UCIPR will conduct nine research projects on various aspects of democratic development. The think tank will organize four focus groups bringing together representatives of civil society and the authorities, three roundtables, two in the country's regions and one in Kyiv, and a conference. This year, UCIPR will focus on political party transparency and reform as well as examine the state of local democracy. Two studies, on local democracy and political party communications, will be published in 500 copies each.

Ukrainian Helsinki Human Rights Union

Human Rights

\$49,960

Promoting Human Rights

To raise awareness about human rights in Ukraine. The Union will produce the 2012 edition of its annual report on the country's human rights situation, publish 1,500 copies in Ukrainian and 300 copies in English, prepare 300 copies on compact disc, and make the document available on its website at www.helsinki.org.ua. The Union will also organize a press conference and a roundtable to highlight the report's findings.

Ukrainian Youth Association of Ukraine (SUM)

NGO Strengthening

\$40,070

Strengthening Civil Society in Central and Eastern Ukraine

To strengthen youth civil society organizations in the Chernihiv, Donetsk, Zaporizha and Kirovohrad regions of Ukraine. SUM will conduct three training seminars for 30 potential civic leaders in the Zaporizha region as well as one seminar for 30 NGO leaders from all four regions; organize four working meetings for 35 NGO leaders and a two-day conference for 40 participants and hold a mini-grant competition that will provide funding for six local civic initiatives.

Vinnitsia Regional Committee of Youth Organizations

NGO Strengthening

\$33,170

Mobilizing Communities in the Vinnytsia Region

To develop the skills of local civil society leaders to more effectively mobilize communities and engage them in solving pertinent local problems. The program will include four trainings and three study visits for local activists, as well as a mini-grant program that will provide support to five community activism projects. The Committee will produce five video clips and three interviews about successfully implemented projects and publicize them through local websites, radio and TV stations and a press conference.

Youth Alternative

Democratic Ideas and Values

\$68,170

Preparing Ukraine's Future Leaders

To promote youth activism and engagement in government processes. Youth Alternative will continue and expand its government internship program. The organization will select 35 students from leading Kyiv universities to serve eight-month fellowships in the Verkhovna Rada, Ukraine's national legislature. In addition, it will select 140 students to serve five-month fellowships at local councils in 20 regions. Interns will participate in 47 related events, including orientation, training seminars and roundtables. They will also produce educational booklets, with a total print run of 500 copies.

Zhytomyr Youth Civic Organization "Modern Format"

Democratic Ideas and Values

\$39,962

Promoting Civic Engagement Among Youth in Northern Ukraine

To engage youth in the process of strengthening and implementing democratic ideas and values in their communities. Modern Format will organize two, parallel, year-long schools that will present the core ideas and values of democracy and human rights through two different perspectives. One school will target journalists; the other will be for civic activists. A total of 100 youth people in the Zhytomyr region will take part in the program.

Accountability

\$31,293

Strengthening Transparency in Northeastern Ukraine

To promote transparency and accountability in the use of public funds in northeastern Ukraine. The organization will train civic activists to identify corruption in local governments. It will also produce a final report to be disseminated through press conferences.

Freedom of Information

\$21,139

Strengthening Investigative Journalism and Intersectoral Cooperation

To boost the capacity for investigative journalism and increase cooperation between journalists and civil society. The organization will hold basic trainings and advanced workshops for journalists and support a series of investigative pieces. It will also work with local community councils to monitor the impact of the investigative articles and produce a final report on best practices and lessons learned from the program.

\$36,882

Analyzing Regional Security

To stimulate public discussion on and policy responses to threats to democracy in Ukraine's regions. The organization will identify and foster debate on key issues while developing and advocating for policy responses. It will organize roundtables, print and distribute its bulletin, and publish articles in regional newspapers.

\$13,674

Promoting Civic Journalism

To stimulate civic journalism among youth. The organization will trainings in for youth activists from local communities and NGOs. Young people will learn how to develop and create content focusing on issues that affect the lives of citizens for social media. The most active participants will be selected to take part in a master class with a well-known Ukrainian journalist.

Human Rights

\$20,287

Defending Human Rights

To educate and inform youth about defending their basic civil rights. The organization will conduct seminars and trainings on recognizing, addressing and resolving day-to-day civic rights violations. To inform and educate a wider audience, the organization will produce and post a series of online training videos and informational materials, as well as publish 1,000 copies of a legal handbook.

\$40,892

Promoting Awareness of Rights and Freedoms in Southern Ukraine

To raise awareness of legal and human rights in southern Ukraine. The organization will maintain a legal clinic providing free legal aid to the public and organize a series of events drawing attention to rights abuses, including roundtables for representatives of the local authorities, roundtables for the NGO community, and public lectures on legal rights. It will also conduct an extensive advertising campaign on rights issues, including leaflets and other materials, billboards, banners and TV spots. It will also publish bimonthly columns in local newspapers and disseminate a monthly e-bulletin on legal and human rights.

\$30,000

Fostering Human Rights Networks

To strengthen a network of human rights organizations. The organization will convene a training for representatives of human rights NGOs and initiative groups, conduct trainings in towns and villages, and operate and publicize a human rights hotline and reception centers that will provide free legal assistance to citizens.

\$21,790

Promoting Human Rights

To promote human rights. The organization will conduct a training for regional activists to improve human rights monitoring. Following the training, the organization will organize volunteer groups of training participants, lawyers, elected officials and other activists to monitor human rights abuses. These groups will track reported cases and utilize the information for broader advocacy campaigns.

NGO Strengthening

\$29,469

Fostering Intersectoral Cooperation in Central Ukraine

To inform, educate and activate civil society. The organization will organize trainings on proposal writing, project development, and community and civil society development projects, as well as on project implementation, to foster civil society.

\$19,920

Promoting Community Activism in Southern Ukraine

To stimulate civic activism in southern Ukraine. The organization will conduct trainings in villages and towns to facilitate the implementation of local projects targeting community problems, and convene a roundtable webinar with community representatives to present project outcomes and lessons learned for representatives from Ukrainian and international NGOs.

\$19,507

Strengthening the Capacity of Youth NGOs

To strengthen youth activism. The organization will support a network of youth organizations and initiative groups through a series of trainings to increase members' capacity and professionalism. It will provide informational and technical support for the youth organizations' events and activities. The organization will promote the network by holding a press conference and disseminating a booklet highlighting the organizations' activities to local government offices, media, schools, and other NGOs.

Grant descriptions are from the 2013 NED Annual Report.

Annex 180

The World, *Who Were the Maidan Snipers?* (14 March 2014)



Agence France-Presse

Who were the Maidan snipers?

GlobalPost

March 14, 2014 · 4:42 PM EDT

By **Guest Writers**



A man suspected of being a sniper and member of the pro-government forces is forced to pay his respects on February 22, 2014 to the mourning place of a victim killed in the clashes in Kyiv.

Credit: BULENT KILIC

Before the current crisis in Crimea, the focal point of tensions in Ukraine was Kyiv's Independence Square. During the bloodiest days of clashes last month, dozens of protesters were shot and killed by sniper fire on the Maidan, as the square came to be known.

By the end of the week, close to a hundred people were dead.



Initial reports seemed to indicate all the sniper fire came from the security forces, but some are now questioning that narrative as Ukraine's interim government investigates who was behind the fatal shootings.

Oleksandr Yakymenko, the former head of Ukraine's Security Service, claimed this week [in an interview with TV channel Rossiya](#) that pro-Maidan (pro-Western) organizers were the ones behind the Feb. 20 shootings.

Yakymenko said the shots came from Kyiv's Philharmonic Hall. That particular building was overseen by the Fatherland Party's deputy Andriy Parubiy, known unofficially as the "commander of Maidan." After President Viktor Yanukovych fled Ukraine, Parubiy assumed the post of Secretary of the National Security and Defense Council for the interim Ukrainian government.

Yakymenko said snipers started shooting at local police forces but then directed their fire on the anti-government protesters fighting the police. After the shooting, some of the snipers moved on to Hotel Ukraine. He added that the Maiden fighters appeared "prepared," leaving the barricades at the first sniper shot.

Yakymenko said Ukrainian nationalist groups Praviy Udar and Svoboda requested his help in clearing out the snipers, but Parubiy wouldn't allow government forces into Maidan-controlled territory. Yakymenko went on to claim that among the snipers were foreign mercenaries. While not making a direct connection between the United States and the snipers, Yakymenko suggested that the US embassy was somehow using Poland to orchestrate the overthrow of (now ousted) Yanukovych.

Pro-Russian news networks were not the only ones that suggested pro-Maidan snipers may have taken part in the shootings.

"The majority of the gunfire seemed to be coming from police lines," [said BBC's Gabriel Gatehouse](#). "But not all of it." Gatehouse said he saw one of the shooters "wearing one of the protesters' green helmets," and shooting from an open window in Hotel Ukraine.

Gatehouse also spoke to British forensic experts on Feb. 24, who examined evidence from the sniper fire. They said the gunfire came primarily from the police. At least one sniper shot from the ground, while three shot from high



vantage points, said the investigators, whose faces were blurred. They all fired in the direction of Hotel Ukraine.

The first suggestion that the snipers might be pro-Maidan supporters came from a leaked phone conversation published by Russia Today — which is funded by the Kremlin — last week. The conversation, [originally posted on YouTube](#), took place on Feb. 25, between European Union Foreign Affairs Chief Catherine Ashton and Estonian Foreign Affairs Minister Urmas Paet.

Paet is heard saying that a medic on site during the shootings said she thought the snipers were shooting at both the police and the protesters. The medic, whom Paet later referred to as "clearly a person with authority," added there was growing understanding that the shooters were not acting on the orders of Yanukovych, but rather the opposition. The Guardian ran with the story cautiously, headlining it with the words "[bugged call reveals conspiracy theory](#)."

The Estonian Foreign Ministry [confirmed the authenticity of the call](#) but rejected the assertion that Paet "was giving an assessment of the opposition's involvement." (Ashton's people declined to respond to several media outlets, saying that they don't comment on leaked information.) According to Russia Today, the video was uploaded by members of Ukraine's Security Service who remain loyal to Yanukovych.

Russia's suggestion has been that the shooters were organized by the opposition to increase outrage against the government.

The Ukrainian authorities investigating the shootings, meanwhile, are looking more closely at Russia's involvement than at Yanukovych's government, [according to the Associated Press](#).

"I think it wasn't just a part of the old regime that (plotted the provocation), but it was also the work of Russian special forces who served and maintained the ideology of the (old) regime," Health Minister Oleh Musiy told the AP.

Interim Interior Minister Arsen Avakov, meanwhile, said the snipers were a "[third force](#)" that was "not Ukrainian."

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Annex 181

BBC News Ukraine, *The Maidan Shooting: a Participant's Account* (13 February 2015)

(translation)

Translation from Russian

BBC News Ukraine, *The Maidan Shooting: a Participant's Account* (13 February 2015), available at:
https://www.bbc.com/ukrainian/ukraine_in_russian/2015/02/150213_ru_s_maidan_shooting

The Maidan Shooting: a Participant's Account

Gabriel Gatehouse
BBC

13 February 2015



Almost a year ago, a day of bloodshed on Kiev's central square marked the end of a long and cold winter of protests against President Viktor Yanukovich, who soon fled the country.

More than 50 protesters and three policemen were killed that day. How did the shooting start?

The protest organisers have denied having anything to do with it. But one person told the BBC a different story.

In the early hours of 20 February 2014, Kiev's Maidan stands divided - Berkut on one side, protesters on the other.

This has been going on for more than two months. But events are moving into a decisive phase. Before the end of the day, more than 50 people will be killed, most of them struck by security agencies' bullets right in the middle of the street.

The violence will hasten the fall of Viktor Yanukovich. Moscow will call the day of February 20 an "armed coup" and use the idea to justify its annexation of Crimea and support for separatists in eastern Ukraine.

The protest leaders, some of whom now hold positions in the government of the new Ukraine, insist that the security forces, who were acting on the instructions from the previous leaders, are fully responsible for the shootings. But a year later, some witnesses are beginning to "paint" a different picture.

What actually happened on the Maidan?

I didn't mean to kill

"I was shooting at the feet," says a man we will call Sergei. He tells me that he took up a position in the Kiev conservatory, which is in the south-west corner of Maidan.

"Of course, I could have hit somebody's arm or something. But I didn't shoot to kill," he adds.

Sergei says he was a regular protester on Maidan for more than a month and his shots at the police in the square and on the roof of the underground shopping centre forced them to retreat.

The shooting had already begun two days earlier, on February 18. On Wednesday, the 19th, it was calmer, but in the evening, Sergei says, he was set up with a man who offered him a choice of two guns: a 12-mm shotgun and a Saiga high-speed hunting rifle.

He chose the latter and hid it in the post office building across the street from the conservatory. Both of these houses were under the control of the protesters.

How the events of 20 February 2014 unfolded

Under an onslaught of protesters, the Interior Ministry units retreated from their positions near Maidan to Institutskaya Street (on the north side of Hotel Ukraine).

The protesters followed them and came under fire from the retreating special units and snipers from nearby buildings.

More than 50 people were killed, the highest number of casualties in the clashes between protesters and police on Maidan.

On the morning of 20 February, when the shooting started, Sergei, according to him, was taken to the conservatory, where he and another man were shooting at the security forces for about 20 minutes; this was before seven o'clock in the morning.

His account is partially corroborated by other witnesses. That same morning, Andrey Shevchenko, then an opposition deputy and an active participant in the protests, received a phone call from the commander of special forces on Maidan.

"He called and said: "Andrei, who is shooting at my guys?" He also specified that they were shooting from the conservatory," Mr Shevchenko said.

He contacted the protesters' chairman, Andrey Parubiy, who was described as the commandant of the Maidan.

"I sent a squad of my best men to search the conservatory and identify the firing positions there," Parubiy said.

Meanwhile, the deputy Andrey Shevchenko received several more phone calls, increasingly panic-stricken: "From time to time, an officer from the Interior Ministry called and said, 'I already have three wounded. I already have five wounded. One dead.'"

Finally, he said: "We are retreating, Andrei, I don't know what is going to happen next". I clearly felt that something bad was going to happen," the deputy said.

Andrey Parubiy, now First Deputy Chairman of the Verkhovna Rada of Ukraine, said his men did not find any shooters at the conservatory.

But a photographer who visited the conservatory later that morning - after 8 o'clock - photographed people with guns there, although he did not see them shooting.

What happened on the Maidan: a photographer's account

Sergei's account differs from what Parubiy says.

"I was just reloading my gun," he told me. - They ran up to me, one pressed me to the ground with his leg and said: "They want to talk to you. It's okay, but don't do it again."

Sergei is sure that it was Andrey Parubiy's envoys who got him out of there, although he did not recognise him by sight. They took him out of the conservatory, drove him out of Kiev in a car and left him outside the city, from where he had to get home himself.

By then three members of security forces had already been fatally wounded and the mass shooting of protesters had begun.

The official investigation focused on what happened afterwards, after the special forces had withdrawn from Maidan. Video footage clearly shows them shooting at protesters as they retreated.



Photos taken by a photographer at the conservatory on the morning of February 20

Only three people were arrested, all of them members of the Berkut special unit. Of the three, only two, low-ranking officers, remain in custody. The stay in custody for Berkut commander Dmytry Sadovnyk was replaced with house arrest, after which he disappeared.

The three Berkut officers are accused of involvement in the killing of 39 people. But at least ten other protesters were killed and three members of the special forces died of their wounds.

It is almost certain that some of the victims were killed by snipers who likely fired from tall buildings near Maidan.

The attorneys for the victims and sources in the Prosecutor General's Office told the BBC that when it comes to investigating the deaths, which Berkut had nothing to do with, all their efforts are blocked by the courts.

"In Yanukovich's time it was a Bermuda triangle: the prosecutor's office, the police and the court," Andrey Shevchenko says. - Everyone knew about their cooperation. They covered for each other, and it was the basis of large-scale corruption all over the country. These ties are still intact," the interlocutors say.

Different versions of a conspiracy

Earlier this week, Ukraine's Prosecutor General Vitaliy Yarema, who was heavily criticised for the way he handled the investigation, was sacked.

Meanwhile, there are different conspiracy theories.

"I am convinced that snipers who came from Russia and were controlled from there were behind the February 20 shooting," Andrey Parubiy, a former Maidan commandant says.

"The shooters wanted to drown Maidan in blood," he adds.

This is the position held by many Ukrainians. In Russia, however, many believe the opposite: that Maidan was a Western project inspired by the CIA to move Ukraine out of Moscow's orbit. Neither side adds convincing evidence to their claims.

The vast majority of the Maidan protesters were peaceful, unarmed citizens who had endured months of bitter cold, demanding changes in the corrupt government. As far as is known, all those who fell on 20 February were unarmed.

Maidan leaders have always stressed that they did everything they could to ensure that there was no fire on the Maidan.

"We knew that our strength lay in not using force. To start shooting would have been weakness," Mr Shevchenko notes.

Andrey Parubiy admits that a small group of armed protesters could have infiltrated Maidan; in that case it would have been a spontaneous and disorganised response to the violence of the security forces in the previous days.

"I heard that after the February 18 shooting, some came to Maidan with hunting rifles. As I was told, these may have been relatives or parents of those who died on the 18th. So, I admit that

there could have been people with hunting rifles on the Maidan. When the snipers started killing our guys one by one, I can assume that the owners of hunting rifles opened fire," he said.

Sergei's version is different again. According to him, he was recruited as a would-be shooter in late January. It was done by a man he describes as a retired military officer. Sergei himself also used to be in the military.

"We started communicating and he took me under his wing. He saw something in me that he liked. Officers are good psychologists, they see what someone is capable of. He kept me close," Sergei said.

That former officer refused to let him join any militant groups that were active on the Maidan: "Your time will come yet," he said.

Or were they preparing him psychologically to take up arms?

"We didn't develop precise plans. But we talked about it among ourselves, and he was preparing me," the interlocutor replies.

The identity of that man remains uncertain, as well as whether he belonged to any of the known Maidan groups.

Many things are still unknown to us - for example, who first opened fire on February 20.

As for conspiracy theories, perhaps Sergei was manipulated and became a pawn in a larger game. He himself sees it differently. In his own words, he was a simple protester and took up arms in self-defence.

"I didn't want to shoot anyone, to kill anyone. But the situation demanded it. I don't feel like a hero. On the contrary, I don't sleep well and have misgivings. I try to control myself, but I get nervous all the time. I have nothing to be proud of. Shooting is easy. Living afterwards is difficult. But you have to defend your country," he says.

Annexes 182 to 184

Intentionally omitted

Annex 185

BBC News, *Ukraine crisis: Transcript of Leaked Nuland-Pyatt Call* (7 February 2014)

9/22/22, 3:44 PM

Ukraine crisis: Transcript of leaked Nuland-Pyatt call - BBC News



Menu

World | Africa | Asia | Australia | Europe | Latin America | Middle East | US & Canada

Ukraine crisis: Transcript of leaked Nuland-Pyatt call

🕒 7 February 2014



| Victoria Nuland and Geoffrey Pyatt together toured the opposition camp in Kiev in December

An apparently bugged phone conversation in which a senior US diplomat disparages the EU over the Ukraine crisis has been posted online. The alleged conversation between Assistant Secretary of State Victoria Nuland and the US Ambassador to Ukraine, Geoffrey Pyatt, appeared on YouTube on Thursday. It is not clearly when the alleged conversation took place.

Here is a transcript, with analysis by BBC diplomatic correspondent Jonathan Marcus:

<https://www.bbc.com/news/world-europe-26079957>

Warning: This transcript contains swearing.

Voice thought to be Nuland's: What do you think?

- **Jonathan Marcus:** At the outset it should be clear that this is a fragment of what may well be a larger phone conversation. But the US has not denied

its veracity and has been quick to point a finger at the Russian authorities for being behind its interception and leak.

Voice thought to be Pyatt's: I think we're in play. The Klitschko [Vitaly Klitschko, one of three main opposition leaders] piece is obviously the complicated electron here. Especially the announcement of him as deputy prime minister and you've seen some of my notes on the troubles in the marriage right now so we're trying to get a read really fast on where he is on this stuff. But I think your argument to him, which you'll need to make, I think that's the next phone call you want to set up, is exactly the one you made to Yats [Arseniy Yatseniuk, another opposition leader]. And I'm glad you sort of put him on the spot on where he fits in this scenario. And I'm very glad that he said what he said in response.

- **Jonathan Marcus:** The US says that it is working with all sides in the crisis to reach a peaceful solution, noting that "ultimately it is up to the Ukrainian people to decide their future". However this transcript suggests that the US has very clear ideas about what the outcome should be and is striving to achieve these goals. Russian spokesmen have insisted that the US is meddling in Ukraine's affairs - no more than Moscow, the cynic might say - but Washington clearly has its own game-plan. The clear purpose in leaking this conversation is to embarrass Washington and for audiences susceptible to Moscow's message to portray the US as interfering in Ukraine's domestic affairs.

Nuland: Good. I don't think Klitsch should go into the government. I don't think it's necessary, I don't think it's a good idea.



9/22/22, 3:44 PM

Ukraine crisis: Transcript of leaked Nuland-Pyatt call - BBC News



| Anti-government protesters have been camped out in Kiev since November

Pyatt: Yeah. I guess... in terms of him not going into the government, just let him stay out and do his political homework and stuff. I'm just thinking in terms of sort of the process moving ahead we want to keep the moderate democrats together. The problem is going to be Tyahnybok [Oleh Tyahnybok, the other opposition leader] and his guys and I'm sure that's part of what [President Viktor] Yanukovych is calculating on all this.

Nuland: [Breaks in] I think Yats is the guy who's got the economic experience, the governing experience. He's the... what he needs is Klitsch and Tyahnybok on the outside. He needs to be talking to them four times a week, you know. I just think Klitsch going in... he's going to be at that level working for Yatseniuk, it's just not going to work.

Pyatt: Yeah, no, I think that's right. OK. Good. Do you want us to set up a call with him as the next step?

Nuland: My understanding from that call - but you tell me - was that the big three were going into their own meeting and that Yats was going to offer in that context a... three-plus-one conversation or three-plus-two with you. Is that not how you understood it?

Pyatt: No. I think... I mean that's what he proposed but I think, just knowing the dynamic that's been with them where Klitschko has been the top dog, he's going to take a while to show up for whatever meeting they've got and he's probably talking to his guys at this point, so I think you reaching out directly to him helps with the personality management among the three and it gives you also a chance to move fast on all this stuff and put us behind it before they all sit down and he explains why he doesn't like it.

Nuland: OK, good. I'm happy. Why don't you reach out to him and see if he wants to talk before or after.

Pyatt: OK, will do. Thanks.

Nuland: OK... one more wrinkle for you Geoff. [A click can be heard] I can't remember if I told you this, or if I only told Washington this, that when I talked to Jeff Feltman [United Nations Under-Secretary-General for Political Affairs] this morning, he had a new name for the UN guy Robert Serry did I write you that this morning?

9/22/22, 3:44 PM

Ukraine crisis: Transcript of leaked Nuland-Pyatt call - BBC News

- **Jonathan Marcus:** An intriguing insight into the foreign policy process with work going on at a number of levels: Various officials attempting to marshal the Ukrainian opposition; efforts to get the UN to play an active role in bolstering a deal; and (as you can see below) the big guns waiting in the wings - US Vice-President Joe Biden clearly being lined up to give private words of encouragement at the appropriate moment.

Pyatt: Yeah I saw that.

Nuland: OK. He's now gotten both Serry and [UN Secretary General] Ban Ki-moon to agree that Serry could come in Monday or Tuesday. So that would be great, I think, to help glue this thing and to have the UN help glue it and, you know, Fuck the EU.

- **Jonathan Marcus:** Not for the first time in an international crisis, the US expresses frustration at the EU's efforts. Washington and Brussels have not been completely in step during the Ukraine crisis. The EU is divided and to some extent hesitant about picking a fight with Moscow. It certainly cannot win a short-term battle for Ukraine's affections with Moscow - it just does not have the cash inducements available. The EU has sought to play a longer game; banking on its attraction over time. But the US clearly is determined to take a much more activist role.

Pyatt: No, exactly. And I think we've got to do something to make it stick together because you can be pretty sure that if it does start to gain altitude, that the Russians will be working behind the scenes to try to torpedo it. And again the fact that this is out there right now, I'm still trying to figure out in my mind why Yanukovych (garbled) that. In the meantime there's a Party of Regions faction meeting going on right now and I'm sure there's a lively argument going on in that group at this point. But anyway we could land jelly side up on this one if we move fast. So let me work on Klitschko and if you can just keep... we want to try to get somebody with an international personality to come out here and help to midwife this thing. The other issue is some kind of outreach to Yanukovych but we probably regroup on that tomorrow as we see how things start to fall into place.

Nuland: So on that piece Geoff, when I wrote the note [US vice-president's national security adviser Jake] Sullivan's come back to me VFR [direct to me], saying you need [US Vice-President Joe] Biden and I said probably tomorrow for an attaboy and to get the deets [details] to stick. So Biden's willing.

Pyatt: OK. Great. Thanks.

- **Jonathan Marcus:** Overall this is a damaging episode between Washington and Moscow. Nobody really emerges with any credit. The US is clearly much more involved in trying to broker a deal in Ukraine than it publicly lets on. There is some embarrassment too for the Americans given the case

9/22/22, 3:44 PM

Ukraine crisis: Transcript of leaked Nuland-Pyatt call - BBC News

lets on. There is some embarrassment too for the Americans given the ease with which their communications were hacked. But is the interception and leaking of communications really the way Russia wants to conduct its foreign policy? Goodness - after Wikileaks, Edward Snowden and the like could the Russian government be joining the radical apostles of open government? I doubt it. Though given some of the comments from Vladimir Putin's adviser on Ukraine Sergei Glazyev - for example his

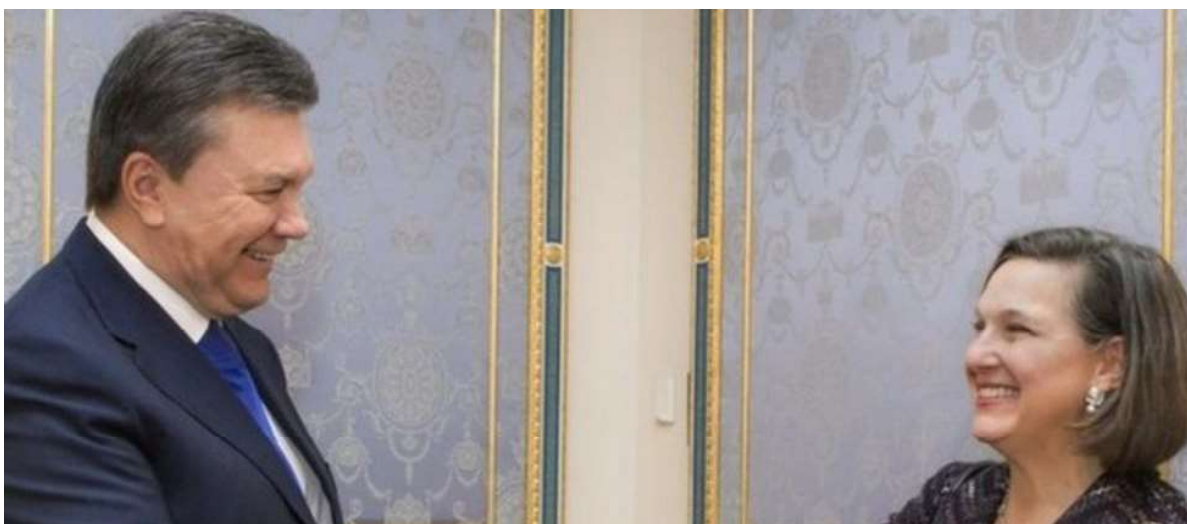
interview with the Kommersant-Ukraine newspaper the other day - you don't need your own listening station to be clear about Russia's intentions. Russia he said "must interfere in Ukraine" and the authorities there should use force against the demonstrators.



REUTERS

REUTERS

Ms Nuland and Mr Pyatt (centre) met Ukrainian opposition leaders Vitaly Klitschko (L) and Arseny Yatsenyuk (R) on Thursday



<https://www.bbc.com/news/world-europe-26079957>

5/9



| She also met President Yanukovich

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Annex 186

Reuters, *Special Report: Flaws found in Ukraine's probe of Maidan massacre* (10 October 2014)

Special Report: Flaws found in Ukraine's probe of Maidan massacre

Steve Stecklow, Oleksandr Akymenko

KIEV (Reuters) - For millions of Ukrainians, it was a crime against humanity. In February, more than 100 protesters were gunned down in the Maidan uprising that toppled the president, Viktor Yanukovich. The victims are now known as “the Heavenly Hundred.”

Smoke rises above burning barricades at Independence Square during anti-government protests in Kiev in this February 20, 2014 file photo. REUTERS/David Mdzinarishvili/Files

In April, prosecutors arrested three suspects, members of an elite unit within the “Berkut” riot police. Senior among them was Dmytro Sadovnyk, 38, a decorated commander, who was accused of ordering his men to fire on the crowds on the morning of Feb. 20. The three stand accused of massacring 39 unarmed protesters.

On Sept. 19, the case took a turn when a judge released Sadovnyk into house arrest – and, two weeks later, he went missing.

Maidan activists were outraged, convinced that a corrupt system had let a killer escape. The judge was placed under investigation. The prosecutor said in a statement: “D. Sadovnyk, suspected of committing an extremely grievous crime, aiming to avoid punishment, disappeared from his place of permanent residence.”

But in a country where justice often isn’t blind, there’s another possibility: Sadovnyk was being framed, and saw flight as his best option. In court last month, he called the case against him “a political lynching.” In the days before he vanished, his wife and his lawyer say, Sadovnyk and his family received death threats.

A Reuters examination of Ukraine’s probes into the Maidan shootings - based on interviews with prosecutors, defence attorneys, protesters, police officers and legal experts – has uncovered serious flaws in the case against Sadovnyk and the other two Berkut officers.

Among the evidence presented against Sadovnyk was a photograph. Prosecutors say it shows him near Kiev’s Independence Square on Feb. 20, wearing a mask and holding a rifle with two hands, his fingers clearly visible.

The problem: Sadovnyk doesn’t have two hands. His right hand, his wife told Reuters, was blown off by a grenade in a training accident six years ago. As prosecutors introduced the image at a hearing in April, said Yuliya Sadovnyk, her husband removed a glove and displayed his stump to the courtroom.

“He can’t really shoot,” said Serhiy Vilkov, Sadovnyk’s lawyer. “To blame him for the crime is a political game.”

The probes into the killings have been hindered by missing evidence. Many guns allegedly used to shoot protesters have vanished; many of the bullets fired were taken home as souvenirs.

Barricades, bullet-pierced trees and other items of forensic evidence were removed, lawyers say.

A former Berkut commander told Reuters that Berkut officers destroyed documentary evidence that potentially could identify fellow officers. They did so, he said, because they feared the Berkut’s headquarters would be attacked by a mob of revenge-seeking protesters after Yanukovich fled to Russia.

The former president isn’t the only key figure missing. In an interview before Sadovnyk vanished, Ukraine’s general prosecutor, Vitaly Yarema, said investigators had identified 17 Berkut officers as alleged participants in the protester shootings, based on surveillance camera videos and mobile-phone location data. Of the 17, he said, 14 had fled to Russia or Crimea, including the Berkut’s top commander in Kiev. Sadovnyk and his two co-defendants were the only identified suspects who had remained behind.

MILESTONE

Independence Square was the rallying point in Kiev where the anti-Yanukovich revolution largely unfolded between November and February. (The word Maidan means “square” in Ukrainian.) The killings there quickly were recognised as a milestone in modern Ukrainian history, part of a chain of events that set off a separatist conflict and Russian incursions that have shaken the country to its core.

Videos and photographs appear to show how Berkut officers shot at protesters and beat them with sticks. In one video, the Berkut are seen making a man stand naked in the snow.

The public is demanding answers and justice. But the investigations are testing Ukraine’s ability to rise above the kinds of failings that have hobbled the country ever since its independence from the Soviet Union in 1991.

In contrast to, say, Poland, Ukraine has never gelled into a robust state. Kiev has had two revolutions since independence. A host of endemic problems - political corruption, racketeering, a divide between speakers of Ukrainian and Russian - have left it feeble and fractious. Another of the state’s chief failings, outside observers say, is a broken justice system.

Under Yanukovich and his rivals before him, courts and cops were political instruments. Yulia Tymoshenko, runner-up to Yanukovich in the 2010 presidential election, later was jailed in a case widely criticised as political.

In its 2013 report on human rights, the U.S. State Department cited the Tymoshenko conviction in observing that Ukraine’s courts “remained vulnerable to political pressure and corruption, were

inefficient, and lacked public confidence. In certain cases the outcome of trials appeared to be predetermined.”

The post-Yanukovich government acknowledged as much this July, in a report it prepared with the International Monetary Fund. “The tax administration, the police, the Prosecutor General’s Office, the State Enforcement Service, and the judiciary were noted as having traditionally been viewed as among the most corrupt public institutions,” the report found.

The past shows signs of repeating itself.

The two prosecutors and a government minister who have led the Maidan shooting probes all played roles in supporting the uprising. One of these officials told Reuters that the investigators gathering the evidence are completely independent.

Another gap in the prosecution: To date, no one has been apprehended in the shooting of policemen. According to Ukraine’s Ministry of Interior Affairs, between Feb. 18 and 20, 189 police officers suffered gunshot wounds. Thirteen died.

In addition, the former acting general prosecutor who oversaw the arrests of the three Berkut officers declared on television that they “have already been shown to be guilty.” That statement, said legal experts, could prejudice the cases. Ukraine is a party to the European Convention on Human Rights, which states that criminal defendants are presumed innocent until proven guilty.

“A public statement by a prosecutor that directly challenges that presumption is a denial of due process,” said Richard Harvey, a British barrister who specialises in international criminal law.

Even some of the bereaved families question the fairness of the proceedings. Serhiy Bondarchuk, a physics teacher, died of a gunshot wound to the back on the morning of Feb. 20. His son, Volodymyr Bondarchuk, said the killing is one of the 39 in which Sadovnyk and his two colleagues are suspected. Volodymyr said that based on his own inquiries, he doubts the three were responsible for his father’s death.

“They are trying to close the case because their bosses and the community just want to have someone to punish,” he said. “The investigation does not have enough evidence to prove the guilt of these three people.”

Volodymyr Bondarchuk recently helped organise an association of about 70 families of dead protesters. “The main aim for us,” he said, “is an objective and accurate investigation.”

GOLDEN EAGLES

February 20 was the bloodiest day of the Maidan uprising. Scores of protesters and police officers were shot and killed. A day later, opposition leaders signed a European Union-mediated peace pact.

Public pressure mounted to prosecute the perpetrators. Within a week, Yanukovich, by then a

fugitive, was indicted for the mass murder of protesters. An interim government disbanded the Berkut, a force of several thousand whose name means “golden eagle.”

On April 3, Ukrainian authorities announced the arrests of several members of an elite special unit within the Berkut. One was Sadovnyk, the unit’s commander. A father of three, he first joined the Berkut in 1996 after serving in the Ukrainian army. He later won numerous commendations for his police service.

Also detained were two younger officers: Serhiy Zinchenko, 23, and Pavel Abroskin, 24.

An internal prosecution document, reviewed by Reuters, sketches out investigators’ version of events. It is a “Notice of Suspicion” for Zinchenko, dated April 3.

The document alleges that on Feb. 18, the Berkut’s top commander, Serhiy Kusiuk, gave an oral order to Sadovnyk to deliver automatic rifles to his unit. Kusiuk is among the Berkut officers who fled to Russia, prosecutors say. He couldn’t be reached for comment.

On the morning of Feb. 20, several members of Sadovnyk’s unit were shot. At around 9 a.m., the document alleges, Sadovnyk ordered his men to fire in the direction of unarmed protesters walking up Instytutska Street in downtown Kiev. The shooting lasted nearly two hours, and more than nine protesters were killed, the document states.

Sadovnyk’s order to shoot was an abuse of power, “given that there was no immediate threat to the lives of the police officers,” the document alleges.

Vilkov, Sadovnyk’s lawyer, disputes that account. Although the document indicates Sadovnyk was at the scene, Vilkov said his client was not on Instytutska Street when the protesters were killed the morning of Feb. 20. Vilkov declined to discuss Sadovnyk’s whereabouts.

In a telephone interview on Sept. 30, Sadovnyk told Reuters he was at a meeting on the morning of Feb. 20 at Kiev police headquarters. It began sometime between 8 a.m. and 8:30 a.m., he said. The purpose, he said, was to deal with reports that many armed protesters would be arriving in Kiev after a call by protest leaders to mobilise.

Sadovnyk said about seven police officials and officers were present, and he named three of them. Reuters was unable to locate the three for comment.

At the meeting, Sadovnyk said, the attendees heard gunshots and screams over police radios. The radios carried reports of the death of a Berkut officer and of other police wounded on Instytutska Street.

Sadovnyk said at that point, he left and drove to the scene, taking about 15 minutes to get there. He said he does not remember what time he arrived, but that investigators could figure it out by tracking his mobile phone. He said he brought a gun and protective equipment.

When he arrived, he said, he found a nearly empty scene, with police officers running and the sound of ricocheting bullets. He said he neither received nor gave any order for his unit’s members

to shoot at protesters, nor did he fire at anyone himself.

“I deny killing,” he said.

Vadim Ostanin, an attorney for the Berkut’s Kiev branch, gave a similar account to Reuters. He said there is a video showing that Sadovnyk attended the meeting at police headquarters. Ostanin said that when Sadovnyk arrived at the scene of the shooting, his unit’s men already were retreating.

“GUILTY”

The general prosecutor’s office declined to discuss the defence’s account. In a statement, the office said it has plenty of evidence against Sadovnyk. This includes videos of a protester being shot by a gunman. The office believes the gunman is Sadovnyk, based on the “special way” the shooter is holding the weapon. In a previous statement, the office said: “The question of guilt or, conversely, innocence of mentioned persons will be resolved by the court.”

Oleh Makhnitsky was Ukraine’s acting general prosecutor until June. In an interview, Reuters asked him about the purported photograph of a two-handed Sadovnyk, which was cited at a hearing in April.

The purpose of that hearing, Makhnitsky said, was not to judge the reliability of the evidence but to determine whether Sadovnyk was a flight risk. He said the evidence against Sadovnyk would be presented at a future trial.

Makhnitsky, now an adviser to President Petro Poroshenko, said he was a leader of a lawyers’ group that provided legal assistance to anti-Yanukovich protesters during the Maidan demonstrations. He said politics played no role in the prosecution of the three Berkut officers.

“The investigators are in a separate unit that can’t even be influenced by the prosecutor,” he said.

On May 30, Makhnitsky gave an interview on local television about the arrests of the three officers. The suspects, he said, “have already been shown to be guilty.”

Asked about those comments by Reuters, Makhnitsky said he meant that “enough evidence was gathered to prove they are guilty.” A court ultimately will decide, he said.

The extent of the prosecution’s evidence against the three officers remains unclear. Court filings in the cases are not public.

Attorneys for officers Zinchenko and Abroskin said that as far as they knew, much of the evidence against their clients consists of videos that prosecutors allege show the officers holding guns. The attorneys say the men in the videos - wearing masks and helmets - are not their clients.

In one video, “only the eyes and nose are seen, and that guy isn’t shooting; he’s just turning around with a gun and looking around,” said Stefan Reshko, an attorney for Abroskin. Reuters did not view the video.

Oleksandr Poznyak, who represents Zinchenko, said the evidence against his client includes a video of a masked man holding a gun. The attorney showed the video to Reuters. The masked gunman, he said, is taller and has bigger hands than Zinchenko, and is holding the gun in his left hand. While Zinchenko writes with his left hand, the lawyer said he has photographs showing that his client shoots with his right hand. Reuters didn't view those pictures.

Defence attorneys also plan to argue that the Berkut officers were entitled to fire in self-defence: They were in danger, as demonstrated by the fact that their colleagues were shot. Prosecutors argue that the 39 protesters the three are accused of killing on Feb. 20 were all unarmed.

The prosecutors "represent the whole picture as a peaceful protest," Sadovnyk told a judge at a hearing on Sept. 5. But, he added, "On the 20th, early in the morning, as a result of the peaceful protest, nearly 17 representatives of law enforcement were killed."

GRAPPLING HOOK & STEEL CLAW

To bolster Sadovnyk's point, several ex-Berkut officers who still serve on Kiev's police force agreed to meet a reporter and photographer. In a small room at their old headquarters, they produced a selection of what they said were weapons seized from demonstrators.

The items included a grappling hook attached to a steel bar, wooden clubs affixed to chains, and a steel claw made of four welded nails. The ex-officers showed a burnt police shield with two bullet holes that they said had been struck by a Molotov cocktail.

Alongside the weaponry were framed photos of two Berkut officers who they said were killed at the demonstrations.

"If these officials were fair, they would catch not only policemen, but also the activists from the other side," said one ex-Berkut member.

On Sept. 5, a tense crowd watched as a judge heard arguments over whether Sadovnyk should be released into house arrest. The defendant observed from inside a metal cage.

The prosecutor, Oleksii Donskyi, called Sadovnyk's claim that he was absent during the shootings "a complete lie." When the judge retired to deliberate in chambers, an exasperated-looking Yuliya Sadovnyk marched up to where the prosecutor sat and told him: "I'm waiting for your case to collapse." Donskyi declined to comment.

The judge ordered that Sadovnyk be kept behind bars. Two weeks later, a different judge gave him house arrest. The prosecution appealed. Last Friday, Sadovnyk was called to a hearing to determine whether he should be sent back to jail.

That's when he vanished. Yuliya Sadovnyk said he left their apartment at 7 a.m. last Friday, saying he felt ill. She hasn't heard from him since, she said.

In the days before the hearing, attorney Vilkov says, the Sadovnyks, their three children and the lawyer himself received death threats. Yuliya Sadovnyk read to Reuters a sample of texts she

received.

“Hey you, Berkut slut,” reads one. “Horrible death is waiting for you and your spawn. Glory to Ukraine!”

Abroskin and Zinchenko remain in jail. No trial date has been set. All three men face life imprisonment.

Additional reporting by Elizabeth Piper in Moscow. Edited by Michael Williams and Sara Ledwith.

Annex 187

Sputnik International, *Incidents With Russian Reporters in Ukraine in 2014-2017*
(31 August 2017)

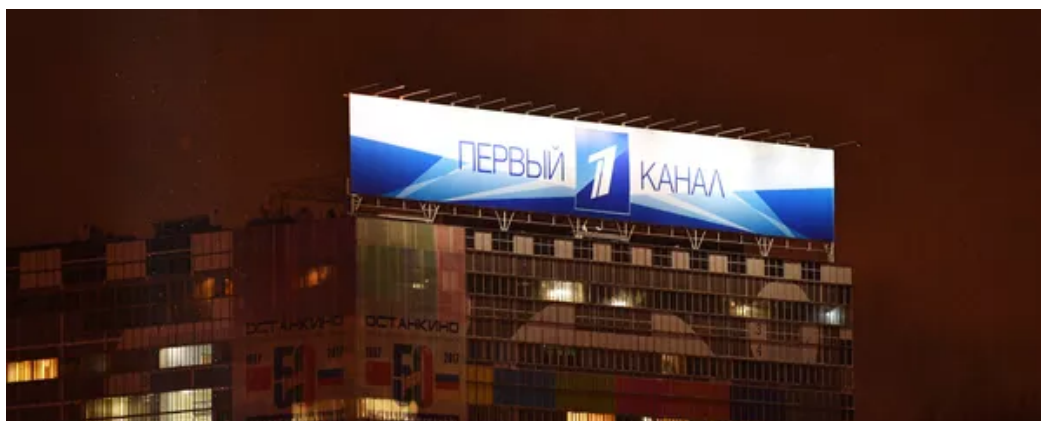
Incidents With Russian Reporters in Ukraine in 2014-2017

Sputnik International

MOSCOW (Sputnik) – Below is the list of other incidents with Russian [reporters](#) that took place between 2014 and 2017 in Ukraine starting from the most recent ones.

2017

On Wednesday, the Rossiya 24 television channel crew came under fire by Ukrainian military outside Donetsk as it was filming a story about observing the "school truce." No one was hurt.



31 August 2017, 04:06 GMT

On August 16, the TV Center television channel reporters came under fire from the Ukrainian military in Horlivka. The fire came from the positions of the 128th brigade near the Novoluhans'ke town. No one was hurt.

On August 15, Ukraine expelled Tamara Nersesyan, a Russian reporter and a special VGTRK correspondent.

On July 26, it transpired that a Russian reporter, an employee of Rossiya 1 and Rossiya 24 television channels, Maria Knyazeva, was expelled from Ukraine and denied entry to that country for three years. According to the SBU, Knyazeva led "subversive activities under the pseudonym Saushkina."

On May 7, the Komsomolskaya Pravda newspaper reported that its two reporters Maria Remizova and Elena Boduen, who were properly accredited for the Eurovision song contest, were denied entry to Ukraine. They were taken off the train by Ukrainian border guards at the Konotop checkpoint.

On May 6, Director of MIA Rossiya Segodnya's Joint Photo Information Directorate Alexander

Shtol said that the agency's photo correspondent Ramil Sitdikov, who was properly accredited for Eurovision, was denied entry to Ukraine. He was issued an official entry denial letter saying he was denied entry "due to an unconfirmed reason for the visit."

On January 31, a cameraman from the Life television channel was wounded in the leg during shelling of the Kievsky district of Donetsk.

On January 29, the crew of the NTV television channel found itself in the shelling zone in the town of Makiivka. The incident took place during recording of interviews with civilians in Makiivka's districts, which came under fire the day before. No one was injured.

2016

On December 19, in Kiev, about 20 people broke into RIA Novosti office demanding to stop a video conference with Ukrainian cities, which was held as part of the Ukrainian Compatriots Congress in Russia. Aggressive young people shouted out anti-Russian slogans. The reporters remained in the office and called in the security and the police. After their arrival, the radical protesters left the building.

On December 12, reporters from several Russian TV channels and news agencies working in the village of Sakhanka, came under machine gun fire. No one was hurt.

On May 17, the NTV television channel film crew came under fire in the Donetsk region. Following a meeting with the Organization for Security and Co-operation in Europe (OSCE) in Dokuchajevsk, the crew members went to the Yasinuvata checkpoint to monitor the situation and to shoot the ceasefire compliance video. Upon arrival, a Ukrainian sniper opened fire at the crew. The correspondents managed to leave the place. No one was hurt.



30 August 2017, 18:06 GMT

On May 15, the Rossiya television channel crew came under the mortar fire of the Ukrainian military near the Yasinuvata checkpoint off the Donetsk-Horlivka motorway. The correspondents came under a grenade launcher and small arms fire as well. No one was hurt thanks to the militia who helped the reporters out of the danger zone risking their lives.

On April 24, without any explanation, Ukrainian border guards denied entry to the country for a period of five years to VGTRK special correspondent Darya Grigorova, as they let her know about it upon her arrival at the airport.

On March 26, the LifeNews television channel crew came under fire outside the Yasinuvata checkpoint. The film crew was filming their story when shelling began in the vicinity of the checkpoint.

On March 14, a group of reporters came under fire outside Zaitseve village near Horlivka. No one was hurt. The Russian reporters who came under fire were representing VGTRK, Channel One and Zvezda.

2015

On September 24, a group of unidentified people detained the Central Television correspondent Yekaterina Voronina on the Ukraine-Crimea border outside the town of Kalanchak. Being on an editorial assignment, she and a Ukrainian stringer cameraman were filming a story about the blockade of Crimea by the Right Sector, an extremist organization outlawed in Russia. After many hours of interrogation, the SBU let her go.

On August 12, the REN TV crew, working outside the Donetsk airport, came under fire from the Ukrainian military. The shelling took place in the Oktyabrsky district around noon. The group consisted of correspondent Stanislav Bernvald and cameraman Kirill Piktorinsky.

On July 30, it became known that the REN TV television channel film crew came under mortar fire in Horlivka. No one was hurt. The reporters spent the night in the school basement together with a dozen of townspeople.

On July 1, the Channel One television channel lost track of its correspondent Alexandra Cherepnina. In a while, Cherepnina contacted her colleagues saying she was detained by the SBU and charged with making a fake video. Later, the security service's representatives said that Cherepnina was denied entry to Ukraine for three years, since the Russian reporter "was trying to film a fake video discrediting the Ukrainian authorities."

On June 15, the Russian REN TV channel correspondents came under fire as they were shooting video in Donetsk. No one was hurt.

On June 2, the Rossiya 24 television channel reporters were detained on Maidan Nezalezhnosti (Independence Square) in Kiev. Cameraman Maxim Grinevich and reporter Ksenia Kolchina were arrested by the SBU and released shortly thereafter following an identity check.





On April 14, journalist of the Russian Zvezda TV Channel Andrei Lunin tripped on a booby trap mine in the village of Shyrokyne. Heavily wounded in the head and a leg he was taken to hospital in the city of Novoazovsk in serious condition. NTV cameraman Stanislav Skripnik and NTV correspondent Daniil Levi came under shelling in Shyrokyne on the same day but emerged unscathed.

On March 24, correspondent of the Russian REN TV Channel Dmitry Vakhnitsky and cameraman Fyodor Boldyrev came under shelling by the Ukrainian side and were blocked in Shyrokyne. According to the channel, they managed to get out of the shelled car and hide in a house. Later on it transpired that the journalists broke away from the settlement.

On March 19, Leonid Muravyev, a correspondent of the Fifth Channel, was ousted by the SBU for propaganda materials about the conflict in eastern Ukraine. He was banned from entering Ukraine for five years.

On February 26, journalists of the LifeNews TV Channel Zhanna Karpenko and Alexander Ulyanov were prevented from leaving the transit zone of Boryspil Airport in Kiev and using telephone and Skype.

On February 25, SBU employees detained journalists of the Channel One Yelena Makarova and Sergei Korenev and NTV correspondent Andrei Grigoryev. On February 26, it was reported that all detainees returned to Moscow.

On February 25, correspondent of the NTV TV Channel Inna Osipova was not allowed to enter Ukraine. She arrived on a flight from Moscow to Kiev's Zhuliany Airport but was not allowed to leave it on the grounds that she "cannot explain the goal of her planned stay in Ukraine."

On February 17, correspondent of the RT broadcaster and two cameramen came under mortar fire while filming in Donetsk Airport. Nobody was injured. A channel representative emphasized that the fire was opened at the film crew "despite the fact that the RT journalists were wearing bullet-proof vests with the word "Press."

On February 22, the SBU detained in Mykolaiv Russian journalist, Ukrainian national Andrei Zakharchyuk who worked part time for the Nevskiy Novosti news agency. According to the agency, he arrived in Ukraine on February 2 and was arrested by the SBU for "wrong coverage of events in Ukraine." Zakharchyuk was released on February 21 during prisoners' exchange on the territory of the self-proclaimed Luhansk People's Republic (LPR).

On February 6, journalists of RT Roman Kosarev and Anna Knishchenko came under fire in the city of Vuhlehirsk near Donetsk. Russian journalists Dmitry Malyshev and Artyom Kol also got

under fire.

On January 30, correspondent Yelizaveta Khramtsova and camerawoman Natalya Kalysheva from LifeNews were detained by the SBU in Kiev. On January 31, they were deported from Ukraine at the Syn'kivka checkpoint on the Ukrainian-Russian border and prohibited from entering Ukraine in the next five years.

On January 20, the film crew of the Rossiya 24 TV Channel came under fire in downtown Donetsk. The shelling began when the crew headed for the Kievsky avenue to check a report about the explosion of a mine on a bus stop, as a result of which one man was killed and six people wounded. Journalists from other Russian and local channels were also at the street at the same time.

On January 16, LifeNews reported that protesters in downtown Kiev attacked its journalists. During a rally for the resignation of Ukraine's Prosecutor General Vitaly Yaryoma, which was covered by correspondent Zhanna Karpenko and camerawoman Alexandra Ulyanova, about 20 people rushed to the women and broke their expensive equipment. The women managed to extract a video of the attack from a flash card.

On January 1, unidentified people battered the LifeNews correspondent and camerawoman during a torch march of nationalists in downtown Kiev. The channel reported that after these people pushed the correspondent, she fell down and knocked her head. The hoodlums took her telephone and destroyed the camera of the camerawoman.

2014

On November 26, LifeNews reported that its correspondent Yevgeniya Zmanovskaya was beaten in Kiev while fulfilling her editorial assignment. Zmanovskaya was covering the action of football fans who gathered at the Ukraina Palace of Arts to wreck the concert of singer Ani Lorak.

On November 19, the film crew of REN TV was not allowed to enter Ukraine. According to Ukrainian customs officers, they were deported from Kiev's Boryspil Airport because having arrived as tourists they could not prove that they will spend all the time in Kiev.

On November 14, the film crew of Rossiya 1 came under shelling in the Luhansk Region. Nobody was hurt.

On November 13, the film crew of the VGTRK came under shelling in the Kuibyshevsky District of Donetsk. Nobody was hurt.

On November 3, Zmanovskaya was detained in Kiev while covering the Slavic March on the instruction of her media outlet. She was surrounded by Ukrainian journalists who called a policeman to check her documents. She had her journalist card but not her passport and was detained for this reason. Soon after that she had been released after her colleague brought her passport.

On October 23, Russian journalist Yevgeny Kiselev reported his deportation from Ukraine. He had

conducted political shows on the Ukrainian TV Channel Inter for several years. He said he was not allowed to cross the border in Kiev's Boryspil International Airport and was given an order on his deportation. Soon after that Ukraine's State Border Service allowed Kiselev to come to Ukraine.

On September 29, a correspondent and cameraman of REN TV came under shelling near Donetsk Airport but were not injured.

On September 10, REN TV correspondent Nikolai Kubantsev came under fire in Ukraine but was not hurt.

On August 28, photo correspondent of Novaya Gazeta Yevgeny Feldman was detained but later on released by representatives of the Ukrainian National Guards in Mar'inka.

On August 25, freelance correspondent of the Rossiya Segodnya International Information Agency Maxim Vasilenko and his colleague, correspondent of the Krymsky Telegraf publication Yevgeny Korolyov were detained by the militants of Ukraine's Right Sector in the Donetsk Region. On August 26, it was reported that they were released.

On August 24, unidentified armed people stopped a car on Makeyevskoye Highway in Donetsk. Anna Mokhova, a freelance correspondent of the Pervy Krymsky TV Channel and journalist Alexei Shapovalov had to leave the car. Ukraine's secret services kept Mokhova in the city of Izyum in the Kharkov Region for over a month. She was suspected of illegally crossing the Ukrainian border "for carrying out assignments of Russian secret services." Mokhova was released during exchange of prisoners between the militia and the Ukrainian army on September 22.

On August 22, journalists of Rossiya Segodnya, TASS, NTV and the Channel One, to name a few came under mortar fire while working on the territory adjacent to the city administration in Luhansk. Nobody was hurt.

Since August 5, special correspondent of Rossiya Segodnya Andrei Stenin stopped getting in touch with the agency. He worked in Donetsk, Slovyansk and other cities of eastern Ukraine. On August 5, the editorial staff received the latest material from him. On September 3, it became known that Stenin was killed on August 6 near Donetsk — the car in which he was traveling for an editorial assignment, was shot and burned on the highway. Russian President Vladimir Putin signed an executive order on awarding Stenin with the Order of Courage posthumously for heroism in the performance of professional duty.

On July 11, a LifeNews cameraman, Valery Moroz, was wounded in the arm with a mine fragment during the shelling in Luhansk.

On July 3, the Channel One's crew, who worked in Slovyansk, came under fire. The hotel, where the journalists were staying, was bombed. At that moment, the crew filmed a story, and at the time of the explosion the camera was turned on.

On July 1, REN TV journalist Denis Kulaga and cameraman Vadim Yudin were wounded in the Luhansk Region. A shell exploded near the correspondent, leading to hearing disorder. Yudin

received contusion.

On June 30, the Russian Channel One's cameraman Anatoly Klyan was killed by the Kiev security forces in Donetsk. He was one of the passengers in a bus transferring soldiers' mothers who demanded the dissolution of a military unit. He was wounded in the stomach as a result of the shelling and died on the way to the hospital. By presidential executive order, Anatoly Klyan was awarded the Order of Courage posthumously.

On June 24, the crew of the Channel One came under mortar shelling near Slovyansk, no one was hurt.

On June 17, Vesti correspondent Igor Kornelyuk and video engineer Anton Voloshin were killed as a result of mortar shelling of the village of Metalist and Mirne near Luhansk. The journalists were buried at the Troyekurovsky cemetery in Moscow. By the presidential executive order, the journalists were awarded the Order of Courage posthumously for courage and heroism shown in the performance of professional duty.

On June 16, a group of journalists, including Stenin, freelance fellow with the Ruptly video agency of RT Andrei Krasnoshchyokov, and correspondents of Komsomolskaya Pravda Alexander Kots and Dmitry Steshin were shot near Slovyansk. As a result of the shelling, no one was hurt.

On June 14, the Zvezda television channel reported the detention of its journalists in Ukraine. Correspondent Yevgeny Davydov and sound engineer Nikita Konashenkov were detained in Dnepropetrovsk by officers of the SBU. On June 16, the journalists were released and flew to Moscow.

On June 11, the Channel One crew came under fire in the village of Semyonovka near Ukrainian Slovyansk. No one was hurt.

On June 6, journalists of the Zvezda television channel Andrei Sushenkov and Anton Malyshev were detained at a checkpoint near Slovyansk. They were accused of monitoring the checkpoint and gathering information about it. They were transferred under control of the SBU. On June 9, the journalists were released and handed over to the Russian side.

On May 29, the crew of the Rossiya 24 TV channel was bombarded in Donetsk, when they filmed footage for their story near the airport. None of the journalists were injured.

On May 27, the crew of the MIR 24 TV channel came under sniping fire in Donetsk, the journalists were not injured and continued to work in the regular mode.

On May 22, a car of LifeNews' crew was fired upon near Lysychansk, the journalists were not injured.

On May 18, the Ukrainian Defense Ministry announced the detention of LifeNews journalists Oleg Sidyakin and Marat Saichenko near Kramatorsk. The Ukrainian authorities accused them of promoting "terrorism" in the east of the country. On May 25, the journalists were released, flew

to the city of Grozny and later returned to Moscow.

On May 15, the Fifth Channel crew came under fire of Ukrainian troops in Kramatorsk along with RT journalists. To evade the shelling, the driver made a sharp maneuver, because of which the car moved into a ditch. None of the journalists were injured.

On May 13, it became known that LifeNews crew was fired near Kramatorsk: the Ukrainian troops opened fire from automatic weapons near the village of Oktyabrskoye. Correspondents Oleg Sidyakin, Marat Saichanko and Marat Abulkhatin managed to find shelter, so none of them was injured. On May 7, it was reported that Ukrainian military opened fire on LifeNews journalists near Slovyansk.

On May 9, 23-year-old freelance cameraman of RUPTLY Fyodor Zavaleikov was wounded during the fighting in Mariupol. With a heavy bullet wound in his stomach, he was taken to a local hospital, where he underwent an emergency operation. On May 12, Zavaleikov was taken to Moscow, where he underwent a second operation. At the end of May, he was discharged from the hospital.

On April 16, Rossiya 24 crew — correspondent Yevgeny Reshetnev, cameraman Sergei Truskov and engineer Vadim Klivanov — was detained near the town of Izyum without explanation. On April 17, the crew was released.

In April, correspondent of Segodnya.Ru online outlet Alexei Khudyakov was kidnapped by people wearing masks in the center of Donetsk. The kidnappers introduced themselves as officers of the SBU and took the journalist to the forest, where they intimidated and forced him to sign documents indicating that he was ready to work for the security service as an agent in Moscow.

Annex 188

Unian.ua, *Military warehouses with weapons burn in Lvov* (19 February 2014)

Translation

Unian.ua, *Military warehouses with weapons burn in Lvov* (19 February 2014), available at: <https://www.unian.ua/politics/886677-u-lvovi-goryat-viyskovi-skladi-zi-zbroeyu.html>.

Military warehouses with weapons burn in Lvov

UNIAN editorial board



Military warehouses are burning in Lvov / 032.ua

Pavel Vasilenko, head of the press service of the State Emergency Service in Lvov region, told UNIAN that the fire started in the morning and was extinguished throughout the day, but has now flared up with renewed vigour. The fire destroyed the barracks and spread from the barracks to the ammunition depots. Explosions began to be heard.

According to Vasilenko, the rescuers were forced to leave the area near the ammunition depots to avoid danger. Firefighters are staying nearby, waiting for the explosions to stop, as the rescuers do not have information on the amount and type of ammunition on the territory of the unit.

"The firefighting work will continue when the explosions stop and people can feel safe. We don't know what kind of ammunition is stored in the warehouses and, ultimately, we have no right to know. The warehouses are sealed."

The activists who blocked the military unit are at a safe distance, and the military have been evacuated from the area.

There is no information about the victims.

As UNIAN reported, today, February 19, in Lvov, protesters seized the buildings of the regional state administration, the Ministry of Internal Affairs, the Security Service of Ukraine, the prosecutor's office, the tax office and two district police stations.

Soldiers of the Internal Troops on Stryiskaya-Rubchak Street tried to leave the territory of the unit, but were blocked by Lvov residents, who gathered about 5,000. A fire broke out on the barricades, spreading to the checkpoint and barracks, one of which burned to the ground. The protesters disarmed the Internal Troops and sealed the weapons depots.

Annex 189

KPHG, Ukraine follows Russia in dubious 'State treason' arrests (16 February 2015)

Ukraine follows Russia in dubious 'State treason' arrests

Halya Coynash



In the last week two Ukrainian journalists have been detained on suspicion of committing 'state treason'. If the [detention on Feb 8](#) of Ivano-Frankivsk blogger Ruslan Kotsaba was clearly unjustified, but the charges seemed to warrant investigation, the new arrest of journalist Andriy Zakharchuk can have no justification in a post-Maidan democratic Ukraine.

A Mykolaiv court remanded Zakharchuk in custody for two months on Feb 12, following his arrest by SBU [Security Service] officers two days earlier. The 25-year-old Ukrainian national is living in St. Petersburg working for the news agency 'Nevskiyevosti', and seemingly also writes for the Russian Federal News Agency [FAN].

The journalist's father Vasyl Zakharchuk told Prestupnosti.net that his son writes about sport, culture and public life in St Petersburg. This can easily be checked and does indeed appear to be the case. Vasyl Zakharchuk explains that FAN was starting up a project covering life in Ukraine and his son's work trip was to gather information about how people live in cities in the South-East of Ukraine. Whatever the federal news agency's plans, the article which Zakharchuk wrote about his visit to Odessa contained nothing suspicious at all.

Nor is it clear what it could contain that would warrant being accused of 'state treason'.

The charges appear to derive from his activities in Mykolaiv. The investigators have found something deeply incriminating in the fact that a journalist should have taken photos of the Inhulsky and some pedestrian bridges; a shipbuilding factory and the Mykolaiv armoured tank factory. The two factories are part of the state defence industry.

A camera, tablet and laptop were taken away and the prosecutor informs "*that in the journalist's technology correspondence was discovered that confirms that he belongs to a Russian news agency*". It would have been simpler to just ask him.

Most worryingly, the prosecutor's request to remand Zakharchuk in custody began with reference to the parliamentary resolution adopted on Jan 27 which declared Russia to be an aggressor state. The prosecutor then cited Article 65 of Ukraine's Constitution which states that "*Defence of the Motherland, of the independence and territorial indivisibility of Ukraine, and respect for its state symbols, are the duties of citizens of Ukraine. Citizens perform military service in accordance with the law.*"

He then asserted that "*during armed conflict in the east of Ukraine in January 2015 Ukrainian national Andrei Zakharchuk, working for the Russian news agency FAN and Nevskie Novosti, and in breach of Article 65 of Ukraine's Constitution, and aware that he was in a criminal link with an aggressor state, in order to provide it with assistance in carrying out subversive activity against Ukraine, passed on photographic material for dishonest coverage of events in Ukraine and inciting separatist moods in Ukraine. The said information agencies are propaganda vehicles, that is, they cover events in Ukraine by distorting facts and providing false information.*"

The prosecutor then moves on to the specific photos taken "*in order to pass the information to the Russian Federation aggressor state*".

According to this version, Zakharchuk was passing on photos of the armoured tank factory to a Russian news agency "*for the purpose of propaganda-filled and anti-Ukraine coverage of events in Ukraine, the anti-terrorist operation, including the technical state of the Ukrainian defence complex and the possibilities for countering illegal armed formations in the East of Ukraine, thus posing a threat to Ukraine's national security in the information and military spheres*".

On the basis of the above, the prosecutor concluded that Andrei Zakharchuk was "justifiably suspected of state treason".

Andriy Lokhmatov, writing for Prestupnosti.net, demolishes the 'evidence' presented by the prosecution. He points out that it basically confirms only that Zakharchuk had the technology one might expect a journalist to have, that he works as a journalist in general and that while in Ukraine he was taking photographs. The one fact with marginally more substance is only incriminating at first glance. A photograph similar to one found on Zakharchuk's equipment was used in an overtly propaganda-filled article on FAN about Kharkiv supporters of the Kremlin-backed militants in Donbas. There is no evidence that Zakharchuk had any input in that article or, in fact, any material which was overtly anti-Ukrainian. The article in question was signed by somebody called Sergei Bendin who was interviewing a person in Moscow.

This is the second arrest of a journalist. In the case of Ruslan Kotsaba, his behaviour and utterances were viewed by very many people as being against Ukraine, with some observers therefore believing that the SBU might have other evidence to justify his detention. There was however concern then about the measures taken, especially since they had followed a video in which he was expressing his opinion, no more, on the subject of mobilization.

The arrest and detention of Andrei Zakharchuk are simply incomprehensible and a very worrying development. Russia may be following in the Soviet traditions of trying people for 'anti-Soviet agitation and propaganda'. Ukraine has taken a different path and even in the face of open Russian aggression, cannot try journalists for 'state treason'.

Annex 190

Human Rights Watch, *Ukraine Foreign Journalists Barred or Expelled* (1 September 2017)

Ukraine: Foreign Journalists Barred or Expelled

(Kyiv) – Ukrainian authorities have detained and expelled several foreign journalists in recent weeks, most recently Russian reporter Anna Kurbatova, Human Rights Watch said today. In just over a month, the Security Services of Ukraine (SBU) have expelled or denied entry to at least five foreign journalists – three from Russia and two from Spain – for allegedly engaging in anti-Ukrainian “propaganda.”

“The Ukrainian government’s practice of accusing journalists of anti-Ukraine bias, then expelling them or denying them entry, is a serious violation of its international human rights commitments,” said [Tanya Cooper, Ukraine](#) researcher at Human Rights Watch. “Barring journalists is short-sighted and vindictive, and undermines Ukraine’s pledges on democratic reforms and the rule of law.”

On August 30, 2017, the SBU in Kyiv detained Kurbatova, a journalist with Channel One, a major Russian television station. An [SBU spokesperson announced via Facebook](#) that Kurbatova had been expelled and banned from Ukraine for three years. The spokesperson also said that this would happen to “anyone who allows themselves to discredit Ukraine.”

In one of her latest reports from Kyiv, Kurbatova described Ukraine’s Independence Day anniversary as a “sad celebration” due to the armed conflict in eastern Ukraine and economic hardships in the country.

Kurbatova’s detention and removal from Ukraine is the latest example of mistreatment of foreign journalists.

On August 25, the SBU denied entry to two Spanish journalists, Antonio Pampliega and Manuel Ángel Sastre, and [barred](#) them for three years. Pampliega and Sastre work for several media outlets, and had covered the armed conflict in eastern Ukraine. The SBU accused the journalists of carrying out “activities countering national interests of Ukraine.”

On August 29, Ukraine’s [Ministry of Information Policy released a statement](#) expressing concern about the journalists’ situation and claiming that it had “filed requests to the relevant law enforcement agencies, including the SBU, asking for a detailed explanation.” The [journalists wrote](#) on Twitter that they had been detained in the Kyiv Boryspil airport for 20 hours, “treated like criminals,” and then sent back to Spain without explanation. The journalists covered a variety of issues related to the armed conflict in eastern Ukraine, including the plight of civilians in the conflict zone, and criticized the Ukrainian government for not doing enough to protect them.

On August 14, the SBU [detained](#) and expelled Tamara Nersesyan, a correspondent with the Russian state television and radio company VGTRK, accusing her of “actions damaging to Ukraine’s national interests.” Nersesyan was banned from entering the country for three years.

Another VGTRK journalist, Dariya Grigorieva, was [expelled](#) from Ukraine in April and banned for five years.

On July 26, the SBU expelled Maria Knyazeva, a journalist with Russian television channels Rossiya 1 and Rossiya 24. The SBU also [banned](#) Knyazeva from entering Ukraine on the grounds of “biased coverage of the situation in Ukraine.”

The Representative on Freedom of the Media of the Organization for the Security and Cooperation in Europe (OSCE), [Harlem Desir, expressed concern over the detentions](#) and expulsions of journalists. Ukraine is a member of the OSCE and the Council of Europe, as well as a party to the European Convention on Human Rights and has taken on specific obligations to respect and protect freedom of expression and support media freedom.

Much of the mainstream media in Russia, including television, print, and online outlets, are either owned or indirectly controlled by the state and [have become the voice of the government](#). Moreover, some use elaborate propaganda tools, including blatant misinformation, to mobilize patriotic support for the government and its agenda, including support of armed groups in eastern Ukraine and Russia’s occupation of Crimea.

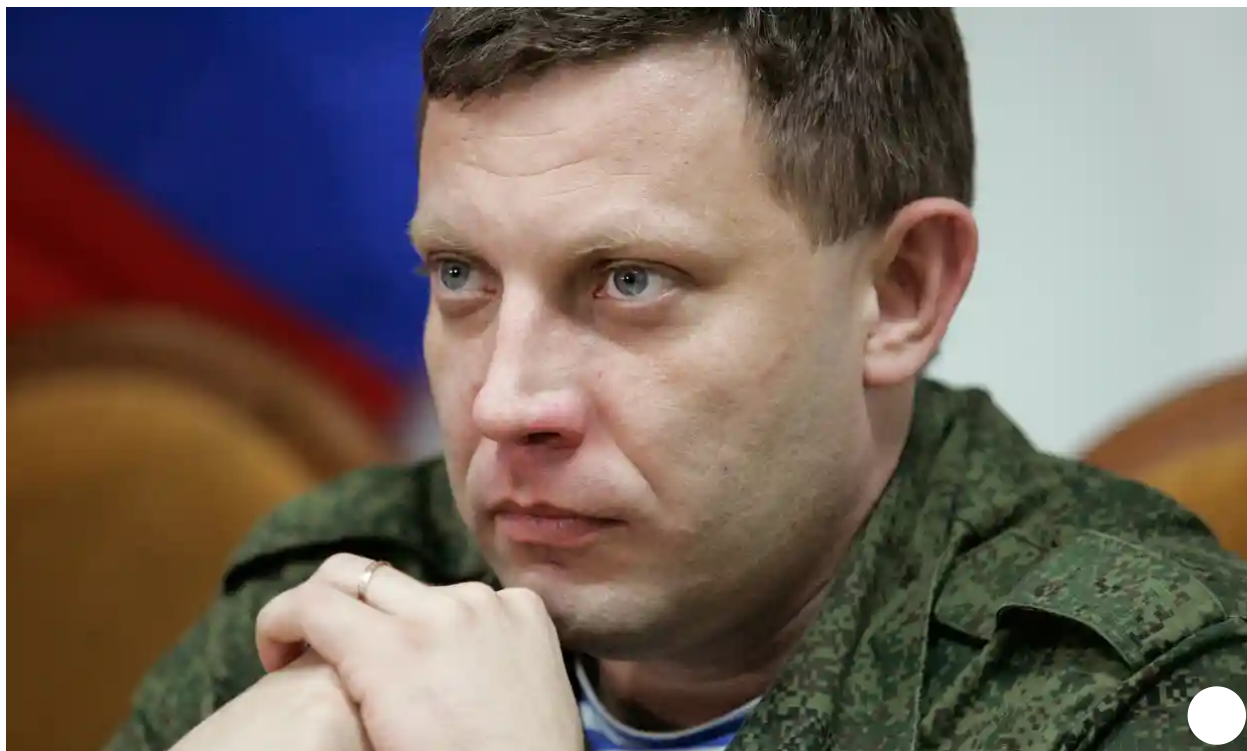
“Ukraine has legitimate reasons to be concerned about biased or false media reports, particularly Russian propaganda, but barring journalists is not the answer,” Cooper said. “The authorities should make Ukraine a country where media can convey different views without fear of retaliation.”

Annex 191

The Guardian, *Rebel Leader Alexander Zakharchenko Killed in Explosion in Ukraine*
(31 August 2018)

9/24/22, 3:22 PM

Rebel leader Alexander Zakharchenko killed in explosion in Ukraine | Ukraine | The Guardian



Ukraine

🕒 This article is more than **4 years old**

Rebel leader Alexander Zakharchenko killed in explosion in Ukraine

Prime minister of self-declared Donetsk People's Republic dies in cafe blast

Marc Bennetts in Moscow

Fri 31 Aug 2018 18.09 BST

The leader of a Kremlin-backed separatist republic in war-torn eastern [Ukraine](#) has been killed in a blast that tore through a cafe close to his official residence in Donetsk.

Alexander Zakharchenko, 42, was named prime minister of the so-called Donetsk People's Republic (DNR) in November 2014. The DNR's official news agency confirmed his death and said the republic's finance minister, Alexander Timofeev, was injured when the explosive device went off in the Separ café in the centre of Donetsk. The bomb was planted in a nearby vehicle, Ukrainian media reported.

Zakharchenko is the latest in a series of separatist leaders to have been

9/24/22, 3:22 PM

Rebel leader Alexander Zakharchenko killed in explosion in Ukraine | Ukraine | The Guardian

assassinated during the ongoing conflict in eastern Ukraine, where more than 10,000 people have died since fighting broke between Kremlin-backed separatists and pro-Ukrainian government forces in 2014, according to UN figures. More than 1.5 million people have been displaced by the fighting.

Vladimir Putin called the killing a “dastardly” act that aimed to destabilise the fragile peace in the region and the Russian president expressed his condolences to Zakharchenko’s family.

The Russian foreign ministry was quick to react, accusing the Ukrainian government of ordering the “terrorist attack”, although Putin’s later statement did not blame Kiev for the killing.

The Ukrainian security service chief, Igor Guskov, said Zakharchenko’s death could have been the result of infighting between rival separatist factions or an operation by Russian special forces. Kiev has previously accused Russia of killing separatist figures who refuse to obey Kremlin orders.

Separatist forces have detained a number of suspects, Russia’s Interfax news agency reported, citing a security service source in Donetsk. “Several Ukrainian saboteurs and people connected to them have been arrested on suspicion of involvement in the assassination of the republic’s leader,” Interfax quoted the source as saying.

Numerous international attempts to secure a lasting ceasefire in eastern Ukraine have been unsuccessful. The United States and European countries imposed economic sanctions on Russia over its military actions in Ukraine in 2014, including the Kremlin’s annexation of Crimea. Putin denies sending troops and

weapons to eastern Ukraine, but admits that some Russian “volunteers” are fighting alongside separatist forces.

Ukraine’s infrastructure minister, Volodymyr Omelyan, said this month that Kiev would sever all remaining public transport links to Russia over its military actions in eastern Ukraine, as well as an increase in Russian naval activity near Crimea. There have been no direct flights between the two former Soviet republics since October 2015.

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9/24/22, 3:22 PM

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Blast that killed Ukraine PoWs was Kremlin operation, Kyiv claims

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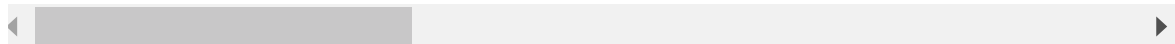
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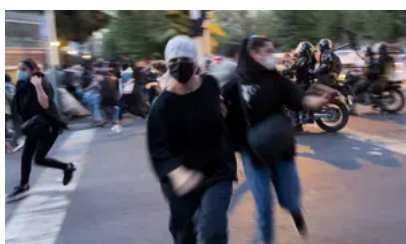


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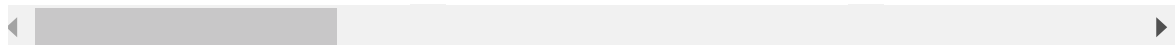
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Annex 192

Deutsche Welle, *Alexander Zakharchenko: The Latest Ukrainian Rebel Leader to Face an Abrupt Death* (2 September 2018)

Alexander Zakharchenko: The latest Ukrainian rebel leader to face an abrupt death | DW | 02.09.2018

Deutsche Welle (www.dw.com)

Bomb attacks, ambushes, mysterious illnesses — militant leaders in eastern Ukraine often die in violent and dramatic ways, even far away from the front line. And now, Alexander Zakharchenko has died in a bomb blast.

Rebels in Ukraine are still reeling from the assassination of the head of the self-proclaimed "[Donetsk People's Republic](#)," [Alexander Zakharchenko](#), who was [killed by a bomb blast on August 31](#) while sitting in a coffee shop in downtown Donetsk. The entity's "finance minister" and a youth leader were injured in the attack. The rebels say they captured "Ukrainian operatives" after the bombing.

Russian news site Lenta.ru tweeted the CCTV video showing the moment of the blast, which had been published by state-funded Rossiya 1.

However, 42-year-old Zakharchenko is only the latest in a line of rebel commanders who have died in dramatic ways. Another Donetsk leader, Vladimir Makovich, briefly served as the "vice speaker" of the rebel assembly in 2014 before fading into the background of the rebel administration. He died in 2017, with the official cause of death being a brain tumor. He was 54 years old.

Shot during an ambush

Just a few months before Makovich's passing, battalion commander Mikhail Tolstykh was killed when someone [fired an incendiary rocket at his office outside Donetsk](#). Tolstykh, better known by his nom de guerre "Givi," was 36 at the time.



Rebel commander Arsen Pavlov, also known as 'Motorola'

In 2016, top militant leader Arsen Pavlov, also known as "Motorola," was killed when [a bomb was placed in an elevator of his apartment building](#). The Russian-born warlord was 33, and the commander of the so-called "Sparta" battalion. Rebel officials blamed both of the commanders' deaths on "Ukrainian operatives." Kyiv denied any involvement and pointed the finger at Moscow, describing such attacks as Russia-sponsored "purges."

Heart attack at 46

All in all, nearly a dozen high-ranking militants were killed in the last three years. Others faced unexpected diseases. The first leader of the "Luhansk People's Republic," Valeri Bolotov, 46, died in early 2017 while in his Moscow apartment. Heart failure was the reported cause of death, but some media outlets speculated that the politician had been poisoned. Bolotov had resigned his Luhansk function as early as August 2014 and had lived away from the public eye until his death.

Bolotov's close aide Gennadiy Tsypkalov, 43, reportedly killed himself in 2016 while in custody. He was being investigated over an alleged coup attempt. Tsypkalov's death also sparked rumors that the politician, who once served as prime minister of the Luhansk-based entity, was murdered.

Trading blame between Kyiv and Moscow

The attack that claimed the life of Zakharchenko has once again set off [a spiral of accusations between Kyiv and Moscow](#). Russia quickly stated it has "all reasons to believe" that Ukraine was behind the blast. This was corroborated by rebels, who referred to the suspects they had in custody.

In turn, the Ukrainian security service SBU put forward two theories about Zakharchenko's assassination, saying that he might have been killed due to a power struggle between the warlords or that he may have been removed by Russian agents after falling from Moscow's grace.

Alexander Zakharchenko: The latest Ukrainian rebel leader to face an... <https://www.dw.com/en/alexander-zakharchenko-the-latest-ukrainian-...>

Zakharchenko is unlikely to be the last rebel leader to die a violent death in the Ukraine fighting, which has already claimed over 10,000 lives.

Annex 193

European Pravda, *No pressure over Concessions: Kuleba on Negotiations with Germany's Foreign Minister* (7 February 2022)

(translation)

Translation

European Pravda, *No pressure over Concessions: Kuleba on Negotiations with Germany's Foreign Minister* (7 February 2022), available at:
<https://www.eurointegration.com.ua/rus/news/2022/02/7/7133666/>

No pressure over Concessions: Kuleba on Negotiations with Germany's Foreign Minister

MONDAY, 7 FEBRUARY 2022, 17:43

The Ukrainian Foreign Minister Dmytro Kuleba has assured that there is no pressure on Ukraine from Germany for the sake of any concessions from the Ukrainian side in an attempt to reduce tension between the West and Ukraine, on the one hand, and Russia, on the other.

According to a correspondent of the European Pravda, he said this at a joint press conference with German Foreign Minister, Annalena Baerbock, in Kiev.

Dmytro Kuleba stated that at the meeting he reiterated which issues were categorical "red lines" for Ukraine: first, no concessions on territorial integrity, second, no negotiations with the militants, and third, Ukraine's full right to determine its own foreign policy.

"By no means do I want to say that Annalena Baerbock said something to the contrary to me and I was trying to persuade her. Now, the question about whether foreign guests are forcing us to make any concessions is very popular in Ukraine. I declare with absolute responsibility that neither during today's meeting nor before it did Annalena Baerbock force me to make any concessions on the issue of the conflict resolution. It was an exchange of views between friends and partners, who seek the same thing - to resolve this conflict by diplomatic means", Dmitriy Kuleba stressed.

Let us recall that that the head of the German foreign ministry is one of the four EU foreign ministers who are visiting Ukraine on 7 February. The foreign ministers of Austria, Slovakia and the Czech Republic went to the frontline zone in Donbass.

Her French counterpart Jean-Yves Le Drian was due to arrive at the same time as Annalena Baerbock, but his visit was postponed by a day in view of French President Emmanuel Macron's visit to Moscow, where the foreign minister also went.

Annex 194

Uryadovy Kuryer, *On the Future of Donbass in Terms of Numbers* (21 July 2018)

(translation)

Translation from Ukrainian

Uryadovy Kuryer, *On the Future of Donbass in Terms of Numbers* (21 July 2018), available at: <https://ukurier.gov.ua/uk/articles/pro-majbutnye-donbasu-movoyu-cifr/>



21 July 2018

SURVEY**On the Future of Donbass in Terms of Numbers**

One third of Ukrainians are convinced that in order to establish peace in Donbass, international sanctions and pressure by international institutions on the Russian Federation should be strengthened. Half of the respondents believe that it is worth agreeing to compromises, but not to all of them, for the sake of peace in Donbass.

The results of a nationwide public opinion poll, which was conducted by Ilka Kucheriva Democratic Initiatives Foundation together with the survey research service of Razumkov Centre from 19 to 25 May 2018 in all the regions except the Crimea and the occupied territories of Donetsk and Lugansk regions, were presented at Ukrinform on Thursday. In addition, the main results of the research by the Democratic Initiatives Foundation, which was based on focus group discussions held in February 2018 in cities in Donetsk region (Nikolaevka, Myrnohrad, Pokrovsk, Slavyansk) and Lugansk region (Rubizhne, Svatove, Severodonetsk, Starobelsk) were released.

In sum, according to the results of the opinion poll, only 17% of the population support the establishment of peace in Donbass by force. That said, the greatest proportion of those who support the belligerent solution reside in the west (24%) and in the centre (19%) and significantly less such supporters reside in the south (8%) and the east (11%). Only 20% agree to peace "at any price".

The important matters of reintegration are part of the social and humanitarian policy of the state towards citizens from the non-controlled areas of Donbass. In fact, each of the steps proposed for consideration was supported by the majority of the Ukrainian population. The most supported steps in the social and humanitarian spheres are, first of all, simplifying access to education at Ukrainian educational institutions of different levels for residents of non-controlled areas (67% support and only 16% do not support this), strengthening of control over payments to internally displaced persons to avoid abuses (64% support and 15% oppose this), providing (financial and material) support to residents of isolated districts of the Donetsk and Lugansk regions who want to move to the Ukraine-controlled areas (60% support and 20% oppose this); and simplifying to a maximum extent the use of any administrative services in populated areas near the front line (60% support and 21% oppose this).

There was a more mixed public support for such steps as removal of restrictions on social and pension payments to Ukrainian citizens living in the isolated districts of the Donetsk and Lugansk regions (40% support and 35% are against this), maximum simplification of crossing the line of demarcation, easing the access regime (48% support and 31% oppose this), tightening control over crossing the line of demarcation (47% support and 26% oppose this) and permission to trade in food and other basic commodities with non-controlled areas (46% support and 29% oppose this).

The survey showed that there was no consensus on what Ukraine's policy towards the non-controlled areas should be. 17% of the respondents think it is necessary to officially recognize these territories as occupied and to end all trade, services, payments and contacts (in particular, movement of people from these territories); 20.5% believe that it is necessary to keep the economic blockade, but to maintain humanitarian relations (movement of people, payment of pensions, supply of water and electricity); 22% believe that it is necessary to allow trade in critical goods (trade in food and basic commodities by Ukraine and in anthracite from the isolated districts of the Donetsk and Lugansk regions) with the maximum support of humanitarian contacts, while 20% of the respondents support the proposal to develop relations, both humanitarian and trade ones, with the non-controlled areas to a maximum extent. A significant part of the population - every fifth respondent (20%) – are undecided about their view of the optimum Ukrainian policy towards the non-controlled territories.

Among the solutions that should be adopted to establish peace in Donbass, the people consider only two to be really efficient: international pressure on Russia to force it to abandon interference in the conflict in Donbass (32%) and successful restoration of normal life in the controlled territory (31%). All other possible solutions are not considered efficient for the establishment of peace. The support for the idea of introducing an international peacekeeping contingent to Donbass has remained unchanged at 60%, the same percentage as last year.

A total of 2,019 respondents over the age of 18 were interviewed. The theoretical sampling error does not exceed 2.3%. The survey was financed within the framework of the project called "Program for Promoting Social Activism, Join Us!", which is financed by the US Agency for International Development (USAID) and implemented in Ukraine by Pact.

Maria LAGIDNAYA

for Uriadovy Kurier

Annex 195

Interfax-Ukraine, Rada Appoints Next Elections to Local Self-Govt Bodies for Oct 25

(15 July 2020)

Rada appoints next elections to local self-govt bodies for Oct 25

Interfax-Ukraine



The Verkhovna Rada has scheduled elections for local authorities on Sunday, October 25.

Some 326 MPs voted for corresponding decree No. 3809 at the plenary meeting on Wednesday.

According to the decision, on Sunday, October 25, the next elections of deputies of district councils and rural, township and city mayors will be held.

Elections of deputies of the Supreme Council of Crimea, deputies of local councils and rural, township, city mayors in the temporarily occupied territories of Crimea, the city of Sevastopol, in certain areas, cities, towns and villages of Donetsk and Luhansk regions are neither appointed nor held.

"Due to the impossibility of ensuring the representation of the joint interests of the territorial communities of villages, towns, and cities of Donetsk and Luhansk regions, elections of deputies of Donetsk and Luhansk regional councils are neither appointed nor held," the resolution says.

In turn, MP Oleksandr Kachura (the Servant of the People faction), answering a clarifying question whether elections to city councils will be held, told Interfax-Ukraine: "There will be merged territorial communities. If changes, according to perspective map, the territory joins, then it can be the first election, and if it does not join, then the city council remains. For example, the city council will remain in Kyiv, since it has a special status it is Ukraine's capital, and some 120 MP will be elected to its city council."

According to him the next elections will be held everywhere, in district, rural, village councils, as well as elections to the regional councils and the elections of rural, village and city mayors.

According to adopted decision No. 3809, elections of deputies of the Supreme Council of Crimea, deputies of local councils and rural, village, city mayors in the temporarily occupied territories of Crimea, the city of Sevastopol, in certain districts, cities, towns and villages of Donetsk and Luhansk regions are not appointed and are not held.

Annex 196

NBC News, *MH17 Investigators Face Huge Challenges in Ukraine 'Combat Zone'*

(18 July 2014)

MH17 Investigators Face Huge Challenges in Ukraine 'Combat Zone'

[nbcnews.com/storyline/ukraine-plane-crash/mh17-investigators-face-huge-challenges-ukraine-combat-zone-n158881](http://www.nbcnews.com/storyline/ukraine-plane-crash/mh17-investigators-face-huge-challenges-ukraine-combat-zone-n158881)

July 18, 2014



July 18, 2014, 9:07 AM UTC / Updated July 18, 2014, 12:04 PM UTC

Investigators digging in to what happened to Malaysia Airlines Flight MH17 face enormous obstacles that go far beyond the obvious threat to their personal safety, as armed fighters and even looters swarm to the site, aviation experts say.

"Oh, my gosh. I've done a couple of investigations in combat zones, and it's a huge challenge," said Matt Robinson, a member of the International Society of Air Safety Investigators who's a crash reconstruction specialist with the investigative firm Robson Forensic of Pennsylvania.

"This is chaos here," Robinson added.

Aviation experts and government officials agreed that the top concern is the safety of the investigators.

"Our efforts are complicated by the presence of insurgents in the area," a duty officer for the Ukrainian State Emergency Service told NBC News. "The place is controlled by the militants — our people at the crash site are followed by armed men."

But there are also political, military and economic factors at play that could severely restrict how much time investigators could actually spend at the scene, Robinson said.

The site will attract Ukrainian security forces and rebels fighters alike eager to score political points by appearing to be in charge, he said. Pro-Russian separatists claimed to have recovered most of the jet's black boxes, The Associated Press reported early Friday.

And "an aircraft includes lots of valuable materials" — making the crash site a magnet for scavengers, scrappers and other "interlopers," he said. Off-duty coal miners were among those gathering evidence at the site early Friday.

"This needs to be quarantined," Robinson said. "People will actually abscond with pieces and parts of the aircraft."

Who'll Be in Charge?

Senior U.S. officials told NBC News they believed the aircraft was shot down by a surface-to-air missile. But it could be months or even years before an official determination could be nailed down. The first problem will be figuring out who's ultimately in charge of the international inquiry.

The flight went down in Ukraine, so under regulations of the U.N.'s International Civil Aviation Organization, it would have the lead role, but that assumes "everything is done according to the book," which is highly problematic, said Kenneth Button, director of the Center for Transportation, Policy, Operations and Logistics at George Mason University in Virginia.

"The other interests are purely subservient," Button told NBC News on Thursday. At the same time, "all airspace is sovereign," he said, so "any country can do exactly as it wants," and there's no international aviation court to sort out the competing interests.

| "I'm afraid it's going to be a real mess"

As the country where the flight originated, the Netherlands could stake a claim. So could Malaysia, where the flight was headed. And Ukraine could invite other countries, such as the U.S., because the plane was manufactured by Boeing Corp.

"I'm afraid it's going to be a real mess," said Ross Aimer, a retired United Airlines pilot and chief executive of Aero Consulting Experts of Los Angeles.

Ukraine initially proposed that the investigation be led by the Ukraine State Commission, the ICAO and representatives of the Netherlands and Malaysia.

A senior Obama administration official told NBC News that a coordinated international investigation was imperative.

"There were people on the plane for several nations, and due to the ongoing conflict between Russia and Ukraine, we believe strongly that the international community needs to play a role in determining what happen here," the official said.

Greg Waldron, Asia editor for FlightGlobal magazine, told the BBC: “The plane has come down in contested territory so there has to be some concern. By rights the aircraft is owned by Malaysian so under international law Malaysia should have a key role in any investigation.

“If parts have been sent to Russia, as is reported, that it would be beyond standard operating procedure, certainly.”

Robinson said Malaysia's involvement would likely involve many of the same teams and experts who have been working for months on the disappearance of another Malaysia Airlines Flight MH370, which vanished March 8 on a flight from Kuala Lumpur to Beijing.

"That's their job," he said. "That's their expertise."

But in the long term, Aimer agreed with Robinson that physical safety was still the biggest barrier.

"You're in a war zone. That's going to be pretty tough," Aimer said. "If not invited, I certainly wouldn't go there ... I would say good luck to anyone who takes it on."

Jim Miklaszewski, Kristen Welker, Courtney Kube, Irina Tkachenko and Marc Smith of NBC News contributed to this report.

Annex 197

Expert report of Mr Akash Rosen, 26 May 2019

Project-MH17



Digital Forensic Services

Digital Forensic Reporting – Final Report V1.0

Bonanza Media

MH17 Video and Audio Forensic Analysis

Case: OGIT-001-095-08-04-2019

Prepared By:
Rosen, Akash MSc, CHFI, GCIH, Assoc. ICFA, HCME
Computer Incident Response & Forensics
26th May 2019



Bio of Akash Rosen (A.Rosen)

**Hancom Certified Mobile Forensic Examiner – HCME
Certified Hacking & Forensic Investigator – CHFI
SANS Hackers Techniques and Incident Handling – GCIH
#18524**

**Associate Member of Institute of Certified Forensic Account
(0212221)**

Master's in computer science (Dec 2010)

University of Malaya, Malaysia

Bachelor of Science Degree in Computer Science (2002)

University of Technology Malaysia

Certificate in Data Processing (1998)

Polytechnic Sultan Ahmad Shah

Location: Malaysia

A.Rosen is the founder of the 1st Private Digital Forensic Investigation firm, OG IT Forensic Services in Malaysia (www.ogitforensics.com). He has been providing digital forensic services for private companies in Malaysia since early 2010. He is an expert in Cyber Security Incident Response and Digital Forensics Investigation on all types of cybercrimes.

A.Rosen holds a master's in computer science, achieved various certifications and has undergone security technical training such as Global Information Assurance Certification (GIAC) Certified Incident Handler (GCIH), and Certified Hacking & Forensic Investigator (CHFI). He is also an Associate Member of the Institute of Certified Forensic Accountants (CFA).

A.Rosen has been working closely with law agencies, other International Digital Forensic Investigators and Forensic Accountants mainly handling digital crimes and providing relevant digital evidences related to financial frauds, IP infringement, contractual/employment issues, data theft and many other types of cybercrime.

Since early 2010, A.Rosen, had been providing digital forensic analysis and verification services such as computer forensics, mobile phone forensic, email forensics, audio & voice biometrics, video forensics, digital images & pdf file forensics, social networking analysis, cloud forensics, database forensics, live security incident response and IoT forensics now.

A.Rosen also provides cyber intelligence investigation solutions for banking and law enforcement agencies and support them by providing the latest awareness and prevention of cybercrimes such as due diligence countermeasures in respect of anti-money laundering, intelligent fraud, targeted threat Intelligence, and many more.

A.Rosen has appeared as an expert witness in Malaysian courts and support many legal departments of local and international companies in digital forensic investigation for financial fraud, data theft and other digital crime cases.

He has been working for more than 15 years in the IT Security field where he worked mostly on various types of security technologies, provided security solutions (including security risk consultation) and gained significant experience as well as developed the first global security operation center in a MSC Status company handling real time monitoring and investigating security threats for more than 100 clients globally.



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List of some of the court cases being an expert witness as Digital Forensic Investigative

- 1.** A case of audio recording verification of an old parent (father) who had passed away. This was a litigation on property. Authenticity of audio for tampering - Dec 2014
Civil Case No: 22NCVC-314-03/2012 (Kuala Lumpur)
Expert Witness: Yes
- 2.** A conversation in audio conference recording system was recorded with the account owner and the banking personal allegedly approving the money transfer. Voice biometric analysis on the bank account owner to verify the speakers – Dec 2015
Suit No. 1047 of 2013 (Singapore)
Expert Witness: Not Required
- 3.** Verification of audio recording performed by SPRM (Suruhanjaya Pencegah Rasuah Malaysia). Engaged by a lawyer.
Criminal Case No: 61R-2-04/1250 (SJ4) (Johor Bahru)
Expert Witness: Not required
- 4.** Raw oil stock was manipulated. This is financial fraud case – Jul/Sept 2016
Johor High Court Case No: 22NCVC – 28 – 02 / 2014 (Johor Bahru)
Expert Witness: Yes
- 5.** An employer had transferred funds into an employee account and claim the employee had done fraud – Oct 2013
Criminal Case No: 62D-(383-385)-10/2011 & 62D-(326-347)-9/2011 (Shah Alam)
Expert Witness: Yes
- 6.** 2 directors had moved company's money out of country, evidence was stored in old mobile which was claimed not extractable – Apr 2014
Civil Case No: 22NCVC-78-01-2012 (Shah Alam)
Expert Witness: Yes
- 7.** Spear phishing/email fraud by international fraudster causing loss of USD30 Million.
Civil Case No: 22NCC-465-12/2014 (Labuan/Kuala Lumpur)
Expert Witness: Yes
- 8.** Audio Forensic and Verification of audio files for any tampering which is the main evidence of the defence – May 2016
High Court Case No: 22NCC-135-05/2015 (Kuala Lumpur)
Expert Witness: Yes
- 9.** Sales team diverting corporate business to own and Competitor Company – May 2016
Penang High Court: PA-22NCvC-78-05/2016
Expert Witness: Yes



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10. Software house internal fraud. Full email acquisition and forensics analysis – Jul 2016

High Court Case No: 22NCC-312-10/2015 (Penang)

Expert Witness: Required

11. A small case involving a family matter – Apr 2017

Court Case No: PA-33-367-10/2016 (Penang)

Expert Witness: Not required

12. Mobile phone audio verification - Mac 2017

Kuching High Court Case: KCH-22NCvC-10/2-2014 (Kuching)

Expert Witness: Required

13. Anthon Piller Order – Jul 2017

Penang High Court Civil Suit: 22NCvC-91-05/2016 (Penang)

Expert Witness: Required

14. Software development dispute – Oct 2017

KL High Court Case No: WA-22NCVC-91-02/2017

Expert Witness: Required

15. Financial fraud case in logistic sector – Oct 2017

Kuala Lumpur High Court Case: BA-22NCVC-463-08/2016

Expert Witness: Required

16. Internal property matter - Nov 2017

Shah Alam Court: BA-B52NCVC-127-04/2016

Expert Witness: Yes

17. Sales Fraud Case – Jan 2018

Ipoh High Court Case No: AA-22NCVC-38-05/2017

Expert Witness: Required

Submit Forensic Report to Commercial Crime Investigation Department – Ipoh

Ref No: JK KPN 168/17 No Repot: 478/18

18. Business fraud/property matter

Kuching High Court Case No: 22NCVC-10/3/2016

Expert Witness: Required

19. Mobile Phone Chat Verification - Jun 2018

Penang High Court Case No: PA-22NCvC-184-09/2017

Expert Witness: Yes

20. Mobile Phone Chat Communication – WhatsApp Verification

Negeri Sembilan High Court: NA-22NCVC-63-10/2017

Expert Witness: Yes



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21. Mobile Phone Chat Communication – WhatsApp, WeChat and Emails

Butterworth Sesyen Court: PB-A52NCC-57-07/2018

Expert Witness: Yes

22. Audio, Video and Photo Verification

Shah Alam High Court: BA-23NCvC-38-12/2018

Expert Witness: Yes

23. Many other digital forensics/cyber-crime investigative cases dealt with internal management team

Education:

Certifications:

- Cisco Certified Network Associate - CCNA 2002
- Cisco PIX Firewall (CSPFA - Course) 2003
- Sun Solaris Administrator I & II & III (SCSA - Course) 2003
- Checkpoint System Administrator - CCSA (Course) 2005
- Hack In The Box, Hand on Hacking - Zone H 2007
- ITIL Foundation V2 2007
- Talent Selection 2007
- ITIL Foundation V3 2008
- Certified Hacking & Forensic Investigator - CHFI 2008
- HITB - Web Application Security Advance Attack & Defense 2008
- Manager Excellence Training 2009
- Managing People Through Change 2009
- SANS Hackers Techniques and Incident Handling (GCIH #18524)
Dec, 2010
- Kepner & Tregoe (KT) Jan, 2011
- ITIL V3 – Intermediate Operational Support & Analysis (OSA)
Mac, 2011
- Associate Member of Institute of Certified Forensic Account (0212221)
Mac, 2012
- Managing Risk in The Enterprise
Apr, 2012
- Attending Security Conferences
till now



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Work History:

Private Digital Forensic Investigator/Examiner – Feb 2011 – Now

- Digital Forensic Investigation (on Computer hard disk, mobile, clouds, social networking, audio & video etc...) for local clients in Malaysia, Borneo and aboard
- Handling/Investigating Digital Crime (Financial Fraud & Data Theft) cases with Forensic Accountant/Lawyers
 1. Total Financial Fraud Cases in Malaysia worth of < RM200 Mil – 6
 2. Total Financial Fraud Cases outside of Malaysia worth of > RM200 Mil - 2
 3. Others/Data Theft Cases > 50 cases both inside and outside of Malaysia
- Perform LIVE Security Incident Response on any compromised systems
- eDiscovery & Digital Investigation Case Management expertise
 - all types of media, digital files, multimedia files (audio/videos/images)
- Email server and client verification and forensic analysis
- Image/Picture Forensic Analysis on editing and counterfeiting
- Steganography Analysis (Image and Files- docs/PDF)
- Audio and Video Forensic analysis for any manipulation/ tampering
 - Video Recording (With Audio)
 - CCTV Video Analysis
 - Verification of audio files from media
 - Audio transcript capturing (listening and reporting with support of audio forensic tools)
 - Image/Video Ballistics
- Voice Biometric/Printing Forensic Analysis
 - Audio recordings identification from camera and mobile phones analysis for speaker
- Social Networking analysis (Fb, Twitter, Internet mails, G+, etc...)
- Analyze Digital Evidence (ESI) and writing report to be presented in court
- Provide testimony in court as an expert witness for digital forensic evidences
Mahkamah Kuala Lumpur (High Court), Mahkamah Shah Alam (High Court), Johor High Court, etc...
- Working closely with law firms and law enforcement as below;
 - Commercial Crime Division, Royal Malaysian Police, etc...
- Provide Cyber security awareness for Law Enforcement and private industries
- Design and Setup digital forensic labs and provide standard of Digital Forensics process



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- Integrations solutions for SIEM/SIRT/eDiscovery/Incident Mgmt. tools (PTK/INCMAN/FTK/EnCase, Paraben, Belkasoft, Magnet, Intella, Cellebrite, Systools, etc...)
- Mobile forensic expert – Device Seizure, Oxygen, Cellebrite, Mobiledit, Tarantula, etc...)
- Audio/Video Forensic (Verifeyed, Audition, EVB, SISII, etc...)
- Open Source Digital Forensic Training (DEFT, SIFT - and education hands on)
- Malware Botnet/Cyber Intelligence solution providers in Malaysia
- Reseller Digital Forensic solutions
 - Paraben (USA), DFlabs (Italy), Decision Group (Taiwan), FFT (India), Group-IB (Russia), CyFIR (US), IntelCrawler (US), etc...
- Computer Forensic Group, Consortium of Digital Forensic Specialist Group and Mobile Forensic & Investigation Group
- Network Forensic Analysis and Threats monitoring using Open Source Intelligence
- Security Incident Management solution provider
- Data recovery and analysis
- Provide Social Networking Analysis and cloud forensics acquisition
- Cloud forensic analysis and e-discovery
- Degaussing and Destroying data services

Other Information Security Experience:

Global Security Operation Center – APJ (GSOC APJ) Technical Delivery Expert, Jun 2007 – Feb 2011 - EDS

The Global Security Operations Centers (GSOC) provides 24x7 staffed centers for monitoring and managing all aspects of enterprise security (IDS, IPS, WIDS, AV and SIEM) on a consolidated basis.

- Operation Management of GSOC APJ (Asia Pacific Japan) (multiple large clients of all types of industries – Financial, Banking, Insurance, Energy, Food, Gambling, etc..) - Mostly APJ and US Accounts
- Monitoring of all types of Security Events/Alerts/Attacks – both from standard Security Dashboard and leveraged Security Management Consoles: IBM ISS Site Protector, HP Tipping Point, MC Afee NSM, Sourcefire Defense Center and Cisco SecureWork
- Provide In-Depth Security Incident Investigation (identification/containment/eradication) for all types of attacks/threats
- Provide recommendation and consultation on current security threats/malicious code



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- Working with GSIRT/Forensic team on Access Data - eDiscovery
- Prepare alert handling document and standardize the process for each Client/Environment.
- Involved in escalations and perform client liaison role with Account Security Officers (ASO) for any security incident
- Involved in analyzing risk (risk assessment) from current security trend for the clients
- Work closely with GIS Engineering for new tools/system for future mode of operation (FMO) – Investigations tools, incident mgmt. tools
- Work with End Point Security, SIEM, IDS/IPS, GSIRT (Forensic), TVMR team for GSOC Services
- Growth and planning for GSOC worldwide (tools for Future Mode of Operation), work closely with GIS Engineering team
- On boarding new account to GSOC (testing/implementing), leveraged solution
- Review and provide security consultant on Infrastructure Security - GSOC worldwide
- Certified ISO 20000 for GSOC APJ

Other roles;

- Holding a Security Expert role within EDS Security
- Involve and conduct a triage call with GCIRT for real security incident response
- Manage team perform Vulnerability Assessment
- Perform Live Security Incident Response for local clients
- Compile and gather IDS alert trend for network forensic analyst from all source of Cyber Security Provider
 - IBM ISS - X-Force
 - ThreatLinq – Tipping Point
 - MC Afee NSM - Intruvert
 - SourceFire - VRT
 - iDefense, Bugtraq, CVE
 - Other Security sites Symantec, CERT, Microsoft, Redhat, Solaris, IBM, etc..
- Testing Proposed Security Solution/Product/Research with the team

**Information Security Analyst/Advance/Specialist, Nov 2003 – Jun 2007,
EDS**



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Perform hands on Security Technical for Local Clients and some other regions

- UNIX Security Hardening (all platforms)
- UNIX Security Management (Patching/Access Management)
- Firewalls Implementation/Deployment/Management
- VPN/RAS Security Implementation/Management
- Proxy server management and email server security
- IBM ISS IDS/IPS Deployment/Management/Monitoring/Reporting
- Vulnerability Management and Web Application Penetration Testing
- Involvement in Security Projects/RFP and Security Solutions
- Representing Security and involve directly in all client meetings/projects.
- Compliance and Audit management
- Data Security – File Security/File Transfer Security/Encryption/DLP
- End Point Security – AV for Local Clients
- Security Access Management
- Provide security risk assessment and roadmaps along with growth to the clients
- Security Incident handling and forensic analysis
- PABX and audio call recording system security management
- Others ad hoc requirements, being able to help in any technical related task

EXPERTISE	YEARS OF EXPERTISE
Relevant Technical Expertise:	
UNIX (Solaris, IBM-AIX, HP-UX)/Linux (Redhat, /Ubuntu)	9+ 7+
Firewall Engineering/Management (PIX, Checkpoint)	7+
IDS/IPS Management (IBM ISS, McAfee NSM, Source Fire, Tipping Point, Cisco)	6+ 9+
Server Hardening (UNIX)	7+
Information Infrastructure Security	7+
Vulnerability Scanning & Penetration Testing	7+
CIRT / Security Monitoring & Incident Handling	4+
Security Attacks/APT/Investigation	8+
Security Research/Testing Tools/Exploiting	4+
VPN/Key Management/RAS	4+
Security Identity Management	
Compliance and Audit Management	4+
ISO ISMS Certification	



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EXPERTISE	YEARS OF EXPERTISE
SIEM (RSA Envision, ArcSight, Snare, Tripwire, Sensage, Secure Work) Application Security Assessment Computer Forensic/Analysis Open Source Forensic Mobile Phone Forensic/Analysis Handheld Forensics/Analysis Malware Analysis Image, Video, PDF Forensic Analysis Audio Video Forensic Video Biometric	2+ 5+ 5+ 5+ 5+ 3+ 3+ 2+ 1 +
Relevant Project Expertise: Business Process (Involved In Business Team) Solution Architect Team Managing Projects (Mostly Security related) Security Risk Assessment/Management	5 6 9 5
Relevant Industry Expertise: Financial/Insurance/Banking/IT Industry/Energy/Healthcare/Automotive/Retail Medical Others	10 4+ 3+ 2
Relevant Services Delivery: ITIL Standards Enterprise Security Services – Infrastructure Security Digital Forensic Expert and Consultations	6+ 6+ 4+



Project-MH17

List of training provided by Akash Rosen:

- i. BAR Council Kuala Lumpur - Fundamentals of Digital Forensic Evidence, KL, MY - March 2015
- ii. ii. BAR Council Penang - Fundamentals of Digital Forensic Evidence, Penang, MY - Sept 2015
- iii. 5th Annual Practical Forensic Auditing and Fraud Investigation Technologies, - Singapore - Oct 2015
- iv. Global Legal Confex 2016 Challenges in the Global Legal Industry: Digital Forensic Evidences Challenges, Singapore - Feb 2016
- v. Management Science University (MSU) - Computer Forensic Challenge -Digital Forensic: Open Source Digital Forensic - Shah Alam, MY - Mac 2016
- vi. 6th Annual Practical Forensic Auditing and Fraud Investigation Technologies, Kuala Lumpur, MY - May 2016
- vii. 10th Annual Alliance IFA Meeting (Talk on Digital Forensic), Kuala Lumpur, MY - Nov 2016
- viii. Management Science University (MSU) - Computer Forensic Challenge - Mobile Forensics - Shah Alam, MY - Dec 2016
- ix. A Guide and Workshop for Forensics Skills, Kuala Lumpur - April 2017
- x. Fundamentals of Digital Forensic Evidences, RHB Bank, KL, - May 2017
- xi. Digital Evidence Workshop for Akademi Audit Negara 23rd -24th Oct 2017
- xii. CYFRIC – UTM Digital Forensic Competition 2017 – Main Judge – 28th Oct 2017

List of cases online

1. Seeking the source of the data breach - 23/11/2017
<https://themalaysianreserve.com/2017/11/23/seeking-source-data-breach/>
2. Fake CORs costing Customs dearly – 13/11/2017
<https://www.thestar.com.my/news/nation/2017/11/13/fake-cors-costing-customs-dearly-syndicates-siphoning-out-millions-in-revenue-using-forged-documents/>
3. Vodafone bags the Guinness World Record for creating largest ZooZoo album – 11/08/2016
<https://brandequity.economictimes.indiatimes.com/news/digital/vodafone-bags-the-guinness-world-record-for-creating-largest-zoozoo-album/53649310>
4. a. Mesiniaga faces contingent liability of RM8.2m in suit by Amanah Raya 07/03/2017
<https://www.theedgemarkets.com/article/mesiniaga-faces-contingent-liability-rm82m-suit-amanah-rama>
- b. Mesiniaga cautions of RM8.23mil potential liability if it loses civil suit – 08/03/2017
<https://www.thestar.com.my/business/business-news/2017/03/08/mesiniaga-cautions-of-rm823mil-potential-liability-if-it-loses-civil-suit/>



Project-MH17

Contents

Digital Forensic Reporting – Final Report V1.0.....	1
1.0 Document Control.....	14
1.1 Distribution List.....	14
1.2 Purpose.....	14
1.3 Disclaimer.....	14
1.4 Terminology.....	15
1.5 Case Information.....	16
1.6 Forensic Analysis Process.....	17
1.6.1 Video Forensic Process Flow.....	19
1.6.2 Audio Video Forensic Analysis Process.....	20
1.7 Executive Summary.....	23
1.8 Timeline.....	25
2.0 Acquisition and Verification.....	26
2.1 Video Source Details.....	26
2.1.1 Video 1 - SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash.....	27
2.1.2 Video 2 - MH17 crash: leaked tape proven FAKE by audio analysis. Аналіз перехвату розмов ополчення ДНР.....	31
2.2 Video Acquisition and Verification.....	36
3.0 Video File Analysis and Audio Findings Statements.....	44
3.1 Video File Analysis and Statements.....	44
3.2 Audio Track Analysis and Finding Statements.....	48
3.3 Video 1 Metadata - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4.....	55
3.4 Video 2 Metadata - MH17 crash leaked tape proven FAKE by audio analysis. Аналіз перехвату розмов ополчення ДНР..mp4.....	60
4.0 Video 1 Analysis - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4.....	65
4.1 Audio 1, Track-1 – Duration 0:18.4 – 0:36.1, Conversation between I.Bezler ("Bes") and Vasyly Mykolaiovych Geranin (9031921428).....	72
4.2 Audio 2 - Track 2, Track 3 & Track 4 – Duration 0.43.3 – 1:49.0, conversation between Major and Grek.....	78
4.2.1 Audio 2, Track-2 - 0.43.3 - 0.52.9 - Conversation between Major and Grek.....	79
4.2.2 Audio 2, Track-3 – Duration 0.54.5 - 1:08.0, conversation between Major and Grek.....	84

12



Project-MH17

4.2.3 Audio 2, Track-4 – Duration 1:09.4 – 1:49.0, conversation between Major and Grek.	89
4.3 Audio 3 - Track 5 - from time 1:50 to 2:22.8	94
4.4 Video 1 Audio Tracks Edit/Manipulation.....	100
4.4.1 Audio 1, Track-1	100
4.4.2 Audio 2, Track-2	104
4.4.3 Audio 2, Track-3	105
4.4.4 Audio 2, Track-4	107
4.4.5 Audio 3, Track-5	111
4.5 Voice Biometric (Voice ID) Analysis - From Video 1 Audio Tracks	114
4.5.1 Audio 1, Track 1 Voices	120
4.5.2 Audio 2, Track 2 Voices	122
4.5.3 Audio 2, Track3 Voices	124
4.5.4 Audio 2, Track 4 Voices	126
4.5.5 Audio 3, Track 5 Voices	128
5.0 5.0 Video 2 - MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4.....	131
6.0 Summary.....	139
7.0 Appendix.....	143



Project-MH17

1.0 Document Control

1.1 Distribution List

Document	Name	Role	Representing
MH17-Forensic Reporting Final-V1.0-26052019	Akash Rosen	Forensic Investigator	OG IT Forensic Services

1.2 Purpose

The purpose of this document is to provide an overview of analysis findings of a reported incident received by OG IT Forensic Services. This report provides the summary of the current case assigned by Bonanza Media.

1.3 Disclaimer

The information and contents of this document is confidential. It is intended solely for the use of Bonanza Media, its appointed solicitor and other professionals. Save and extract the forgoing any photocopy/extraction/imaging without the permission of OG IT Forensic Services is strictly prohibited. OG IT Forensic Services makes no representation or warranties with the respect to the contents or use of this document, and specifically disclaims any express or implied warranties or usefulness for any particular purpose of this publication. OG IT Forensic Services reserve the right to change or revise this document, at any time.

I confirm the correctness of my expert report and understand that in giving my report my overriding duty is to the court and that I have complied with that duty.



Project-MH17

1.4 Terminology

Term	Definition
Hash	Hash value for integration purposes
MD5	Message Digest 5 – Hashing algorithm
SHA1	Secure Hashing Algorithm
S/N	Serial Number
Cluster	Area in a hard disk
Imaging	Process forensic image of the media (bit copying)
MACB	Modified, Access, Created & Birth of a file
USB	Universal Serial Bus
Evidence Media	Hard disk acquired (image copy)
OS	Operating System
Kb	Kilo Byte (kB)
SIP	Source IP Address
Exif	Exchangeable image file format
JPEG/JPG	Joint Photographic Experts Group (Image/Photo format)
PNG	Portable Network Graphics (Image/Photo format)
GIF	Graphics Interchange Format (Image/Photo format)
Exiftool	Metadata extraction from Photos/Media
SDCard	Secure Digital Card (Memory Card)
OGITFS	OG IT Forensic Services
OGLab	OGITFS IT Forensic Laboratory equipped with Commercial Forensic Software
MP4	MPEG-4 Part 14
WeBM	audiovisual media file format for video
Hz	Spectral Frequency cycle in in a second
AAC	Advance Audio Coding for audio compression
FFMPEG	An audio/video codec library / command for transcoding multimedia files



Project-MH17

1.5 Case Information

Incident/Case #:	OGIT-001-095-08-04-2019	Reported Date/Time:	8 th Apr 2019
Report Compiled By:	Akash Rosen		
Report Recipient:	Ms. Yana Yerlashova / Mr. Max van der Werff		

OG IT Forensic Services digital forensic expert was engaged by Yana Yerlashova and Max van der Werff, founder of Bonanza Media to collect, acquire, verify, and perform digital forensic analysis on uploaded video files on YouTube social media as listed as in Table 1.5.1 below. The main scope of this case is assigned to;

- i. Verify the video files are genuine based on the source
- ii. Verify the audio track in the video files are genuine especially in video 1 as listed in Table 1.5.1.
- iii. Verify any kind of manipulation seen in the audio stream in Video 1 as listed Table 1.5.1.

Table 1.5.1: Video File Details

Video	Video File Name	Source of the Video File	Remark
Video 1	SSU, radio interception of conversations between terrorists, "Boeing-777" plane crash	https://www.youtube.com/watch?v=BbyZYgSXdyw	- Original Video uploaded by SSU - Consist of 5 audio tracks of intercepted audios
Video 2	MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.	https://www.youtube.com/watch?v=T34AB6CImTE	- Original Video uploaded by Sound Russia - Showing part of audios in Video 1 are faked

Refer to Table 2.1.1 showing the details of the video files.

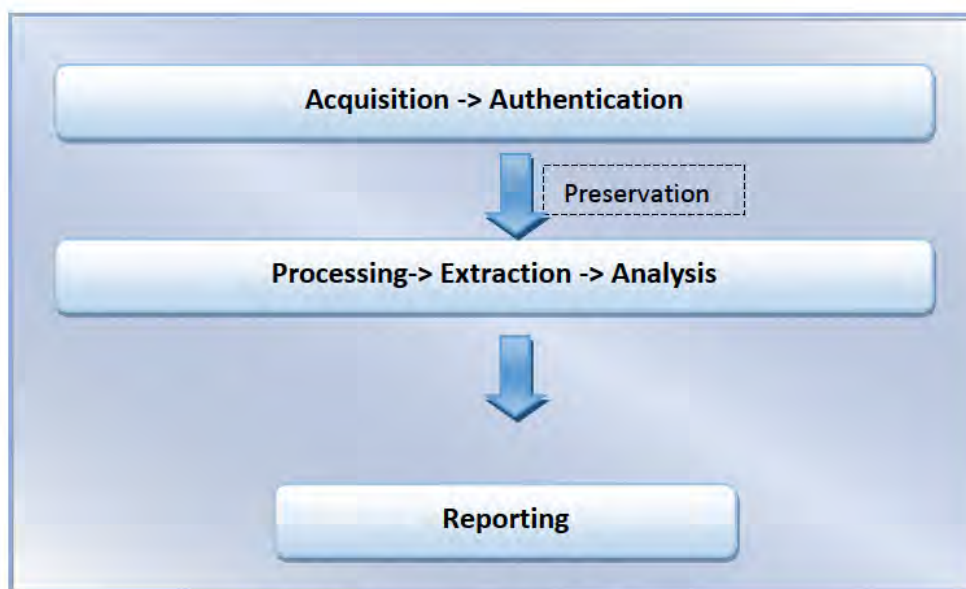


Project-MH17

1.6 Forensic Analysis Process

The process of the forensic verification and analysis for digital media/evidence involves the following:

- i. Seizure of digital media source (cloud storage) and forensic acquisition
- ii. Authentication of the source media/files
- iii. Processing (Recovery, Indexing, Metadata gathering, etc...)
- iv. File extractions (audio/video streams), verification and analysis of files (digital evidence)
- v. The production of a report based on the collected evidence for the benefit of the court or the initiator of the process.



Flow 1.1: Forensic Analysis Process

The video files details as listed in Table 2.1 was provided on the 8th April 2019 by Bonanza Media to OG IT Forensic Services expert.

An acquired image is a bit stream copy of a media (hard disk/mobile). It copies every single bit of the media into an image file. The verification (authentication) of the acquired image files shows the acquisition of media was verified. During the Authentication process, copy of the image was verified with hash value to ensure the authenticity of the image acquired. The main reason for authentication was to ensure the integrity of the information, preservation of digital



Project-MH17

evidence and to get it accepted as evidence in court if it's needed as per the standard of ISO 27037 (Guidelines for identification, collection, acquisition, and preservation of digital evidence). The industry standard for computer evidence authentication is known as RSA Security MD5 (Message Digest 5) algorithm. Each file has a unique MD5 hash value. SHA1 and SHA2 is another hashing algorithm. Refer to section 2.0 showing the acquisition of the acquired image.

The checksum value (MD5) of the media acquisition is listed in the Acquisition report. It is very important to have a forensic verification done from the source origin. Forensic software is read only tools and all attached evidence files (acquired image) can't be tampered in any way. The forensic software maintains the preservation of digital evidence (electronic store information within the forensic software) as per ISO 27037 standard.

The processing of the media is performed using the commercial forensic software, where media data recovery, indexing, system artefacts parsing, internet artefacts parsing, email recovery and parsing's, keywords searches, etc... are done. The keyword search hits were reviewed, and the extraction of the files done accordingly by OG IT Forensic Services team. The analysis is performed based on the scope of the case and report are generated.

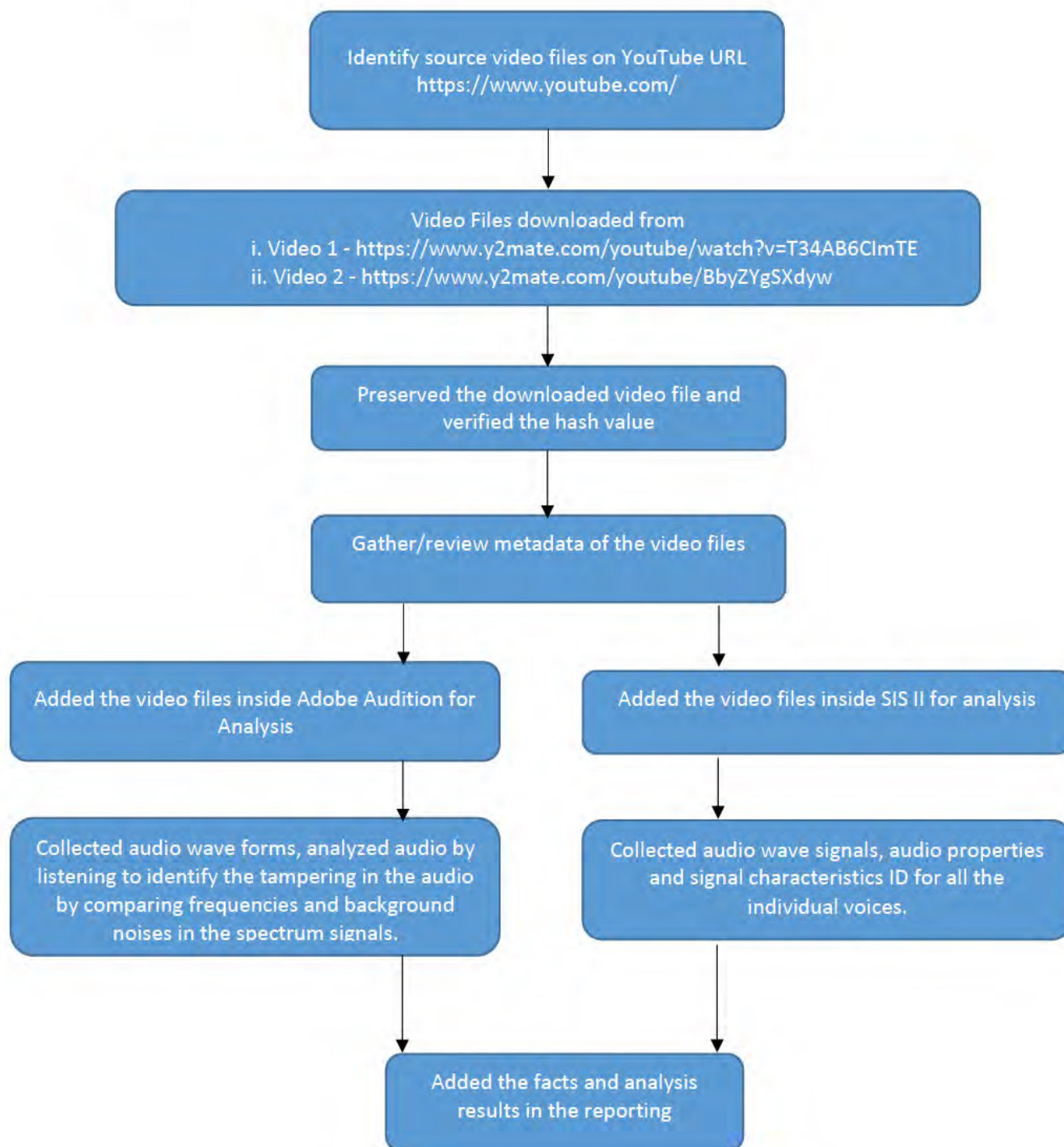
The software used for this audio forensic analysis was;

- i. Adobe - Audition
- ii. Speech Technology Center - SIS II
- iii. MedialInfo - Extraction of Audio Video details/EXIF data
- iv. ExifData - Extraction of Metadata/Exchangeable Information of File
- v. FFMPEG - extraction of audio and video frames
- vi. FAW Project - FAW Professional – Web Acquisition
- vii. Magnet - WPS - Web Acquisition
- viii. X1 Social Discovery



Project-MH17

1.6.1 Video Forensic Process Flow



Flow 1.2: Forensic Analysis Process Flow for Video Files

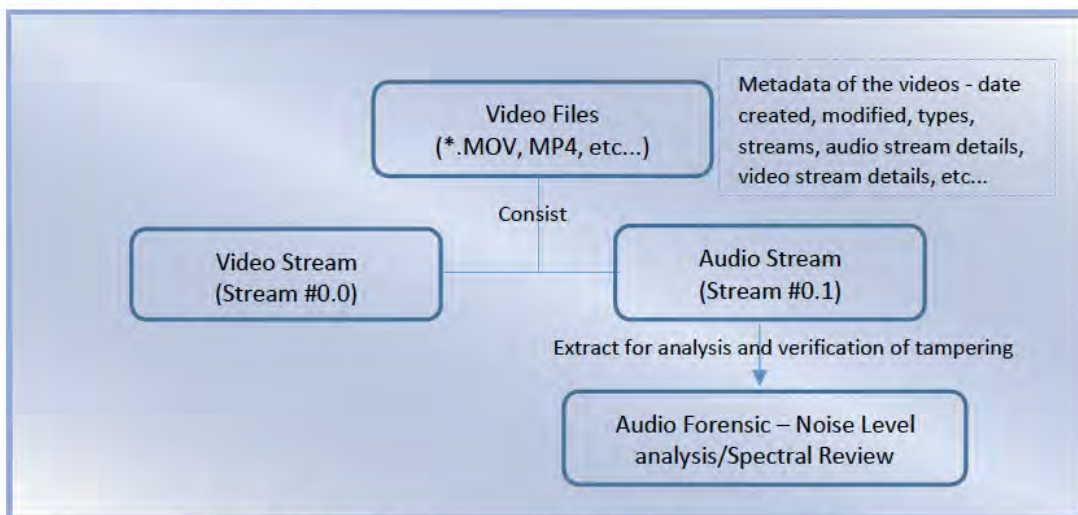


Project-MH17

1.6.2 Audio Video Forensic Analysis Process

Any recorded digital video file has a container. The container is like a box contains the video stream, audio stream and metadata details. It is also referred as MOV, MP4 or AVI. A video metadata (media info) are vital data/details of the video itself such as the date created, date modified, date access, format, about the content produced, format, types, software, tracks, codec, frames, audio, etc. It is stored at the beginning of the video files depending on the format of the video. A codec is a software that compresses the video so it can be stored and played back. Sample of codec is AVC, MPEG-4, H.264 and many more. An audio recorded file will contain audio stream and its metadata of the audio itself. Audio has different set of codec such as MP4, M4A, mp4a and many more. WebM is a container format (with the file ending *.webm) for multimedia files, i.e. for videos and audio files. Within this container, the video codecs VP8 and VP9 and the audio codecs Vorbis and Opus are used. First announced at the Google conference I/O 2010, WebM was planned as an alternative to the existing MP4 format with its H.264 code.

The location of the video’s metadata and the content of the video stream and audio stream are located separately in the video file container. Refer to Flow 1.3, a video file has video stream and the audio stream. The video and audio stream can be used for the content verification as well depending on the metadata details. Video stream contents are video frames (count by size and frame per seconds) and the audio stream content are the audio wave (count sampling rate, bitrate, channel, etc...).



Flow 1.3: Recorded Video/Audio File Forensic Analysis Process



Project-MH17

The audio stream can be used to validate the continuous and constant noise sound level of the audio. The noise sound is the background sound of the recorded audio/video. The measure of signal strength relative to background noise is called SNR (Signal to Noise Ratio). The ratio is usually measured in decibels (dB) using a signal-to-noise ratio formula. Normally, any audio's SNR > 10 dB (decibels) are accepted. As long the background noise is constant, the audio can be analyzed by looking the purple color of the noise level (in Audition CC audio analysis tool) if it was edited or tampered because the noise sound can't be regenerated to be as similar as during the recorded time of the audio/video.

The analysis of the audio/video files are done as stated below (refer to Flow 1.3);

- i. Firstly, analysis on the audio/video's metadata (media info) from the video
 - Review the detail format field of the metadata from the audio/video.
 - Gather all information from metadata field extracted from the video file
 - Analyzed the details of video stream and audio stream
 - Analysis for any abnormal entry on the video.
- ii. Gather information and details of the source of the audio/video recorder (source) recorded the video. In this case are the digital media as listed in Table 1.5.1.
Note: If the date creation and the date modified are same or after adding the duration of the audio/video recorded, the gaps between the date created and modified date are meeting the duration, it means the recorded audio/video digital files are original and not edited or tampered.
- iii. Then, to verify the video are not tampered, the audio stream will be extracted and analyzed further.
- iv. Video frames are also extracted to identify the frames size and number of frames showing continuous movement in each frame per second (not tampered). In this case, the video frames are not analyzed as the audio tracks are the focus.
- v. Extraction of audio stream from recorded video file is very important to validate the video was tampered or edited. By reviewing the noise level, analyst can determine if the audio was edited. By looking at the spectral wave, it can determine if the audio was tampered or edited as well.



Project-MH17

- vi. Similar analysis is done for recorded audio files as per stated above (iv).
- vii. Reviewing the video are done as below;
 - i. Review Identify if the video is continuously recorded such as below;
 - a. No pause from the beginning of the video to the end of the video recording
 - b. No stop from the beginning of the video to the end of the video recording
 - c. The clarity of the video and the surrounding
 - d. The sound of the background (noise)
 - e. The quality of the video and others aspect related to video (duration, speech, etc...)
 - ii. Identify any kind of digital watermarking on the video such as time or logo
 - Watermarking is a method to ensure the integrity of the video content and avoid tampering to the video frames.

Note:

- i. Cepstrum view is main for pitch determination/analysis - vocal excitation (pitch) and vocal tract (formants)
- ii. Fast Fourier Transform is an algorithm that computes the Discrete Fourier transform (DFT) of a sequence, or its inverse (IDFT). Fourier analysis converts a signal from its original domain (often time or space) to a representation in the frequency domain and vice versa.



Project-MH17

1.7 Executive Summary

The Video 1 file named as “radio interception of conversations between militants, "Boeing-777" plane crash.mp4” is actually a video file which was created and uploaded into You Tube media by Security Service of Ukraine (SSU). This video contains 5 audio tracks related to the intercepted radio audio conversation between few militants on the fatal incident day of MH17 flight - 17/07/2014. Video 1 file with the 5 intercepted recorded audios tracks was converted and compressed into WeBM format and uploaded into YouTube. Refer to Table 2.2.1 and 3.1.1 showing the details of the video file.

Firstly, and the most important fundamental ground of the audio/video forensic analysis is to ensure to determine the original source and authenticity of the recorded video/audio file. This must be validated to ensure the audio recorded is not tampered. All the 5 audio tracks which was embedded and showed (aired) in the video had no details of the original sources of the recorded/intercepted audio are from. Therefore, the audio files /audio tracks are highly potential of already been edited, tampered or had been manipulated. Secondly, all audio tracks in the Video 1 were seen as incomplete audio conversations in. Original audio recording files is compulsory required to validate the whether the recording is tampered or legitimate. Unfortunately, that information is not available.

Nevertheless, since there is no original source of original recorded audio, the audio stream in the video files was evaluated/analyzed based on the content of the audio signals/waves/spectrum. The noise floor in the audio which is the background noise (sound) is important to validate the recording is normal. The analysis of the audio signal/waves/spectrums) showing that:

- i. The audio recordings are showing telephone conversation recording ~ 8kHz.
- ii. Very short of audio conversation and there are inconsistencies of the audio tracks. Refer to Section 4.0.
- iii. Only part of the conversation is available. Refer to Section 4.0.
- iv. Inconsistent of stereo and mono channel in the audio tracks seen – Track 1 and Track 5 had mono recording. Track 2, Track 3 and Track 4 are Stereo. Refer to Section 4.0.
- v. There were possible cuts and merging seen in the spectrum signal waves as it can be seen in the background noise changes. Refer to Section 4.4.
- vi. Absents of signal. It also means recording are cut or not the complete recording. Refer to Section 4.4.



Project-MH17

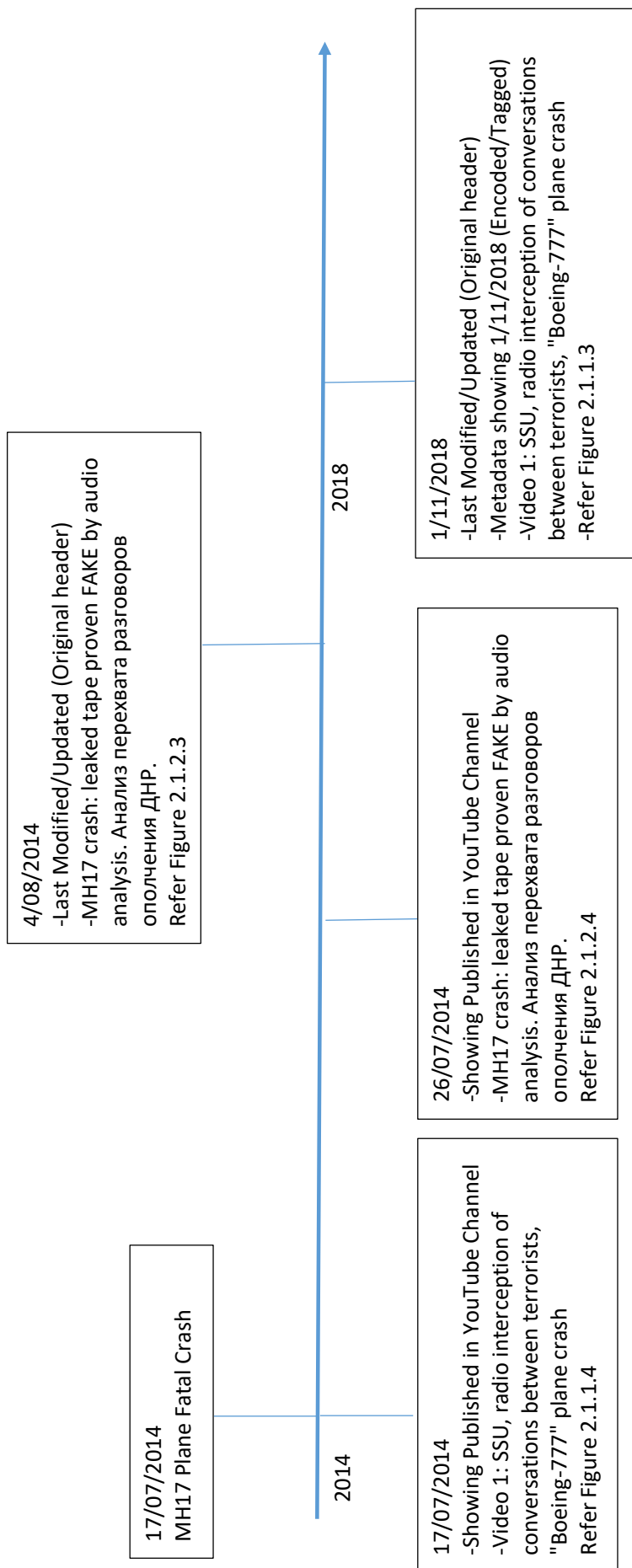
- vii. The audio quality is low, where the audibility of the spoken voice is not very clear. Refer to Section 4.5.

There are inconsistencies in the audio tracks and some part of the conversation was removed. It is clear that only part of the original conversation was added into Video1 audio stream's and make it available. Refer to Section 3.0 showing the Findings statements and Section 6.0 Summary.



Project-MH17

1.8 Timeline



Reference:

Table 2.1.1: Video Source Details

Table 2.2.1: Acquired (downloaded) Video Files Details

Table 3.1.1: Video File Analysis – Metadata from Video Files

Table 3.2.1: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash Intercepted Audio Tracks Analysis

Table 4.5.1: Voice Biometric (Voice ID) Analysis - Audio Tracks from Video 1

Table 4.5.2: Details of Individual Voice ID for Voice Biometrics Analysis Exported

Video 1 Audio Tracks Reference:

(Refer to Figure 4.4 & Diagram: 4.1)

i. Audio 1, Track 1 (Section 4.1)

ii. Audio 2, Track 2 (Section 4.2.1)

iii. Audio 2, Track 3 (Section 4.2.2)

iv. Audio 2, Track 4 (Section 4.2.3)

v. Audio 3, Track 5 (Section 4.3)



Project-MH17

2.0 Acquisition and Verification

The source of the digital video files.

2.1 Video Source Details

Table 2.1.1: Video Source Details

	Video 1	Video 2
Detail/Videos Label	Video 1	Video 2
Source Video Name	SSU, radio interception of conversations between terrorists, "Boeing-777" plane crash	MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.
Source Video URL	https://www.youtube.com/watch?v=BbyZYgSXdyw	https://www.youtube.com/watch?v=T34AB6CImTE
Uploaded By	Служба безпеки України (Verified Youtube Channel of Security Service of Ukraine)	Sounds Russia
Date Published	17th Jul 2014 - Shown in YouTube	26th Jul 2014 - shown in YouTube
Last Modified	1st Nov 2018 (Raw header) Refer Figure 2.1.1.1.3	4th Aug 2014 (Raw header) Refer Figure 2.1.2.3
Channel URL:	https://www.youtube.com/channel/UCRxyjhmVbewJRb2yku5EuQ	https://www.youtube.com/channel/UCiHYWawDnfa_PRB4JHq2dZg
HTML Details of the Video	<div class="html5-video-container" data-layer="0"><video style="width: 480px; height: 360px; left: 0px; top: 0px;" tabindex="-1" class="video-stream html5-main-video" controlslist="nodownload" src="blob:https://www.youtube.com/82f1ea9d-3524-4e91-9f3a-75ed19ee1420"></video></div> <video style="width: 480px; height: 360px; left: 0px; top: 0px;" tabindex="-1" class="video-stream html5-main-video" controlslist="nodownload" src="blob:https://www.youtube.com/82f1ea9d-3524-4e91-9f3a-75ed19ee1420"></video>	<div class="html5-video-container" data-layer="0"><video style="width: 640px; height: 360px; left: 0px; top: 0px;" tabindex="-1" class="video-stream html5-main-video" controlslist="nodownload" src="blob:https://www.youtube.com/89f83486-2057-452c-bd7d-68fceee668fd"></video></div> <video style="width: 640px; height: 360px; left: 0px; top: 0px;" tabindex="-1" class="video-stream html5-main-video" controlslist="nodownload" src="blob:https://www.youtube.com/89f83486-2057-452c-bd7d-68fceee668fd"></video>
Original Type Format	WeBM - audiovisual media file format	MP4 - MPEG-4 Part 14
Source IP	218.208.3.207	IP: 58.26.8.79
Host Location Cloud	r4---sn-uh-30ad.googlevideo.com	r4---sn-uh-30aek.googlevideo.com
Main URL Cloud	www.youtube.com	www.youtube.com
Remark	Refer to Section 2.1.1 & Table 2.2.1	Refer to Section 2.1.2 & Table 2.2.1
Downloaded File Name	SSU,radio interception of conversations between terrorists, "Boeing-777" plane crash.mp4	MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4
Checksum MD5	43DC84D53A31B73E0D2188E9300E051F	725F08830E3D7782DF9248CE5F0DE5A4

2.1.1.1 Video 1 - SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash

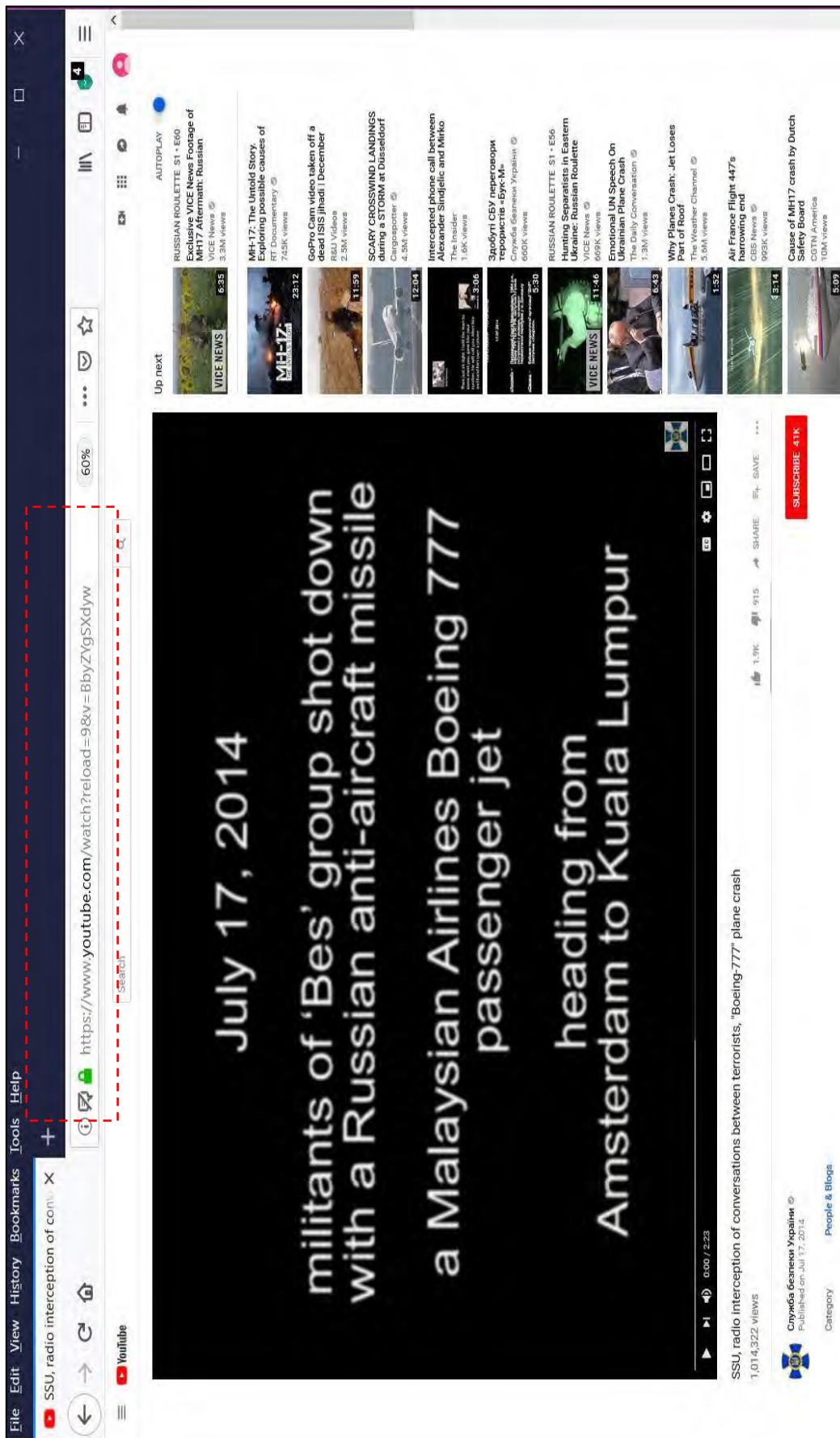


Figure 2.1.1.1: Video 1 - SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash
URL: <https://www.youtube.com/watch?v=BbyZyG5XdYw> showing Published 17/07/2014

Project-MH17

SSU, radio interception of conversations between terrorists, "Boeing-777" plane crash

Video 1

```
<div id="movie_player" class="html5-video-player ytp-transparent ytp-hide-info-bar iv-module-loaded playing-mode ytp-autohide tabindex="-1" data-version="yts/jskin/player_ias-vf161X817/en_US/base.js" aria-label="YouTube Video Player">  
  <div class="html5-video-container" data-layer="0">  
    <video class="video-stream html5-main-video" style="width: 480px; height: 360px; left: 0px; top: 0px; tabindex="1" controlsList="nodownload" src="blob:https://www.youtube.com/733b9e76-3ted-418c-9c5d-54d5f41e262a" ></video>  
  </div>  
</div>  
<div class="ytp-gradient-top" data-layer="1"></div>  
<div class="ytp-chrome-top ytp-share-button-visible" data-layer="1"></div>  
<button class="ytp-unmute ytp-popup ytp-button ytp-unmute-animated ytp-unmute-sprite" style="display: none;" data-layer="2"></button>  
</div>  
<div class="ytp-chrome-bottom ytp-unmute" data-layer="2"></div>
```

Figure 2.1.1.2: Video 1 - SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash details (Web Inspector view)

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The screenshot displays a web browser window with a YouTube video player and its developer tools. The video player shows a video titled "SSU, radio interception of conversations between terrorists, 'Boeing-777' plane crash" with a duration of 01:19 / 2:23. The developer tools are open to the Network tab, showing a list of requests. A red dashed box highlights the "Content Format audio/webm" request. A callout box points to this request with the text "Video 1 Details - Content Format audio/webm Last modified - 1st Nov 2018". The right-hand pane of the developer tools shows the "Response Headers" for this request, including "Access-Control-Allow-Origin: https://www.youtube.com", "Access-Control-Expose-Headers: Client-Protocol, Content-Length, X-Segment-Lmt, X-WebInfo-Ms", and "Content-Type: audio/webm".

Figure 2.1.1.3: Video 1 - SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash - format WebM and source (Web Inspector view) - Showing last modified 1st Nov 2018



Figure 2.1.1.4: Video 1 - SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash – showing published 17th Jul 2014

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The screenshot displays the X1 Social Discovery application interface. At the top, the title bar reads "X1 Social Discovery - Project-MH17". The main window is divided into several sections:

- Search Bar:** Contains the text "Search YouTube - SSU, radio interception of conversations between terrorists, 'Boeing-777' plane crash".
- Filter Saved Searches:** A list of filters including "Everything", "All Social Media", "All Indexed Items", "YouTube", "All YouTube", "Public Information", "nexusmouse2@gmail.com Exam...", and "Individual Videos".
- Search Results:** Shows a single result for a YouTube video titled "Служба безпеки України SSU, radio interception of conversations between terrorists, 'Boeing-777' plane crash". The video thumbnail shows a dark scene with text overlays. Below the thumbnail, it displays the date "7/18/2014 4:33 AM", "02:24 / 1,014,646 views / 1,924 likes / 916 dislikes / 0 comments", and "0 indexed comments".
- Video Player:** A larger view of the same video is shown on the right, with a play button and a volume icon. The video title and description are repeated. The description includes the text: "The plane broke into pieces in the air and fell into the sea. There is the first boeinhundsh (dead), we have found the first boeinhundsh. It's a civilian." Below the video, it shows the date "7/18/2014 4:33 AM (UTC+08:00)", "02:24 / 1,014,646 views / 1,924 likes / 916 dislikes / 0 comments", and "0 indexed comments".
- Bottom Bar:** Shows "2 items indexed" and "1 of 1".

Figure 2.1.1.4: Video 1 – Detail Acquisition using X1 Social Discovery - showing published time 81/7/2014 4:33 AM



Project-MH17

2.1.2 Video 2 - MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.

Figure 2.1.2.1: Video Source 2: MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.

URL: <https://www.youtube.com/watch?v=T34AB6CImTE>

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The screenshot shows a browser window with a YouTube video player. The video player has a red error message: "MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР." Below the video player, the developer console is open, displaying the error message. A red dashed box highlights the error details in the console, and another red dashed box highlights the corresponding HTML element in the DOM inspector. The HTML element is a video player with the following properties: width: 640px; height: 360px; left: 0px; top: 0px; position: absolute; display: block; width: 100%; height: 100%; position: absolute; .html5-main-video { position: absolute; top: 0; left: 0; width: 100%; height: 100%; }

MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.

Video 2

Figure 2.1.2.2: Video Source 2: MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР. (Web Inspector view)

Project-MH17

Project-MH17

has posted on the internet the video with rebels' talks, allegedly proving their guilt.

MH17 crash: leaked tape proven FAKE by audio analysis, Анализ перехвата

Status	Method	Domain	Type	Size	Transferred
200	GET	14--sn-uh-3...	mp4	105.99 KB	106.83 KB
200	GET	14--sn-uh-3...	vid...	65.18 KB	65.59 KB
200	GET	14--sn-uh-3...	vid...	64.48 KB	65.29 KB
200	GET	14--sn-uh-3...	vid...	289.40 KB	290.24 KB
200	GET	14--sn-uh-3...	vid...	124.23 KB	125.04 KB
200	GET	14--sn-uh-3...	vid...	317.93 KB	318.75 KB
200	GET	14--sn-uh-3...	vid...	1.07 MB	1.07 MB
200	GET	14--sn-uh-3...	vid...	313.77 KB	314.58 KB
200	GET	14--sn-uh-3...	vid...	470.32 KB	471.13 KB
200	GET	14--sn-uh-3...	vid...	470.32 KB	471.13 KB
200	GET	14--sn-uh-3...	vid...	470.25 KB	471.06 KB
200	GET	14--sn-uh-3...	vid...	1.54 MB	1.54 MB

Video 2 Details - Format MP4
Last modified - 4th Aug 2014

Response header (661 B)

- Accept-Ranges: bytes
- Access-Control-Allow-Credentials: true
- Access-Control-Allow-Origin: https://www.youtube.com
- Access-Control-Expose-Headers: Client-Protocol, Content-Length, X-Walltime
- Cache-Control: private, max-age=21299
- Connection: keep-alive
- Content-Length: 108537
- Content-Type: video/mp4
- Date: Mon, 06 May 2019 11:51:53 GMT
- Expires: Mon, 06 May 2019 11:51:53 GMT
- Last-Modified: Mon, 04 Aug 2014 12:05:06 GMT
- Server: gws 1.0
- Timing-Allow-Origin: https://www.youtube.com
- X-Content-Type-Options: nosniff
- X-Request-Format: Hint: None

Figure 2.1.2.3: Video Source 2: MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата ДНР. (Web Inspector view) - Last Modified 4th Aug 2014

Project-MH17



File Edit View History Bookmarks Tools Help


MH17 crash: leaked tape prove... X +

← → ↻ 🏠 <https://www.youtube.com/watch?v=T34AB6CImTE>

☰ YouTube MY Search

MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.

13,510 views 199 52 SHARE SAVE ...

 **Sounds Russia**
Published on Jul 26, 2014

Video 2 showing published on Jul 26, 2014

SUBSCRIBE 1.3K

Shortly after the crash of Malaysian Flight MH17, the Ukrainian Security Service (SBU) released a video on YouTube, claiming it was intercepted calls between Eastern rebels discussing how the plane was shot down. SBU said this proved that the rebels were behind the downing of the plane. However, a technical analysis of the sound in the video proves the recording is manufactured, hence being fake!

The analysis is made in Adobe Audition and shows multiple flaws such as merges, background noise coming and going, the endings of the words being cut off and many other things.

To verify for yourself, just extract the audio from the video uploaded by the Security Service of Ukraine (SBU) on their YouTube channel: <https://www.youtube.com/watch?v=V5E8k...>

Figure 2.1.2.4: Video Source 2: MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР. (Web Inspector view) - Published on Jul 26, 2014



Project-MH17

2.2 Video Acquisition and Verification

YouTube has copyright of all YouTube videos and the permission to download the video file is restricted (nodownload) as shown in Figure 2.1.1.2 and Figure 2.1.2.2. The acquisition was done using a third-party website <https://y2mate.com/> to acquire the two subject videos. This website maintains highest integrity of YouTube downloaded video files. Refer to Table 2.2.1 showing the acquired file.

Acquisition was done using two tools,

- i. FAW Project – FAW Professional
- ii. Magnet – WPS

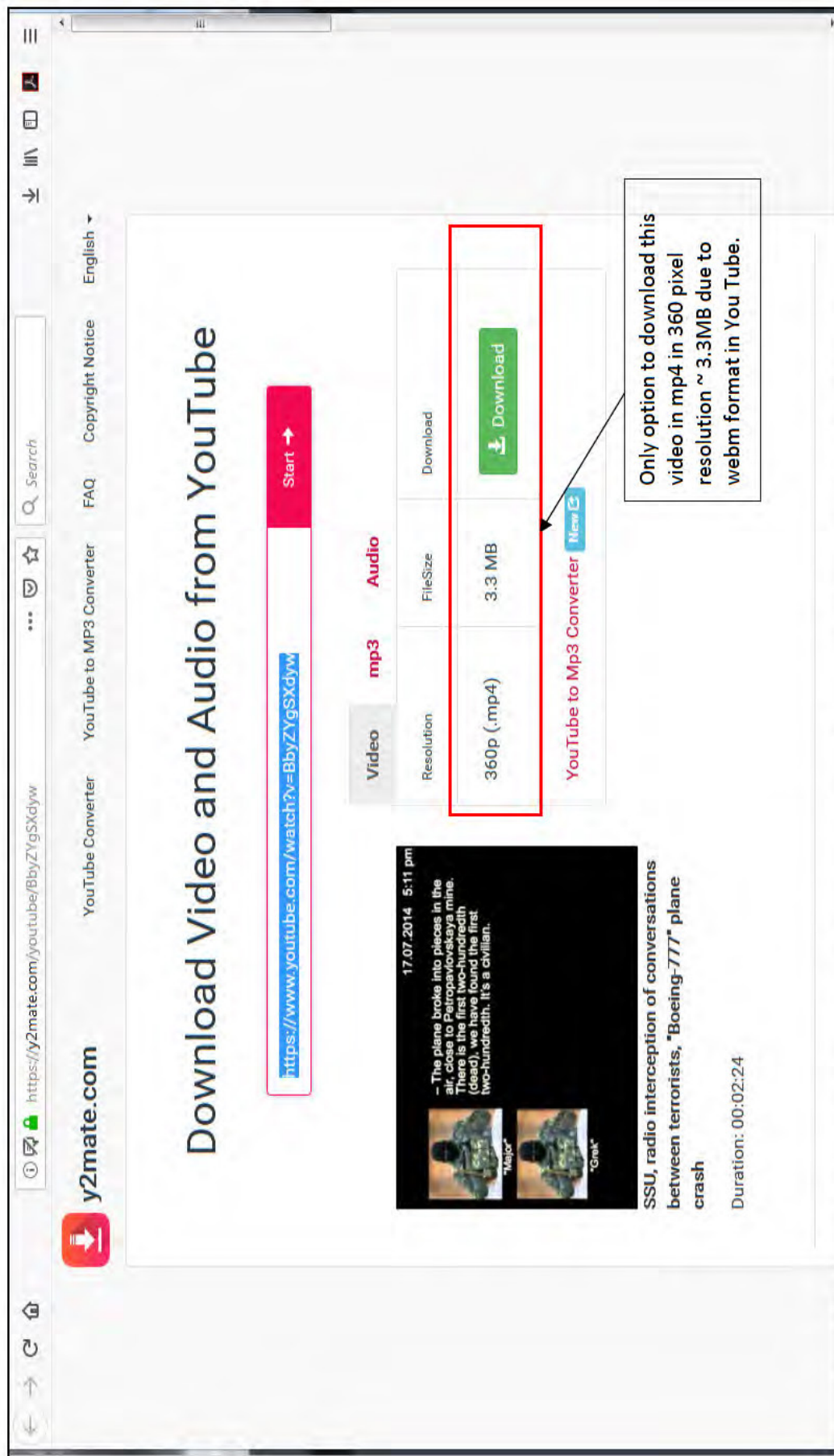


Figure 2.2.1: Video 1 - SSU, radio interception of conversations between terrorists, "Boeing-777" plane crash.mp4 - Downloading



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Multiple choice of download option

Resolution	File Size	Download
1080p (.mp4) full-HD	74.7 MB	Download
720p (.mp4) m-HD	41.6 MB	Download
360p (.mp4)	20.7 MB	Download

YouTube to Mp3 Converter

MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.
Duration: 00:08:06

Figure 2.2.2 MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР .mp4

Project-MH17



Table 2.2.1: Acquired (downloaded) Video Files Details

	Video 1	Video 2
Acquired Video Source File Name:	SSU,radio interception of conversations between terrorists, "Boeing-777" plane crash.mp4	MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4
Checksum Value: MD5:	43DC84D53A31B73E0D2188E9300E051F	725F08830E3D7782DF9248CE5F0DE5A4

Acquisition Details:

Start time: 13/4/2019 4:53:20 PM

[13/4/2019 4:53:20 PM] Setting up HTML index files...done.

[13/4/2019 4:53:20 PM] Starting capture...

[13/4/2019 4:53:20 PM] Capturing <https://www.youtube.com/watch?v=BbyZYgSXdyw>[13/4/2019 4:53:24 PM] Successfully captured <https://www.youtube.com/watch?v=BbyZYgSXdyw>[13/4/2019 4:53:24 PM] Capturing <https://www.youtube.com/watch?v=T34AB6CImTE>[13/4/2019 4:53:28 PM] Successfully captured <https://www.youtube.com/watch?v=T34AB6CImTE>

[13/4/2019 4:53:28 PM] Finished.



Project-MH17

- i. SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4

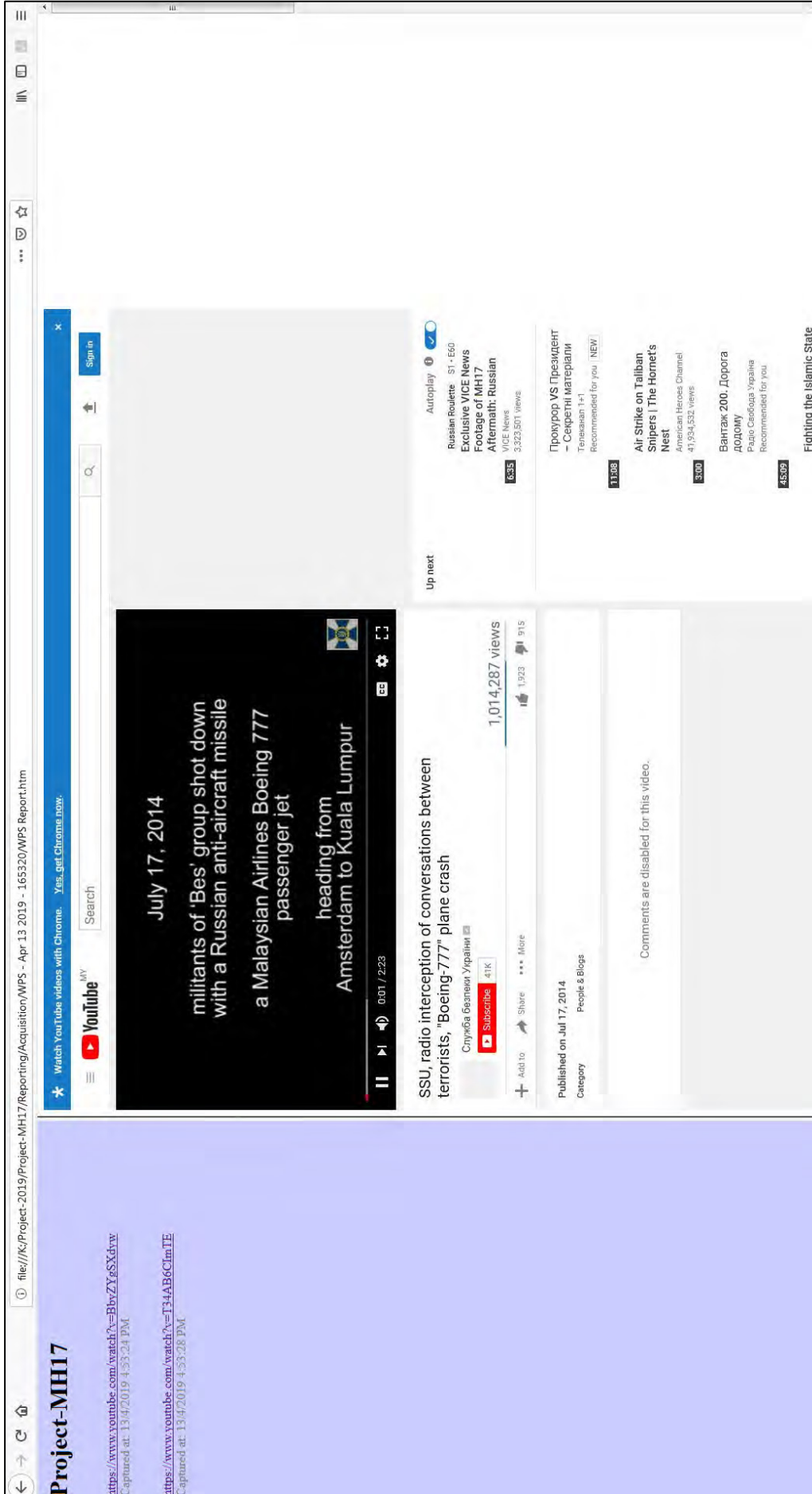


Figure 2.1.1: Video 1 - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 (acquisition using Magnet WPS)

Project-MH17

Acquisition Details:

Software FAW version: 7.9.0.0 PROFESSIONAL

Owner: Akash Rosen - OG IT Forensic Services - akash@ogitforensics.com

URL: <https://www.youtube.com/watch?v=BbyZYgSXdyw>

Host: www.youtube.com

IP Host: 216.58.196.46

User Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 6.2; WOW64; Trident/7.0; .NET4.0C; .NET4.0E; .NET CLR 2.0.50727; .NET CLR 3.0.30729; .NET CLR 3.5.30729)

Capture Date/Time start UTC: 2019-04-15T09:15:27

Capture Date/Time end UTC: 2019-04-15T09:15:36

Capture Date/Time start computer time: 2019-04-15T17:15:27+0800

Capture Date/Time end computer time: 2019-04-15T17:15:36+0800

Ntp Server: Local machine

Is in use proxy: False

Proxy: www.google.com

DNS Local Machine 8.8.8.8

ExternalIpMachine:

Case ID: 20190415171057

Acquisition ID: 20190415171057#00001



Project-MH17

ii. MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4

Project-MH17

<https://www.youtube.com/watch?v=BbvZYgSXdvw>
Captured at: 13/4/2019 4:53:24 PM

<https://www.youtube.com/watch?v=T34AB6CimTE>
Captured at: 13/4/2019 4:53:28 PM

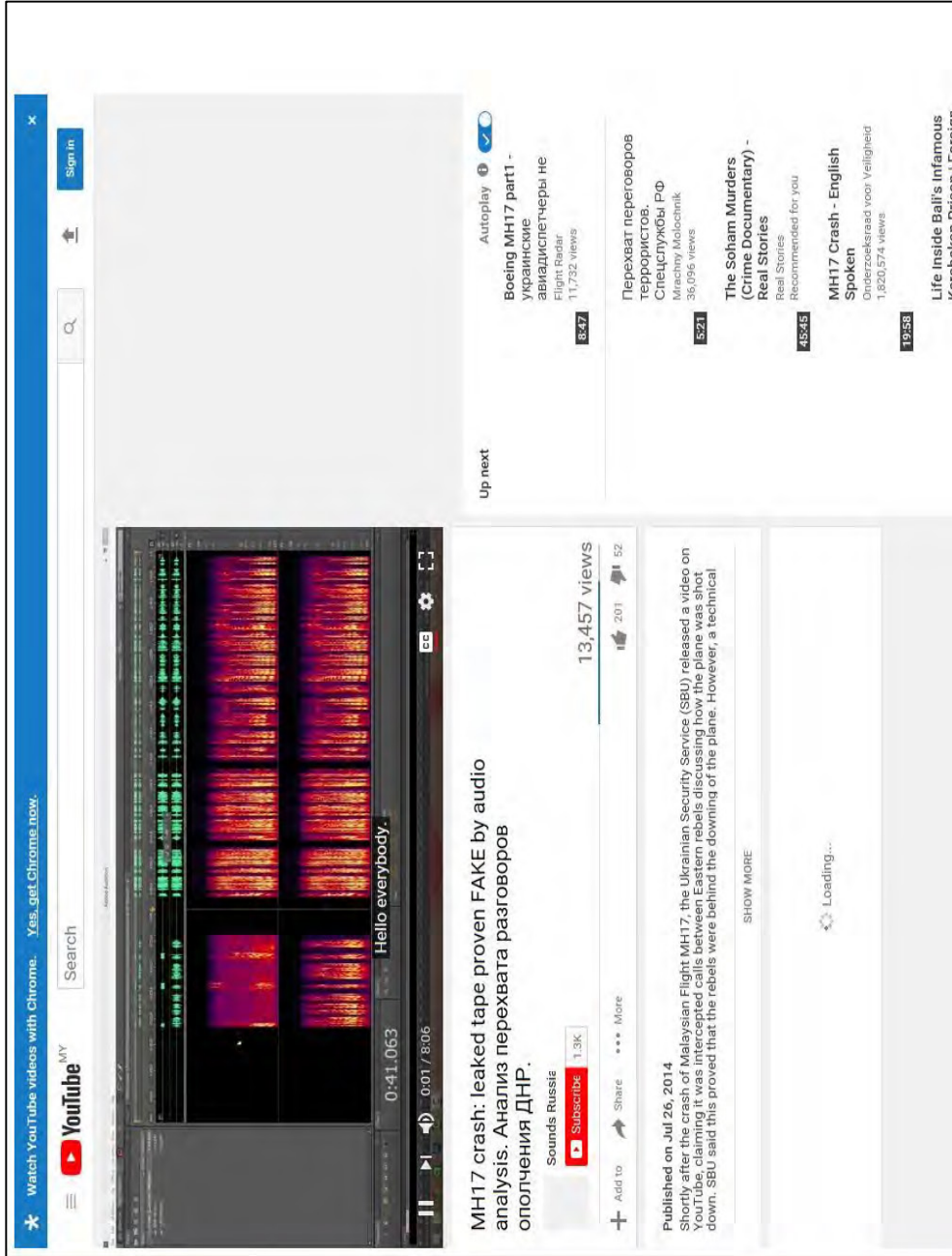


Figure 2.1.2: Video 2 - MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4 (acquisition using Magnet WPS)



Project-MH17

Software FAW version: 7.9.0.0 PROFESSIONAL
Owner: Akash Rosen - OG IT Forensic Services - akash@ogitforensics.com
URL: <https://www.youtube.com/watch?v=T34AB6CImTE>
Host: www.youtube.com
IP Host: 216.58.196.46
User Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 6.2; WOW64; Trident/7.0; .NET4.0C; .NET4.0E; .NET CLR 2.0.50727; .NET CLR 3.0.30729; .NET CLR 3.5.30729)
Capture Date/Time start UTC: 2019-04-15T09:18:16
Capture Date/Time end UTC: 2019-04-15T09:18:25
Capture Date/Time start computer time: 2019-04-15T17:18:16+0800
Capture Date/Time end computer time: 2019-04-15T17:18:25+0800
Ntp Server: Local machine
Is in use proxy: False
Proxy: www.google.com
DNS Local Machine 8.8.8.8
Case ID: 20190415171057
Acquisition ID: 20190415171057#00002



Project-MH17

3.0 Video File Analysis and Audio Findings Statements

This section covers both Video files and Audio file finding statements.

3.1 Video File Analysis and Statements

- i. Two video files were acquired (downloaded) from YouTube video medial channel. Both Video 1 and Video 2 are referred as below (Refer to Table 2.2.1).
 - a. Video 1 - SSU, radio interception of conversations between terrorists, "Boeing-777" plane crash
 - URL: <https://www.youtube.com/watch?v=BbyZYgSXdyw>
 - Original Format: WeBM - audiovisual media file format
 - Option to Download only with Resolution of 360 pixel at size of 3.3 MB. Refer to Figure 2.1.1.2
 - Downloaded file for analysis: SSU,radio interception of conversations between terrorists, "Boeing-777" plane crash.mp4 (Refer to Table 2.2.1)
 - MD5: 43DC84D53A31B73E0D2188E9300E051F
 - b. Video 2 - MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.
 - URL: <https://www.youtube.com/watch?v=T34AB6CImTE>
 - Format: MP4 - MPEG-4 Part 14
 - Option to Download with multiple choice resolution of 360 pixel, 720 pixel and 1080 pixel. This is due to the quality of video uploaded into YouTube channel. Refer to Figure 2.1.1.2
 - Downloaded file for analysis: MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4 (Refer to Table 2.2.1)
 - MD5: 725F08830E3D7782DF9248CE5F0DE5A4
- ii. In YouTube channel media, both video file (Video 1 and Video 2) was set to "no download". Refer to Figure 2.1.1.2 and Figure 2.1.2.2 showing the setting in YouTube media channel. However, the acquisition of the video was done using a third-party tool <https://y2mate.com/>, FAW Project – FAW Professional and Magnet – WPS. Refer to Figure 2.2 showing the video Acquisition and Verification.
- iii. Analysis on both videos date published and date when exactly created showing inconsistency of dates. Published date is much earlier than last modified date, both videos had be modified.
 - a. Video 1
 - Showing Published date on 17th Jul 2014



Project-MH17

- Last Modified Date: 1st Nov 2018 (Similar with Date Encoded/Tagged Date)

Note: This clearly indicated, the video had been modified and it is clearly showing tampered had happen.

b. Video 2

- Showing Published date on Jul 26, 2014

- Last Modified Date: 4th Aug 2014

- iv. Video 1 - "SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4" which contain the intercepted audio tracks (aired by SSU) was tagged/encoded on the 01/11/2018 ~ 02:44:30 (UTC). This is the only valid information were seen to be genuine. Refer to Table 3.1.1 showing the detail metadata information from the video file.
- v. Detail of title of Video 1 showing that ISO Media file produced by Google Inc. Created on: 10/31/2018. Refer to Table 3.1.1 and Section 3.3 showing the metadata of Video 1.
- vi. MH17 flight fatal incident happened on the 17/07/2014, Video 1 was created after ~ 4 years 3 months of the recorded intercepted audio. Refer to Table 3.1.1 showing the detail metadata information from the video file.
- vii. There is basically no details of audio track and the the authenticity of the audio tracks file shown or added in the Video file metadata which was uploaded into You Tube social media channel. Refer to Table 3.1.1.
- viii. Analysis on Video 2, MH17 crash leaked tape proven FAKE by audio analysis.Анализ перехвата разговоров ополчения ДНР..mp4 were done at very high level due to the focus of analysis is on the content of Video 1. Video 2 is basically showing the audio tracks related in Video 1, but it does not show the last audio (Audio track 5). Refer to Section 4.0.



Project-MH17

Table 3.1.1: Video File Analysis – Metadata from Video Files

No	Video File Name	Metadata of the Video	Remarks	
1	Video 1: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 (Published 17/07/2014 in YouTube)	<p>Date Created 4/10/2019 13:26</p> <p>Date Modified 4/10/2019 13:26</p> <p>Date Access 4/10/2019 13:26</p> <p>Checksum Value (MD5) 43DC84D53A31B73E0D 2188E9300E051F</p> <p>Type Video</p> <p>Title ISO Media file produced by Google Inc. Created on: 10/31/2018.</p> <p>Compression mode Lossy</p> <p>Channels 2 (L/R)</p> <p>Audio Sampling Rate 44100 Khz</p> <p>Avg Bitrate 188 Kbps</p> <p>Date Published 17/07/2014</p>	<p>UTC 2018-11-01 02:44:30</p> <p>UTC 2018-11-01 02:44:30</p> <p>UTC 2019-04-10 05:26:33</p> <p>2019-03-08 17:14:59</p> <p>UTC 2019-04-10 05:26:33</p> <p>4/10/2019 13:26</p> <p>11/01/2018</p> <p>3.26 MiB</p> <p>mp42</p> <p>Base Media / Version 2</p> <p>1 Ref Frames</p> <p>00:02:23.778 (00:02:23:18)</p>	<p>i. Date Published (17/07/2014) does NOT match with date modified/date encoded – 11/01/2018. Tampered.</p> <p>ii. The encoded and Tagged date showing UTC 2018-11-01 02:44:30 which is after ~ 4 years 3 months incident of MH17 fatal incident.</p> <p>iii. Total of 3 audio segment with 5 audio tracks added/encoded into Video 1 audio stream and were uploaded into YouTube channel.</p> <p>iv. The audio tracks in the video are not the first/original source of original audio, hence these audio tracks cannot be accepted for analysis as they are not genuine and not from original recorded form regardless if this video is genuine.</p> <p>v. Uploaded in YouTube in WeBM format which had very high compression and low quality of audio (Lossy and exported file size 3.26 Mb).</p> <p>vi. The author of the video did not speak in the video only show text of transcript in English. No other speaker voice in the video except for the speakers in the 5 audio tracks.</p> <p>vii. Refer to Table 3.2.1 for audio stream analysis</p>



Project-MH17

2	Video 2: MH17 crash leaked tape proven FAKE by audio analysis. Аналіз перехвата розговорів ополчення ДНР..mp4 (Published 26/07/2014 in YouTube)	Date Created	4/10/2019 13:27	Encoded Date	Nil	vii. Refer to Section 3.3 showing the metadata of the Video 1. i. Raw Header showing video was last modified on 04/08/2014 ii. Similarly, audio tracks were added into this Video 2. iii. Video was paused to explain that the audio released by SBU was tampered, reasonable pauses from the speakers. ii. Background noise remains same throughout the audio stream. iii. This video was intent to show the edition on Video 1, but it does not show the last audio (Audio track 5). iv. Video Published and Date Last modified are not the same. v. Refer to Section 5.0.
		Date Modified	4/10/2019 13:41	Tagged Date	Nil	
		Date Access	4/10/2019 13:27	File Creation Date	UTC 2019-04-10 05:27:42	
		Checksum Value (MD5)	725F08830E3D7782DF9 248CE5F0DE5A4	File Creation Date (local)	4/10/2019 13:27	
		Type	Video	File Last Modification Date	UTC 2019-04-10 05:41:20	
		Compression mode	Lossy	File Last Modification Date (local)	4/10/2019 13:41	
		Channels	2 (L/R)	Raw Header Date Last Modified	4/08/2014	
		Audio Sampling Rate	44100 Khz	FileSize	74.85 MiB	
		Avg Bitrate	1.28 Mbps	Codec ID	isom	
		Date Published	28/07/2014	Format profile	Base Media	
				Format settings	High@L4	
				Duration	00:08:06.100 (00:08:06:03)	



Project-MH17

3.2 Audio Track Analysis and Finding Statements

- i. Video 1 " SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4" file (source from uploaded YouTube videos) analysis was focused more on the audio streams as the audio aired in the video was the intercepted recorded audio conversations.
- ii. There was no speaker in the video speaking before and after the aired audio conversation. It was intended to show the audio track with details who was speaking and the transcripts. Refer to Section 4.0.
- iii. The first main requirements and the dependencies for all audio tracks in the video file is the source and authenticity of the audio files. It is very important to know when the audio tracks were recorded, where it was recorded, how it was recorded/stored and how it was recorded. Since this information is not available and undetermined, none of the audio tracks in the video can't be accepted as a valid, genuine and authentic source of audio recording. Refer to statement iv. and v. Also refer to Table 3.1.1 and Table 3.2.1.
- iv. Analysis in Video 1 metadata or content does not show any original source of the audio tracks, none of the audio tracks are genuine. Refer to Table 3.1.1, Table 3.2.1 and Section 4.0.
- v. YouTube only shows the only details of Video files uploaded as listed in Table 2.1.1 and Table 3.1.1, it does not show the content of the audio track aired in the video container. There is basically no way to get the details of each audio tracks in the audio stream due to it was compress and added into single Video 1 container and uploaded into You Tube social media channel. Video 1 container showing as single audio of Stream# 0.1 (und) below. Refer to Section 3.3 showing Video 1 Metadata detail.

Stream #0.0(und): Video: h264, yuv420p, 480x360, 25 tbr, 25 tbn, 50 tbc
Stream #0.1(und): Audio: aac, 44100 Hz, stereo, s16
- vi. In a way, the audio stream (Stream #0.1) in Video 1 still holds the audio tracks (which was aired by SSU) which can be used analyze each audio tracks and verify the content of the audio. This analysis is based on the audio wave, the spectral of the speaker voice and the background noise floor which still can be analyzed of each audio tracks. Refer to Section 4.0 showing the audio stream analysis.
- vii. Analysis on Video 1 audio stream (Stream #0.1(und): Audio:) showing there are 5 intercepted audio tracks conversation which were added by SSU in the video file. Refer to Table 3.2.1 showing the details of each audio tracks. Refer to Section 4.0 showing the audio track analysis.



Project-MH17

Table 3.2.1: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash Intercepted Audio Tracks Analysis

Audio Aired in the Video	Audio Tracks	Parties in the Conversation	Audio Details	Remarks
Audio 1 Time Frame: 0:18.3 – 0:36.1 Total Duration: 0:18.368	Track-1 Time Frame: 0:18.3 – 0:36.1	- Total 2 Speakers - Speakers: I.Bezler ("Bes") and Vasyi Mykolaiovych Geranin (9031921428) (Refer Section 4.1)	i. 0:18.3 – 0:36.1 (recorded time as shown in the video 4:40 PM 17/07/2014) Refer Figure 4.1.6. ii. 2 person voices - I.Bezler and V. Geranin. iii. Source of recording/Channel Type: Telephone	- 2 difference channels a. Left Channel - I.Bezler b. Right Channel - V. Geranin - Background noise in the left channel track is different when V. Geranin speaks. - Recorded Audio is tampered, where possible cuts and edits can be seen. Refer Section 4.4.1 - Audio cannot be accepted for Voice ID Analysis. Refer to Table 4.5.1 (Voice ID Analysis) - This audio track is tampered and not genuine.
Audio 2 Time Frame: 0:43.3 – 1:49.0 Total Duration: 0:43.289	Track-2 Time Frame: 0:43.3 - 0:52.9	- Total 2 Speakers - Speakers: Major and Grek (Refer Section 4.2.1)	i. 0:43.3 – 0:52.9 (recorded time as shown in the video 4:33 PM 17/07/2014). Refer Figure 4.2.1.1. ii. 2 person voices - Major and Grek (Left and Right Channels) iii. Source of recording/Channel Type: Telephone	- Audio is tampered, 3 different tracks recorded in different timings and merged as one segment. - A new person voices start to appear instead of Grek's voice - A new person voices start to appear instead of Major's voice - Audio was cut between time frame 1.24.2 and 1.24.3. - Refer Section 4.4.2, 4.4.3 & 4.4.4 - Audio cannot be accepted for Voice ID Analysis Refer to Table 4.5.1 (Voice ID Analysis) - This audio tracks are tampered and not genuine.
Track-3 Time Frame: 0:54.5 - 1:08.0	- Total 2 Speakers - Speakers: Major and Grek (Refer Section 4.2.2)	i. 0:54.5 - 1:08.0 (recorded time as shown in the video 5:11 PM 17/07/2014). Refer Figure 4.2.2.1. ii. 2 person voices - Major and Grek (Left and Right Channels) iii. Source of recording/Channel Type: Telephone		
Track-4 Time Frame: 0:54.5 - 1:08.0	- Total 2 Speakers - Speakers: Major (Different Speaker) and Grek (Different Speaker) (Refer Section 4.2.3)	i. 1:09:4 - 1:49.0 (recorded time as shown in the video 5:32 PM 17/07/2014). Refer Figure 4.2.3.1. ii. 2 New person voices - Major and Grek (Left and Right Channels) iii. Source of recording/Channel Type: Telephone		



Project-MH17

<p>Audio 3 Time Frame: 1:50 - 2:22.8 Total Duration: 1:50.130</p>	<p>Track-5 Time Frame: 1:50 - 2:22.8</p>	<p>- Total 3 Speakers - Speakers: Kozitsyn and Militants (2 different militants speaker) (Refer Section 4.3)</p>	<p>i. 1:50 - 2:22.8 (recorded time as shown in the video 5:42 PM 17/07/2014). Refer Figure 4.3.2 ii. Militant 1, Militant 2 (Left Channel) and Kozitsyn (Right Channel) iii. Source of recording: Telephone</p>	<p>- Two different militants' voices are identified speaking to Kozitsyn, - Edits are seen in this audio track - Different frequencies in the militant track. No background voice appears in Kozitsyn track. - Refer Section 4.4.5 - Audio cannot be accepted for Voice ID Analysis Refer to Table 4.5.1 (Voice ID Analysis) - This audio track is tampered and not genuine.</p>
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- viii. The Audio 1 Track-1 spectral and noise analysis showing clear edition of the audio track (mono).
 - a. In Audio 1, Track-1 - I. Bezler ("Bes") and V. Geranin were talking in the conversation as per the video.
 - b. Bezler ("Bes") voice was recorded in right channel and V. Geranin was recorded in left channel. Original audio is actually a mono recording.
 - c. It is clearly seen in the spectral analysis in audio Track 1 that, V.Geranin voice and Bezler voice speaking at the same time. This making the real conversation being overlapped with one another at 0.18.5, 0:25.75 & 0:31:5. The noise level are seen different for V.Geranin. It is possible phrases were taken from a different conversation and merged. Refer Figure 4.4.1.1.
 - d. Frequency level in spectrogram appears in all three phrases are changing, first phrase appears very low, second phrase appears to be in high frequency, but middle spectrum was unseen, and third phrase shows medium frequency level. This shows phrases are from different conversations and a gap which appears at the end of third phrase uttered by V. Geranin in the Audio 1 Track-1 is clear indication that his voices were overlaid and merged into the conversation. Refer Section 4.4.1.
 - e. A gap which appears at the end of third phrase ~0:32.6 uttered by V. Geranin in the audio Track-1 (Left Channel) is a definite possible indication that Geranin voices are merged into the conversation. Audio spectral at 0:31.75 – 0:31.85 (Left Channel) showing added cut, paste and merger of other sound in this audio. Refer Figure 4.4.1.1.
 - f. Seen merged of audio at at 0:22.5, 0:23.5 and 0:30:5 (Refer to Figure 4.4.1.3). Different audio conversation starts at 0:23.30 (Refer to Figure 4.4.1.3).



Project-MH17

- g. Voice samples taken but not meeting the requirement for voice biometric analysis as it has very short speech below 15 second and the audio quality is low. Refer Table 4.5.1 and Table 4.5.2 showing the audio samples details.
 - i. Bezler's Audio recording (Refer to Section 4.5.1)
 - Frequency Response: ~ 2013 Hz
 - SNR 53 dB
 - Voice: 7.66 s
 - ii. V.Geranin's Audio recording
 - Frequency Response: ~ 3510 Hz
 - SNR 53 dB
 - Voice: 2.24 s
- ix. Audio 2 tracks spectral and noise analysis showing edition of the audio (Stereo);
 - a. The audio tracks are in stereo where both left and right channel are similar.
 - b. Analysis in Audio 2, Track-2 showing difference level of background noise level indication tampering of the audio at audio duration between ~0:43.3 – 0:52.9. Refer Figure 4.4.2.1.
 - c. In Audio 2, Track-3, spectrograms show there were cuts and merging of conversation in this part from ~0:58:75 and 0:59:0. At ~0:58.85 another difference noise were seen. Refer Figure 4.4.3.1.
 - d. In Audio 2, Track-3, second cut and merging can be seen between ~1:03.85 and 1:04.55. The background noise suddenly appears at this duration doesn't fit to both the speakers' atmosphere. Refer Figure 4.4.3.2.
 - e. In Audio 2, Track-4, third cut and merging can be seen between ~1:13.55 and 1:13.5. The background noise suddenly appears at this duration doesn't fit to both the speakers' atmosphere. Refer Figure 4.4.4.1.
 - f. In Audio 2, Track-4, fourth cut and merging can be seen between ~1:15.20 and 1:16.20. The background noise suddenly appears at this duration doesn't fit to both the speakers' atmosphere. Refer Figure 4.4.4.1.
 - g. In Audio 2, Track-4, fifth cut and merging can be seen between ~1:18.80 and 1:19.30. The background noise suddenly appears at this duration doesn't fit to both the speakers' atmosphere. Refer Figure 4.4.4.2.



Project-MH17

- h. In Audio 2, Track-4, failed to overlay the merging of other audio between time frame ~1.24.2 and 1.24.3, editing is very clear at this part. Another merging between ~1:24.50 and 1:24.85. obvious editing failure can be seen. Refer Figure 4.4.4.3
- i. In Audio 2, Track-4, a new speaker (militant) voice appeared instead of Grek and Major voice speaking between ~1:09.5 and 1:49.0. However, SBU stated that the conversation was between Major and Grek. Refer Figure 4.4.4.4.
- j. Voice samples were taken for details voice analysis but none of the voices are meeting the requirement for voice biometric analysis as it has very short speech below 15 second and the audio quality is low. Refer Table 4.5.1 and Table 4.5.2 showing the audio samples details.
 - a. Audio 2, Track 2 (Refer to Section 4.5.2)
 - i. Grek's Audio recording
Frequency Response: ~2692 Hz
SNR 13 dB
Voice: 0.51 s
 - ii. Major's Audio recording
Frequency Response: ~2810 Hz
SNR 24 dB
Voice: 4.13 s
 - b. Audio 2, Track 3 (Refer to Section 4.5.3)
 - i. Grek's Audio recording
Frequency Response: ~1744 Hz
SNR 16 dB
Voice: 0.54 s
 - ii. Major's Audio recording
Frequency Response: ~2627 Hz
SNR 34 dB
Voice: 5.11 s
 - c. Audio 2 - Track 4 (Refer to Section 4.5.4)
 - i. Grek's Audio recording
Frequency Response: ~2110 Hz
SNR 38 dB
Voice: 3.99 s



Project-MH17

ii. Major's Audio recording

Frequency Response: ~2918 Hz

SNR 34 dB

Voice: 12.70 s

- x. Audio 3 track spectral and noise analysis showing edition of the audio (mono);
- a. Original audio track is a mono recording channel.
 - b. Audio 3 Track-5 begins from ~1:50.2 and ends at ~2:22.8. This segment of audio has 3 different individual voices heard, it appears to be two different militants speaking to Kozitsyn, SBU didn't say anything about this in their video. Refer Figure 4.4.5.1
 - c. Militant voice between ~1:50.15 and ~2:02.93 is not the same as Militant voice appears after ~2:02.98 till the end of the audio. It is clear the merging can be seen between ~2:02.94 and 2:02.97, also sudden difference in the spectrum frequency from ~2:02:98 in Left Channel. Refer Figure 4.4.5.2
 - d. Surprising to see that no background noise was seen in the Kozitsyn track, generally it can be seen in the half duplex (walkie talkie) conversations. It is clear indication the audio track of Kozitsyn was merged and background voices appears from ~2:12.3 until 2:22.28. Refer Figure 4.4.5.3.
 - e. Editing can be seen between time frame ~2:12.6 and 2:14.2, suddenly left channel's spectrum appearing in the right channel – this is clear editing. Refer Figure 4.4.5.3.
 - f. Voice Sample taken but not meeting the requirement for voice biometric analysis as it has very short speech below 15 second and the audio quality is low. Refer Table 4.5.1 and Table 4.5.2 showing the audio samples details.
 - a. Audio 3 - Track 5 (Refer to Section 4.5.5)
 - i. Kozitsyn's Audio recording

Frequency Response: ~2207 Hz

SNR 23 dB

Voice: 3.59 s
 - ii. Militant 1 Audio recording

Frequency Response: ~2186 Hz

SNR 35 dB

Voice: 6.02 s



Project-MH17

iii. Militant 2 Audio recording

Frequency Response: ~2885 Hz

SNR 37 dB

Voice: 6.64 s

- xi. Analysis on Video 2, MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4 were done at very high level.
- i. There were many pauses/mutes in the audio stream of Video 2.
 - ii. Pauses/Mute were reasonable in the audio as the speaker was explaining the audio released by the SBU.
 - iii. Original audio seems to be a mono recording.
 - iv. There is only one speaker explaining about the audio released by SBU.
 - v. Voices from the audio released by SBU was played in the video to explain about the tampering.
 - vi. The speaker in Video 2 didn't cover Audio 3, Track-5. The focus of this case is to analyze audio tracks in Video 1. Video 2 is just a reference. Refer to Section 5.0



Project-MH17

3.3 Video 1 Metadata - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4

Details of this video showing below streams using FFmpeg;

Input #0, mov,mp4,m4a,3gp,3g2,mj2, from 'SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4':

Duration: 00:02:23.77, start: 0.000000, bitrate: 190 kb/s

Stream #0.0(und): Video: h264, yuv420p, 480x360, 25 tbr, 25 tbn, 50 tbc

Stream #0.1(und): Audio: aac, 44100 Hz, stereo, s16

For the audio analysis, the audio stream - Stream #0.1(und): Audio: aac, 44100 Hz, stereo, s16 was taken for analysis into the forensic tool.

The audio channel is stereo, 44Khz and the audio code is AAC (Advance Audios Coding). There are 5 audio conversation track as mention in Table 3.1.1



Project-MH17

```

E:\Projects-2019\Project-MH17\DownloadSource>MediaInfo.exe -f 'SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4'
General
Count                               : 330
Count of stream of this kind         : 1
Kind of stream                       : General
Kind of stream                       : General
Stream identifier                    : 0
Count of video streams               : 1
Count of audio streams               : 1
Video_Format_List                    : AAC
Video_Format_WithHint_List          : AAC
Codecs Video                         : AAC
Audio_Format_List                    : AAC
Audio_Format_WithHint_List          : AAC
Audio codecs                         : AAC LC
Complete name                        : SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4
File name                            : SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4
File name                            : SSU, radio interception of conversations between terrorists, Boeing-777 plane crash
File extension                       : mp4
Format                               : MPEG-4
Format                               : MPEG-4
Format/Extensions usually used       : mov mp4 m4v n4a n4b m4p 3ga 3gpa 3gpp 3gp 3gpp2 3g2 k3g jpm jpx nqv ismv isna isnt f4a f4b f4v
Commercial name                     : MPEG-4
Format profile                       : Base Media / Version 2
Internet media type                  : video/mp4
Codec ID                             : mp42
Codec ID                             : mp42 (isom/mp42)
Codec ID/Url                         : http://www.apple.com/quicktime/download/standalone.html
CodecID_Compatible                  : isom/mp42
Codec                                : MPEG-4
Codec                                : MPEG-4
Codec/Extensions usually used       : mov mp4 m4v n4a n4b m4p 3ga 3gpa 3gpp 3gp 3gpp2 3g2 k3g jpm jpx nqv ismv isna isnt f4a f4b f4v
File size                            : 3415646
File size                            : 3.26 MiB
File size                            : 3 MiB
File size                            : 3.3 MiB
File size                            : 3.26 MiB
File size                            : 3.257 MiB
Duration                             : 143778
Duration                             : 2 min 23 s
Duration                             : 2 min 23 s 778 ns
Duration                             : 2 min 23 s
Duration                             : 00:02:23.778
Duration                             : 00:02:23.18
Duration                             : 00:02:23.778 (00:02:23:18)
Overall bit rate mode                : VBR
Overall bit rate mode                : Variable
Overall bit rate                     : 190051
Overall bit rate                     : 190 kb/s
Frame rate                           : 25.000
Frame rate                           : 25.000 FPS
Frame count                          : 3593
Stream size                          : 44028
Stream size                          : 43.0 KiB (1x)
Stream size                          : 43 KiB
Stream size                          : 43 KiB
Stream size                          : 43.0 KiB
Stream size                          : 43.00 KiB
Stream size                          : 43.0 KiB (1x)
Proportion of this stream           : 0.01289
Header$size                          : 44028
Data$size                            : 3371626
Footer$size                          : 0
IsStreamable                         : Yes
Encoded date                         : UTC 2018-11-01 02:44:30
Tagged date                          : UTC 2018-11-01 02:44:30
File creation date                   : UTC 2017-04-10 05:26:33.173
File creation date (local)           : 2017-04-10 13:26:33.173
File last modification date          : UTC 2017-04-10 05:26:33.235
File last modification date (local)  : 2017-04-10 13:26:33.235

Video
Count                               : 344
Count of stream of this kind         : 1
Kind of stream                       : Video
Kind of stream                       : Video
Stream identifier                    : 0
StreamOrder                          : 0
ID                                    : 1

```

Encoded/Tag Date showing
UTC 2018-11-01 02:44:30

Figure 3.3.1a: MediaInfo results SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4



Project-MH17

```

StreamOrder      : 0
ID               : 1
ID              : 1
Format          : AVC
Format/Info     : Advanced Video Codec
Format/Url      : http://developers.videolan.org/x264.html
Commercial name : AVC
Format profile  : Baseline@L2.1
Format settings : 1 Ref Frames
Format settings, CABAC : No
Format settings, CABAC : No
Format settings, RefFrames : 1
Format settings, RefFrames : 1 frame
Internet media type : video/H264
Codec ID       : avc1
Codec ID/Info  : Advanced Video Coding
Codec         : AVC
Codec        : AVC
Codec/Family  : AVC
Codec/Info   : Advanced Video Codec
Codec/Url    : http://developers.videolan.org/x264.html
Codec/CG     : avc1
Codec profile : Baseline@L2.1
Codec settings : 1 Ref Frames
Codec settings, CABAC : No
Codec Settings_RefFrames : 1
Duration     : 143720
Duration    : 2 min 23 s
Duration    : 2 min 23 s 720 ms
Duration    : 2 min 23 s
Duration    : 00:02:23.720
Duration    : 00:02:23:18
Duration    : 00:02:23.720 (00:02:23:18)
Bit rate    : 91638
Bit rate    : 91.6 kb/s
Width       : 480
Width       : 480 pixels
Height      : 360
Height      : 360 pixels
Stored_Height : 368
Sampled_Width : 480
Sampled_Height : 360
Pixel aspect ratio : 1.000
Display aspect ratio : 1.333
Display aspect ratio : 4:3
Rotation    : 0.000
Frame rate mode : CFR
Frame rate mode : Constant
FrameRate_Mode_Original : VFR
Frame rate    : 25.000
Frame rate    : 25.000 FPS
Frame count   : 3593
Resolution   : 0
Resolution   : 8 bits
Colorimetry  : 4:2:0
Color space  : YUV
Chroma subsampling : 4:2:0
Chroma subsampling : 4:2:0
Bit depth    : 8
Bit depth    : 8 bits
Scan type    : Progressive
Scan type    : Progressive
Interlacement : PPP
Interlacement : Progressive
Bits/(Pixel*Frame) : 0.021
Stream size  : 1646283
Stream size  : 1.57 MiB (48%)
Stream size  : 2 MiB
Stream size  : 1.6 MiB
Stream size  : 1.57 MiB
Stream size  : 1.570 MiB
Stream size  : 1.57 MiB (48%)
Proportion of this stream : 0.48198
Title       : IS0 Media file produced by Google Inc. Created on: 10/31/2018.
Encoded date : UTC 2018-11-01 02:44:30
Tagged date  : UTC 2018-11-01 02:44:30

Audio
Count       : 275
Count of stream of this kind : 1
Kind of stream : Audio

```

Figure 3.3.1b: MediaInfo results of video stream of SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 is produced by Google Inc.



Project-MH17

```

Colorimetry           : 4:2:0
Color space           : YUV
Chroma subsampling    : 4:2:0
Chroma subsampling    : 4:2:0
Bit depth             : 8
Bit depth             : 8 bits
Scan type             : Progressive
Scan type             : Progressive
Interlacement         : PFF
Interlacement         : Progressive
Bits/(Pixel*Frame)    : 0.021
Stream size           : 1646283
Stream size           : 1.57 MiB (48%)
Stream size           : 2 MiB
Stream size           : 1.6 MiB
Stream size           : 1.57 MiB
Stream size           : 1.570 MiB
Stream size           : 1.57 MiB (48%)
Proportion of this stream : 0.48198
Title                 : ISO Media file produced by Google Inc. Created on: 10/31/2018.
Encoded date          : UTC 2018-11-01 02:44:30
Tagged date           : UTC 2018-11-01 02:44:30

Audio
Count                 : 275
Count of stream of this kind : 1
Kind of stream        : Audio
Kind of stream        : Audio
Stream identifier     : 0
StreamOrder           : 1
ID                    : 2
ID                    : 2
Format                : AAC
Format/Info           : Advanced Audio Codec
Commercial name       : AAC
Format profile        : LC
Codec ID              : mp4a-40-2
Codec                 : AAC LC
Codec                 : AAC LC
Codec/Family          : AAC
Codec/CC              : 40
Duration              : 143778
Duration              : 2 min 23 s
Duration              : 2 min 23 s 778 ms
Duration              : 2 min 23 s
Duration              : 00:02:23.778
Duration              : 00:02:24:00
Duration              : 00:02:23.778 (00:02:24:00)
Bit rate mode         : VBR
Bit rate mode         : Variable
Bit rate              : 96000
Bit rate              : 96.0 kb/s
Channel(s)            : 2
Channel(s)            : 2 channels
Channel positions     : Front: L R
Channel positions     : 2/0/0
Channellayout        : L R
Samples per frame     : 1024
Sampling rate         : 44100
Sampling rate         : 44.1 kHz
Samples count         : 6340610
Frame rate            : 43.066
Frame rate            : 43.066 FPS (1024 SPP)
Frame count           : 6192
Compression mode      : Lossy
Compression mode      : Lossy
Stream size           : 1725335
Stream size           : 1.65 MiB (51%)
Stream size           : 2 MiB
Stream size           : 1.6 MiB
Stream size           : 1.65 MiB
Stream size           : 1.645 MiB
Stream size           : 1.65 MiB (51%)
Proportion of this stream : 0.50513
Title                 : ISO Media file produced by Google Inc. Created on: 10/31/2018.
Encoded date          : UTC 2018-11-01 02:44:30
Tagged date           : UTC 2018-11-01 02:44:30

```

Figure 3.3.1c: MediaInfo results of audio stream of SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 is produced by Google Inc.



Project-MH17

```

E:\Projects-2019\Project-MH17\DownloadSource>exiftool.exe "SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4"
ExifTool Version Number      : 10.04
File Name                    : SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4
Directory                    :
File Size                    : 3.3 MB
File Modification Date/Time   : 2019:04:10 13:26:33+08:00
File Access Date/Time        : 2019:04:10 13:26:33+08:00
File Creation Date/Time      : 2019:04:10 13:26:33+08:00
File Permissions              : rw-rw-rw-
File Type                    : MP4
File Type Extension          : mp4
MIME Type                    : video/mp4
Major Brand                   : MP4 v2 [ISO 14496-14]
Minor Version                 : 0.0.0
Compatible Brands             : isom, mp42
Movie Header Version         : 0
Create Date                   : 2018:11:01 02:44:30
Modify Date                   : 2018:11:01 02:44:30
Time Scale                    : 1000
Duration                      : 0:02:23
Preferred Rate                : 1
Preferred Volume              : 100.00%
Preview Time                  : 0 s
Preview Duration              : 0 s
Poster Time                   : 0 s
Selection Time                : 0 s
Selection Duration            : 0 s
Current Time                  : 0 s
Next Track ID                 : 3
Track Header Version         : 0
Track Create Date             : 2018:11:01 02:44:30
Track Modify Date             : 2018:11:01 02:44:30
Track ID                      : 1
Track Duration                : 0:02:23
Track Layer                   : 0
Track Volume                  : 0.00%
Image Width                   : 480
Image Height                  : 360
Compressor ID                 : avc1
Source Image Width            : 480
Source Image Height           : 360
X Resolution                  : 72
Y Resolution                  : 72
Bit Depth                     : 24
Video Frame Rate              : 25
Graphics Mode                 : srcCopy
Op Color                      : 0 0 0
Matrix Structure              : 1 0 0 0 1 0 0 0 1
Media Header Version         : 0
Media Create Date             : 2018:11:01 02:44:30
Media Modify Date             : 2018:11:01 02:44:30
Media Time Scale              : 44100
Media Duration                : 0:02:23
Media Language Code          : und
Handler Type                  : Audio Track
Handler Description           : ISO Media file produced by Google Inc. Created on: 10/31/2018.
Audio Format                   : mp4a
Audio Channels                 : 2
Audio Bits Per Sample         : 16
Audio Sample Rate             : 44100
Balance                       : 0
Movie Data Size               : 3371610
Movie Data Offset             : 44028
Avg Bitrate                   : 188 kbps
Image Size                    : 480x360
Megapixels                    : 0.173
Rotation                      : 0

```

Figure 3.3.2: Metadata (ExifInfo) results of audio stream of SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 is produced by Google Inc.



Project-MH17

3.4 Video 2 Metadata - MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4

Details of this video showing below streams using FFmpeg;

Input #0, mov, mp4, m4a, 3gp, 3g2, mj2, from 'MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4':

Duration: 00:08:06.20, start: 0.000000, bitrate: 1291 kb/s

Stream #0.0(und): Video: h264, yuv420p, 1920x1080, PAR 1:1 DAR 16:9, 30 tbr, 30 tbn, 60 tbc

Stream #0.1(und): Audio: aac, 44100 Hz, stereo, s16

For the audio analysis, the audio stream - Stream #0.1(und): Audio: aac, 44100 Hz, stereo, s16 was taken for analysis into the forensic tool.

The audio channel is stereo, 44Khz and the audio code is AAC (Advance Audios Coding).

Project-MH17



```

Windows Command Processor
E:\Projects-2019\Project-MH17\DownloadSource\MediaInfo.exe -f "MH17 crash leaked tape proven FAKE by audio analysis. ?????? ?????????? ?????????? ?????????? ???..mp4"
General
Count                               : 330
Count of stream of this kind        : 1
Kind of stream                       : General
Kind of stream                       : General
Stream identifier                    : 0
Count of video streams               : 1
Count of audio streams               : 1
Video_Format_List                    : AAC
Video_Format_WithHint_List          : AAC
Codecs Video                         : AAC
Audio_Format_List                    : AAC
Audio_Format_WithHint_List          : AAC
Audio codecs                         : AAC LC
Complete name                       : MH17 crash leaked tape proven FAKE by audio analysis. ?????? ?????????? ?????????? ?????????? ???..mp4
File name                            : MH17 crash leaked tape proven FAKE by audio analysis. ?????? ?????????? ?????????? ?????????? ???..mp4
File name                            : MH17 crash leaked tape proven FAKE by audio analysis. ?????? ?????????? ?????????? ?????????? ???..mp4
File extension                       : mp4
Format                               : MPEG-4
Format                               : MPEG-4
Format/Extensions usually used       : mov mp4 m4v m4a m4b m4p 3ga 3gpa 3gpp 3gp 3gpp2 3g2 k3g jpm jpx mqv ismv isna isnt f4a f4b f4v
Commercial name                     : MPEG-4
Format profile                       : Base Media
Internet media type                  : video/mp4
Codec ID                             : ison
Codec ID                             : ison (ison/iso2/avc1/mp41)
Codec ID/Url                         : http://www.apple.com/quicktime/download/standalone.html
CodecID_Compatible                   : ison/iso2/avc1/mp41
Codec                                : MPEG-4
Codec                                : MPEG-4
Codec/Extensions usually used       : mov mp4 m4v m4a m4b m4p 3ga 3gpa 3gpp 3gp 3gpp2 3g2 k3g jpm jpx mqv ismv isna isnt f4a f4b f4v
File size                            : 78481729
File size                            : 74.8 MiB
File size                            : 75 MiB
File size                            : 75 MiB
File size                            : 74.8 MiB
File size                            : 74.85 MiB
Duration                             : 486203
Duration                             : 8 min 6 s
Duration                             : 8 min 6 s 203 ms
Duration                             : 8 min 6 s
Duration                             : 00:08:06.203
Duration                             : 00:08:06.03
Duration                             : 00:08:06.203 (00:08:06.03)
Overall bit rate                     : 1291341
Overall bit rate                     : 1 291 kb/s
Frame rate                           : 30.000
Frame rate                           : 30.000 FPS
Frame count                          : 14583
Stream size                          : 515321
Stream size                          : 503 KiB (1%)
Stream size                          : 503 KiB
Stream size                          : 503 KiB
Stream size                          : 503 KiB
Stream size                          : 503.2 KiB
Stream size                          : 503 KiB (1%)
Proportion of this stream            : 0.00657
HeaderSize                           : 40
DataSize                             : 77966416
FooterSize                           : 515273
IsStreamable                         : No
File creation date                   : UTC 2019-04-10 05:27:42.899
File creation date (local)           : 2019-04-10 13:27:42.899
File last modification date          : UTC 2019-04-10 05:41:20.473
File last modification date (local)  : 2019-04-10 13:41:20.473
Writing application                   : Lavf58.22.100
Writing application                   : Lavf58.22.100

Video
Count                               : 344
Count of stream of this kind        : 1
Kind of stream                       : Video
Kind of stream                       : Video
Stream identifier                    : 0
StreamOrder                          : 0
ID                                    : 1
ID                                    : 1
Format                               : AAC
Format/Info                          : Advanced Video Codec

```

Figure 3.4.1a : MediaInfo results of MH17 crash leaked tape proven FAKE by audio analysis.Анализ перехвата разговоров ополчения ДНР..mp4

Project-MH17



```

Windows Command Processor
Format/Info           : Advanced Video Codec
Format/Url            : http://developers.videolan.org/x264.html
Commercial name      : AVC
Format profile        : High@L4
Format settings       : CABAC / 3 Ref Frames
Format settings, CABAC : Yes
Format settings, CABAC : Yes
Format settings, ReFrames : 3
Format settings, ReFrames : 3 frames
Internet media type   : video/H264
Codec ID              : avc1
Codec ID/Info         : Advanced Video Coding
Codec                 : AVC
Codec                 : AVC
Codec/Family          : AVC
Codec/Info            : Advanced Video Codec
Codec/Url             : http://developers.videolan.org/x264.html
Codec/CG              : avc1
Codec profile         : High@L4
Codec settings        : CABAC / 3 Ref Frames
Codec settings, CABAC : Yes
Codec settings, ReFrames : 3
Duration              : 486100
Duration              : 8 min 6 s
Duration              : 8 min 6 s 100 ms
Duration              : 8 min 6 s
Duration              : 00:08:06.100
Duration              : 00:08:06:03
Duration              : 00:08:06.100 (00:08:06:03)
Bit rate              : 1157519
Bit rate              : 1.158 kb/s
Width                 : 1920
Width                 : 1.920 pixels
Height                : 1080
Height                : 1.080 pixels
Stored_Height         : 1088
Sampled_Width         : 1920
Sampled_Height        : 1080
Pixel aspect ratio    : 1.000
Display aspect ratio  : 1.778
Display aspect ratio  : 16:9
Rotation              : 0.000
Frame rate mode       : CFR
Frame rate mode       : Constant
FrameRate_Mode_Original : VFR
Frame rate            : 30.000
Frame rate            : 30.000 FPS
Frame count           : 14583
Resolution            : 8
Resolution            : 8 bits
Colorimetry           : 4:2:0
Color space           : YUV
Chroma subsampling    : 4:2:0
Chroma subsampling    : 4:2:0
Bit depth             : 8
Bit depth             : 8 bits
Scan type             : Progressive
Scan type             : Progressive
Interlacement         : PPP
Interlacement         : Progressive
Bits/(Pixel*Frame)    : 0.019
Stream size           : 70333739
Stream size           : 67.1 MiB (90%)
Stream size           : 67 MiB
Stream size           : 67.1 MiB
Stream size           : 67.08 MiB
Stream size           : 67.1 MiB (90%)
Proportion of this stream : 0.89618

Audio
Count                 : 275
Count of stream of this kind : 1
Kind of stream        : Audio
Kind of stream        : Audio
Stream identifier     : 0
StreamOrder           : 1
ID                    : 2
ID                    : 2
Format                : AAC
Format/Info           : Advanced Audio Codec

```

Figure 3.4.1b: MedialInfo results of MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4

Project-MH17



```

ca: Windows Command Processor
Chroma subsampling      : 4:2:0
Chroma subsampling      : 4:2:0
Bit depth               : 8
Bit depth               : 8 bits
Scan type               : Progressive
Scan type               : Progressive
Interlacement           : PPF
Interlacement           : Progressive
Bits/(Pixel*Frame)     : 0.019
Stream size             : 70333739
Stream size             : 67.1 MiB <90%>
Stream size             : 67 MiB
Stream size             : 67 MiB
Stream size             : 67.1 MiB
Stream size             : 67.08 MiB
Stream size             : 67.1 MiB <90%>
Proportion of this stream : 0.89618

Audio
Count                  : 275
Count of stream of this kind : 1
Kind of stream         : Audio
Kind of stream         : Audio
Stream identifier      : 0
StreamOrder            : 1
ID                     : 2
ID                     : 2
Format                 : AAC
Format/Info            : Advanced Audio Codec
Commercial name        : AAC
Format profile         : LC
Codec ID               : mp4a-40-2
Codec                  : AAC LC
Codec                  : AAC LC
Codec/Family           : AAC
Codec/CC               : 40
Duration               : 486203
Duration               : 8 min 6 s
Duration               : 8 min 6 s 203 ms
Duration               : 8 min 6 s
Duration               : 00:08:06.203
Duration               : 00:08:06:41
Duration               : 00:08:06.203 <00:08:06:41>
Bit rate mode          : CBR
Bit rate mode          : Constant
Bit rate               : 125588
Bit rate               : 126 kb/s
Channel(s)             : 2
Channel(s)             : 2 channels
Channel positions      : Front: L R
Channel positions      : 2/0/0
ChannelLayout          : L R
Samples per frame      : 1024
Sampling rate          : 44100
Sampling rate          : 44.1 kHz
Samples count          : 21441552
Frame rate             : 43.066
Frame rate             : 43.066 FPS <1024 SPF>
Frame count            : 20939
Compression mode       : Lossy
Compression mode       : Lossy
Stream size            : 7632669
Stream size            : 7.28 MiB <10%>
Stream size            : 7 MiB
Stream size            : 7.3 MiB
Stream size            : 7.28 MiB
Stream size            : 7.279 MiB
Stream size            : 7.28 MiB <10%>
Proportion of this stream : 0.09725
Default                : Yes
Default                : Yes
Alternate group        : 1
Alternate group        : 1

E:\Projects-2019\Project-MH17\DownloadSource>

```

Figure 3.4.1c: MedialInfo results of MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4



Project-MH17

```

Windows Command Processor
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\System32>E:

E:\>cd E:\Projects-2019\Project-MH17\DownloadSource

E:\Projects-2019\Project-MH17\DownloadSource>exiftool.exe MH17*
ExifTool Version Number      : 10.04
File Name                    : MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4
Directory                   : .
File Size                    : 75 MB
File Modification Date/Time  : 2019:04:10 13:41:20+08:00
File Access Date/Time       : 2019:04:10 13:27:42+08:00
File Creation Date/Time     : 2019:04:10 13:27:42+08:00
File Permissions             : rw-rw-rw-
File type                    : MP4
File Type Extension         : mp4
MIME Type                    : video/mp4
Major Brand                  : MP4 Base Media v1 [ISO 14496-12:2003]
Minor Version                : 0.2.0
Compatible Brands            : isom, iso2, avc1, mp4i
Movie Data Size              : 77966408
Movie Data Offset            : 48
Movie Header Version         : 0
Create Date                  : 0000:00:00 00:00:00
Modify Date                  : 0000:00:00 00:00:00
Time Scale                   : 1000
Duration                     : 0:08:06
Preferred Rate               : 1
Preferred Volume              : 100.00%
Preview Time                 : 0 s
Preview Duration             : 0 s
Poster Time                  : 0 s
Selection Time               : 0 s
Selection Duration           : 0 s
Current Time                 : 0 s
Next Track ID                : 3
Track Header Version         : 0
Track Create Date            : 0000:00:00 00:00:00
Track Modify Date            : 0000:00:00 00:00:00
Track ID                     : 1
Track Duration               : 0:08:06
Track Layer                  : 0
Track Volume                 : 0.00%
Image Width                  : 1920
Image Height                 : 1080
Graphics Mode                : srcCopy
Op Color                     : 0 0 0
Compressor ID                : avc1
Source Image Width           : 1920
Source Image Height          : 1080
X Resolution                 : 72
Y Resolution                 : 72
Bit Depth                    : 24
Pixel Aspect Ratio           : 1:1
Video Frame Rate             : 30
Matrix Structure              : 1 0 0 0 1 0 0 0 1
Media Header Version         : 0
Media Create Date            : 0000:00:00 00:00:00
Media Modify Date            : 0000:00:00 00:00:00
Media Time Scale             : 44100
Media Duration               : 0:08:06
Media Language Code          : und
Handler Description          : SoundHandler
Balance                      : 0
Audio Format                  : mp4a
Audio Channels                : 2
Audio Bits Per Sample        : 16
Audio Sample Rate            : 44100
Handler Type                  : Metadata
Handler Vendor ID            : Apple
Encoder                      : Lavf58.22.100
Avg Bitrate                  : 1.28 Mbps
Image Size                   : 1920x1080
Megapixels                   : 2.1
Rotation                     : 0

E:\Projects-2019\Project-MH17\DownloadSource>

```

Figure 3.4.2: Metadata (ExifInfo) of MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4

Project-MH17

4.0 Video 1 Analysis - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4

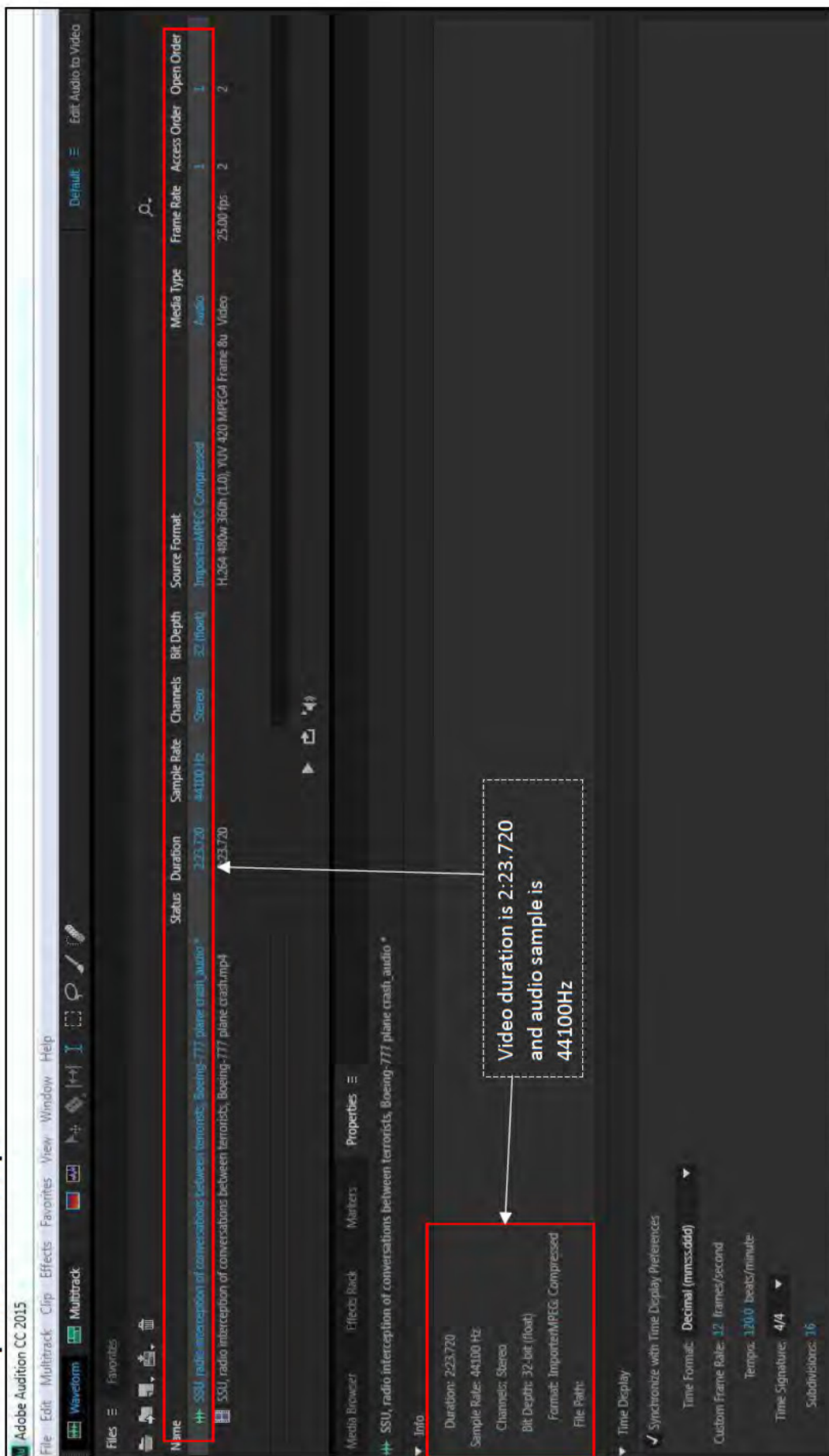


Figure 4.1: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 - detailed Audio Properties



Project-MH17

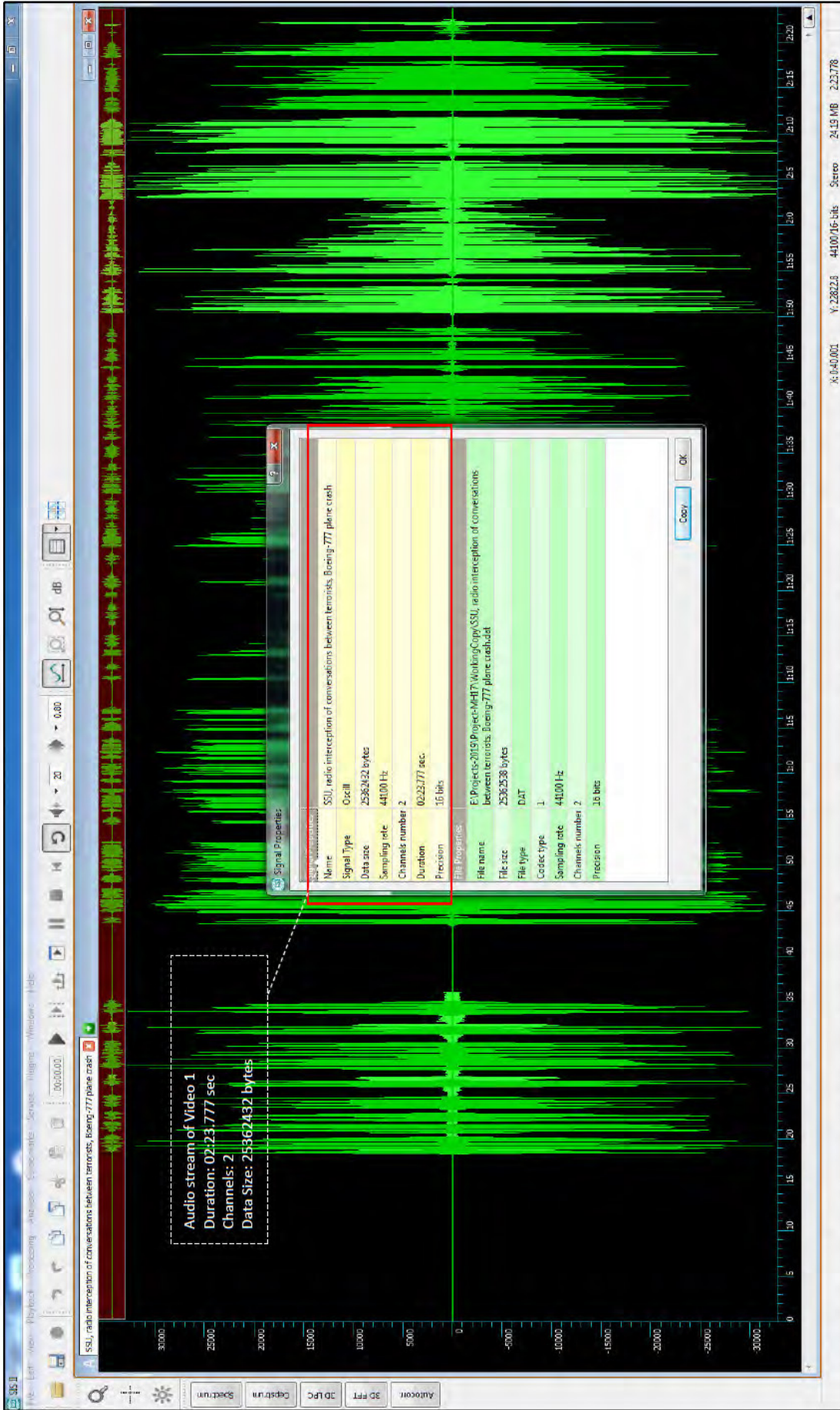


Figure 4.2: Signal Properties SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 audio stream



Project-MH17

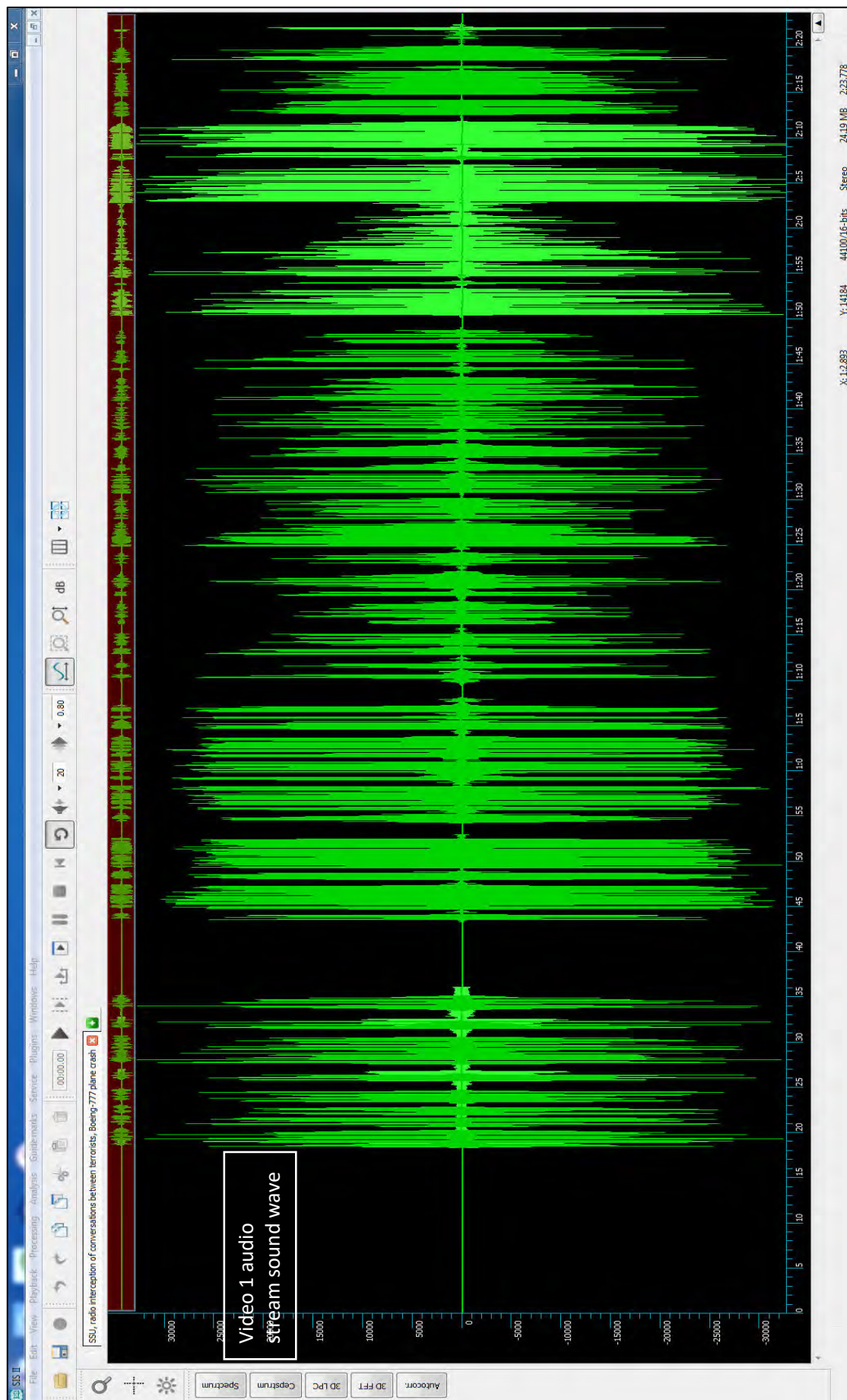


Figure 4.3: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 audio stream

Confidential



Project-MH17

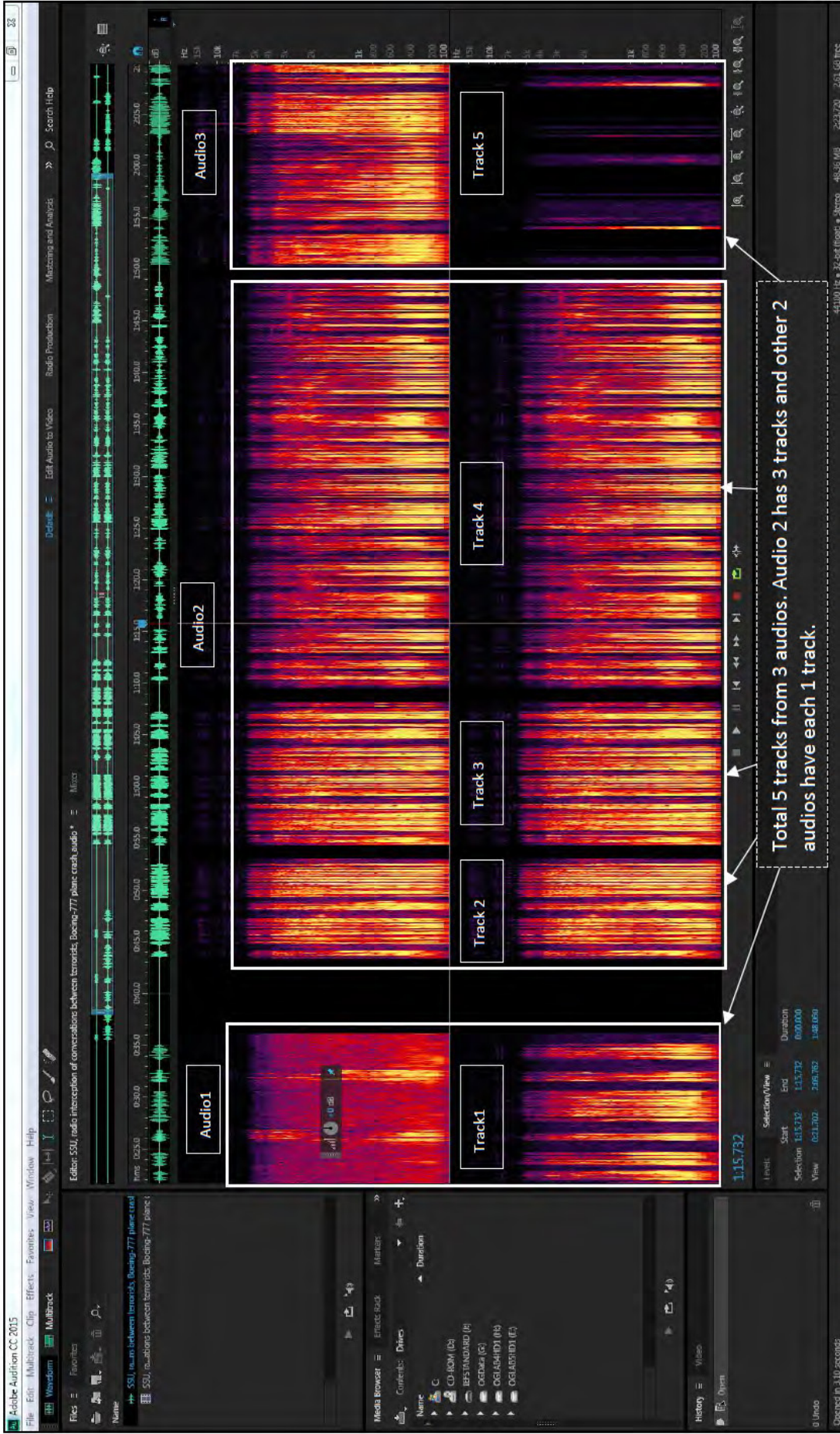


Figure 4.4: Video 1- SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 has 5 audio tracks. Refer to Table below showing the tracks

Project-MH17



Diagram: 4.1 SSU, radio interception of conversations between terrorists, Boeing-777 plane crash – Info Video (As shown and stated in the in YouTube video)



Project-MH17

Table 4.1: Video 1 - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 Audio Tracks

Audio Aired in the Video	Audio Tracks	Parties in the Conversation	Audio Details	Remarks
Audio 1 Time Frame: 0:18.3 – 0:36.1 Total Duration: 0:18.368	Track-1 Time Frame: 0:18.3 – 0:36.1	- Total 2 Speakers - Speakers: I.Bezler ("Bes") and Vasy Mykolaiovych Geranin (9031921428) (Refer Section 4.1)	i. 0:18.3 – 0:36.1 (recorded time as shown in the video 4:40 PM 17/07/2014) Refer Figure 4.1.6. ii. 2 person voices - I.Bezler and V. Geranin. iii. Source of recording/Channel Type: Telephone	- 2 difference channels a. Left Channel - I.Bezler b. Right Channel - V. Geranin - Background noise in the left channel track is different when V. Geranin speaks. - Recorded Audio is tampered, where possible cuts and edits can be seen. Refer Section 4.4.1 - Audio cannot be accepted for Voice ID Analysis. Refer to Table 4.5.1 (Voice ID Analysis) - This audio track is tampered and not genuine.
Audio 2 Time Frame: 0:43.3 – 1:49.0 Total Duration: 0:43.289	Track-2 Time Frame: 0:43.3 - 0:52.9	- Total 2 Speakers - Speakers: Major and Grek (Refer Section 4.2.1)	i. 0.43.3 - 0.52.9 (recorded time as shown in the video 4:33 PM 17/07/2014). Refer Figure 4.2.1.1. ii. 2 person voices - Major and Grek (Left and Right Channels) iii. Source of recording/Channel Type: Telephone	- Audio is tampered, 3 different tracks recorded in different timings and merged as one segment. - A new person voices start to appear instead of Grek's voice - A new person voices start to appear instead of Major's voice - Audio was cut between time frame 1.24.2 and 1.24.3. - Refer Section 4.4.2, 4.4.3 & 4.4.4
	Track-3 Time Frame: 0:54.5 - 1:08.0	- Total 2 Speakers - Speakers: Major and Grek (Refer Section 4.2.2)	i. 0.54.5 - 1:08.0 (recorded time as shown in the video 5:11 PM 17/07/2014). Refer Figure 4.2.2.1. ii. 2 person voices - Major and Grek (Left and Right Channels) iii. Source of recording/Channel Type: Telephone	- Audio cannot be accepted for Voice ID Analysis Refer to Table 4.5.1 (Voice ID Analysis) - This audio tracks are tampered and not genuine.
	Track-4 Time Frame: 0:54.5 - 1:08.0	- Total 2 Speakers - Speakers: Major (Different Speaker) and Grek (Different Speaker) (Refer Section 4.2.3)	i. 1:09:4 - 1:49:0 (recorded time as shown in the video 5:32 PM 17/07/2014). Refer Figure 4.2.3.1. ii. 2 New person voices - Major and Grek (Left and Right Channels)	



Project-MH17

<p>Audio 3 Time Frame: 1:50 - 2:22.8 Total Duration: 1:50.130</p>	<p>Track-5 Time Frame: 1:50 - 2:22.8</p>	<p>- Total 3 Speakers - Speakers: Kozitsyn and Militants (2 different militants speaker) (Refer Section 4.3)</p>	<p>iii. Source of recording/Channel Type: Telephone i. 1:50 - 2:22.8 (recorded time as shown in the video 5:42 PM 17/07/2014). Refer Figure 4.3.2 ii. Militant 1, Militant 2 (Left Channel) and Kozitsyn (Right Channel) iii. Source of recording: Telephone</p>	<p>- Two different militants' voices are identified speaking to Kozitsyn, - Edits are seen in this audio track - Different frequencies in the militant track. No background voice appears in Kozitsyn track. - Refer Section 4.4.5 - Audio cannot be accepted for Voice ID Analysis Refer to Table 4.5.1 (Voice ID Analysis) - This audio track is tampered and not genuine.</p>
---	--	--	--	--

Note: This Table is similar as Table 3.2.1.



Project-MH17

4.1. Audio 1, Track-1 – Duration 0:18.4 – 0:36.1, Conversation between I.Bezler ("Bes") and Vasy Mykolaiovych Geranin (9031921428)

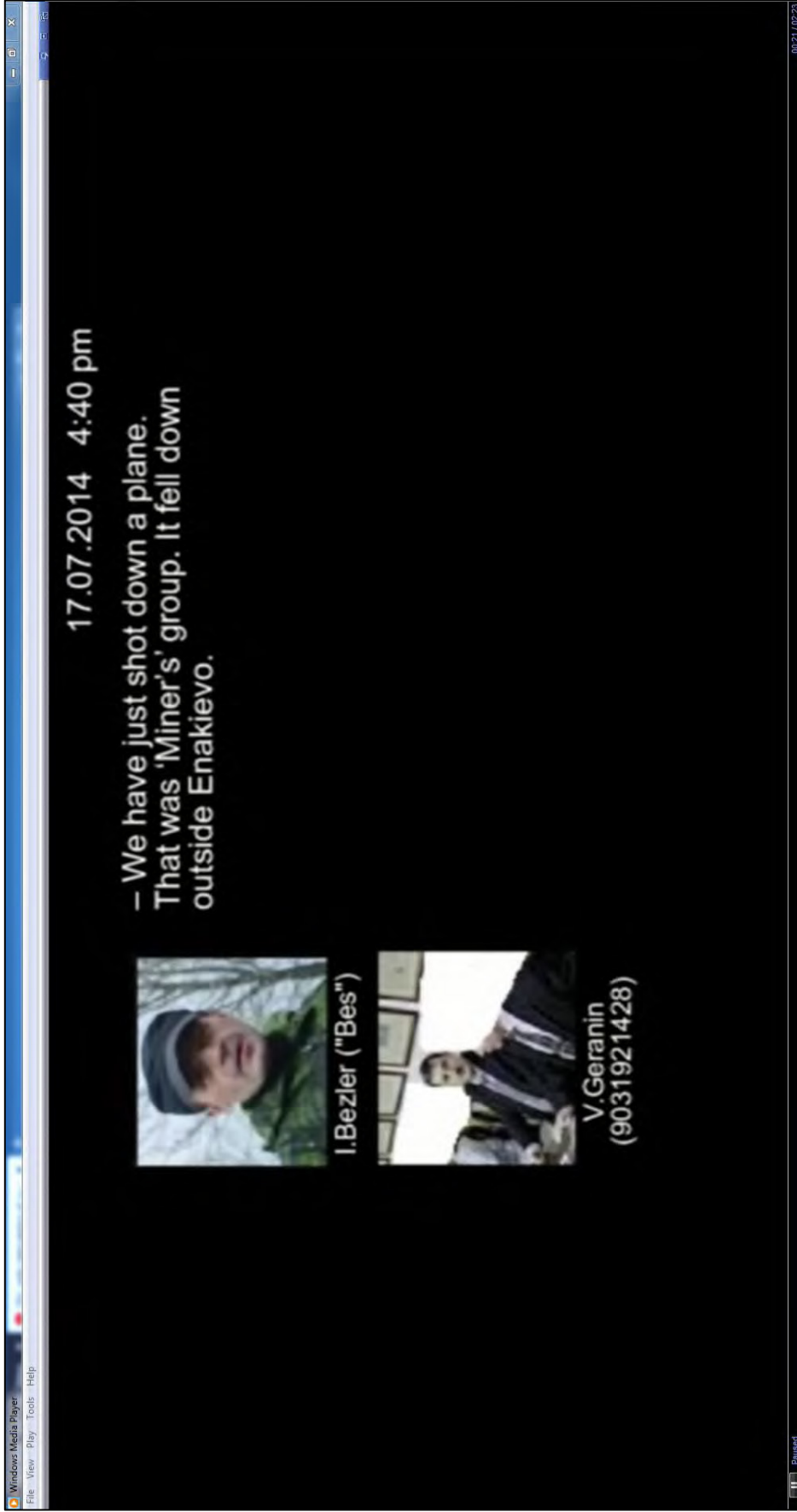


Figure 4.1.1: Audio 1 Track in the Video 1 - Conversation between I.Bezler ("Bes") and V. Geranin (9031921428) Time frame in the video between 0.18.4 and 0.36.1

Project-MH17

i. Audio 1, Track-1 - Duration 0:18.4 – 0:36.1

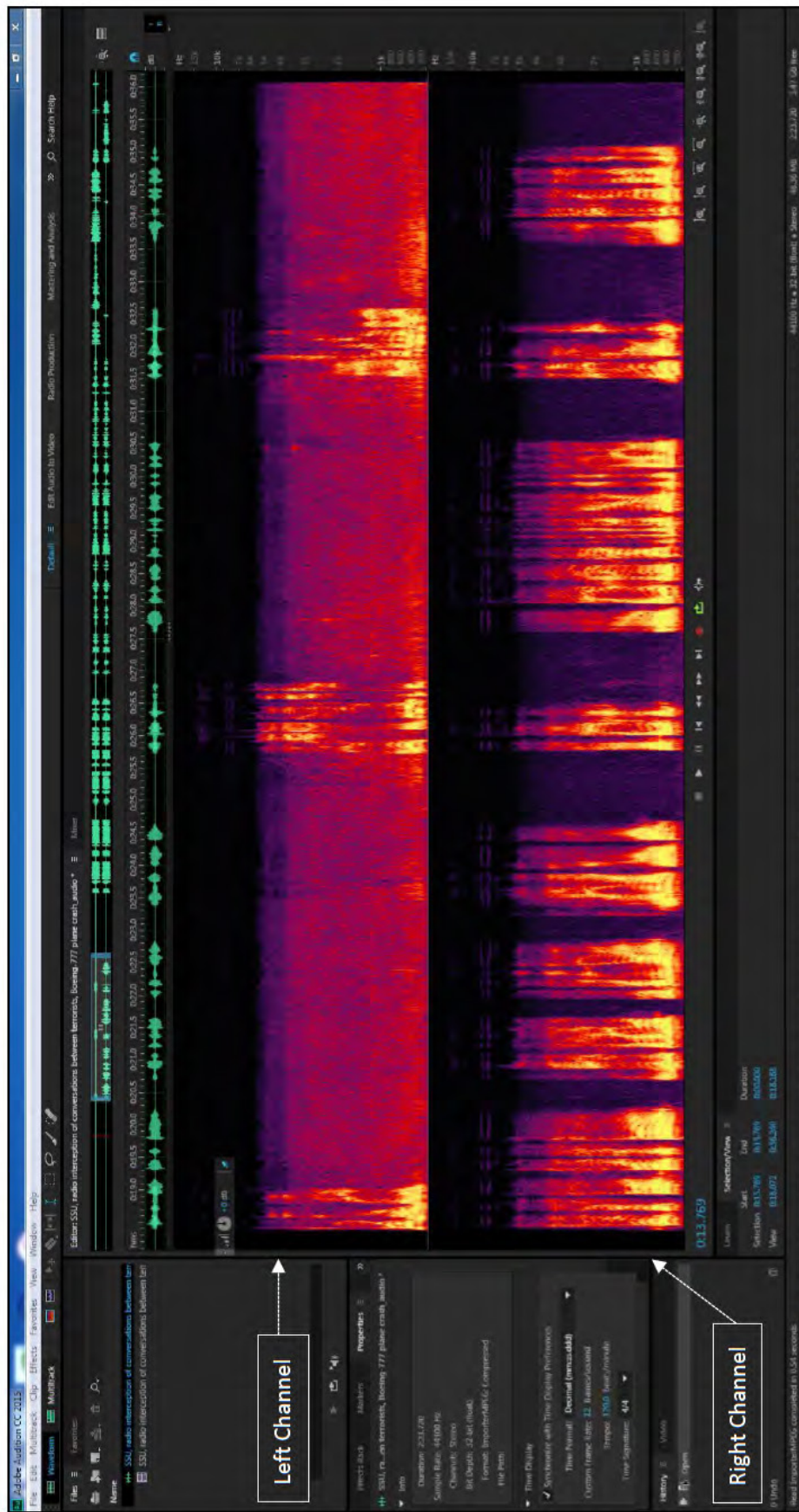


Figure 4.1.2: Audio 1 Track-1 - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, conversation between I.Bezler ("Bes") and Vasy Mykolaiovych Geranin (9031921428) audio duration between 0:18.4 – 0:36.1.



Project-MH17

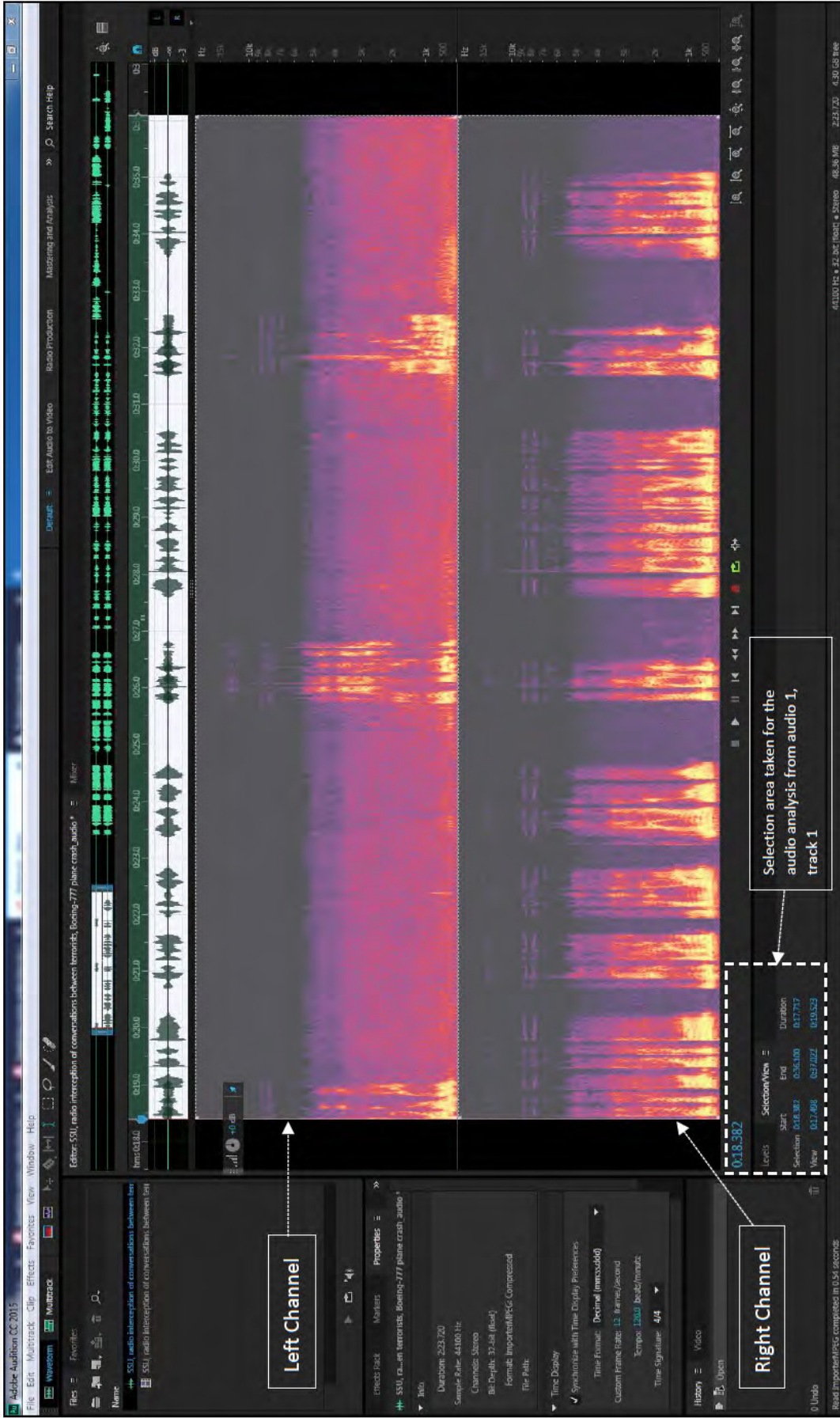


Figure 4.1.3: Audio 1 Track-1 - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 – selection/view



Project-MH17

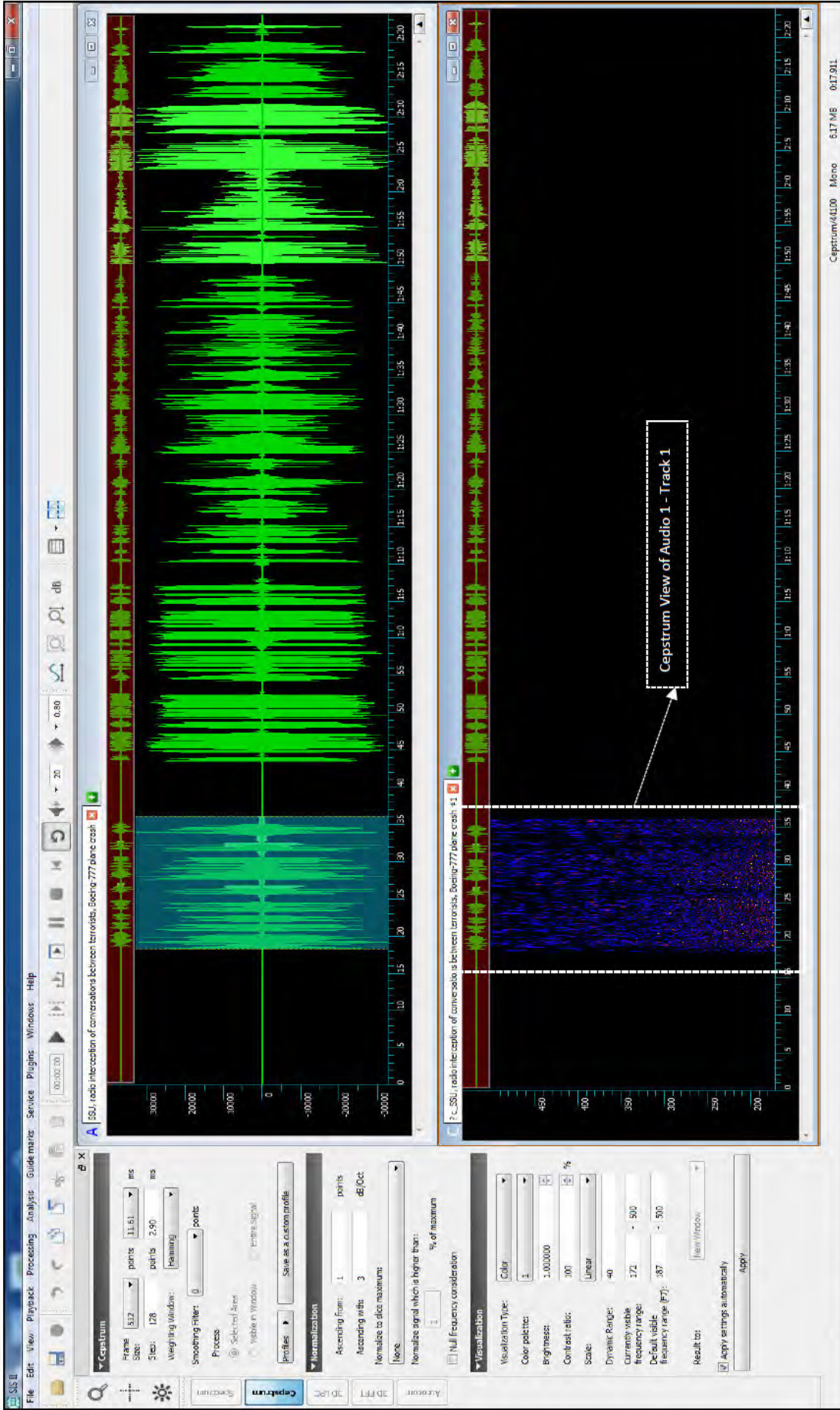
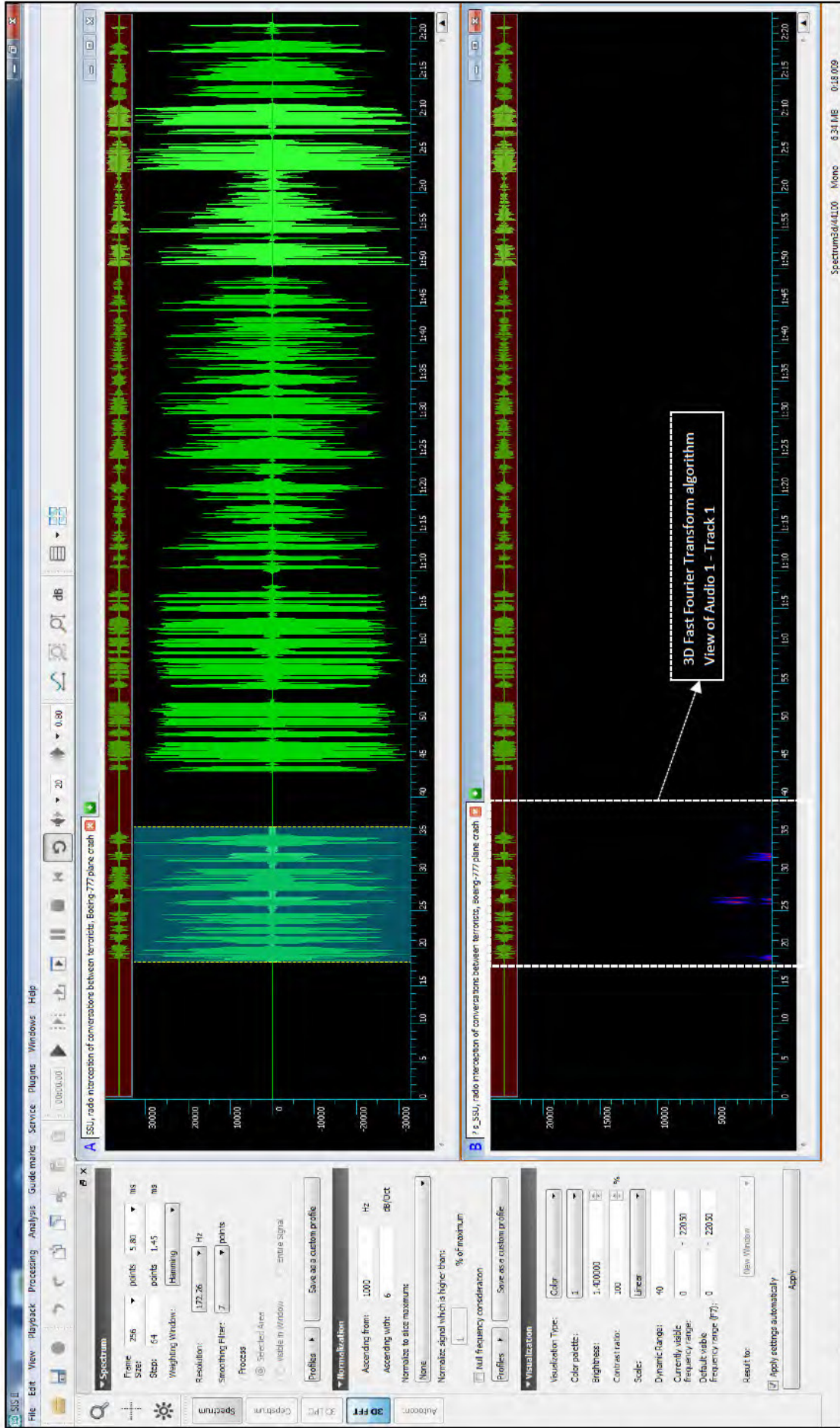


Figure 4.1.4: Cepstrum view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 1, Track-1 conversation between I.Bezler ("Bes") and V.Geranin (9031921428) audio duration between 0:18.4 – 0:36.1



Project-MH17



4.1.5: 3D FFT view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash, Audio 1 Track-1 conversation between I.Bezler ("Bes") and Vasy Mykolaiovych Geranin (9031921428) audio duration between 0:18.4 – 0:36.1.



Project-MH17

- i. There are two channels in this Audio 1, Track 1, conversation between I.Bezler ("Bes") and Vasyl Mykolaiovych Geranin (9031921428) and audio duration between 0:18.4 – 0:36.1. Refer to Figure 4.1.2.
- ii. Total Audio Selection view for Audio 1, Track 1 is 0:18.382 seconds. Refer Figure 4.1.3
- iii. Recording Audio Source: Telephone. Refer to Section 4.5.
- iv. Recorded time mentioned in Video 1 is 4:40 PM on 17/07/2014 which is on the same day of MH17 fatal accident day, but none the audio track does not show same encoded date. Original audio created date is unknown from the audio analysis.
- v. Vasyl Mykolaiovych Geranin (9031921428) is speaking in the left channel and I.Bezler ("Bes") is speaking the right channel.
- vi. Imported Media format is in MPEG (Media Pictures Expert Group)
- vii. Audio sample rate is 44100Hz.
- viii. Audio bit depth is 32-bit (float)
- ix. Audio channels are in stereo format, which are Left and Right channels.
- x. The audio quality is very low although it is hearable.
- xi. Figure 4.1.4 is showing the Cepstrum view which is used for pitch determination/analysis.
- xii. Figure 4.1.5 is showing 3D Fast Fourier Transform (3D FFT) is an algorithm that computes the Discrete Fourier transform (DFT) of a sequence, or its inverse (IDFT).
- xiii. This Recorded Audio 1 Track 1 is tampered, as there are possible cuts and edits which can be seen as the Background noises in the V.Geranin track are different when V.Geranin speaks. Refer to Section 4.2.1



Project-MH17

4.2 Audio 2 - Track 2, Track 3 & Track 4 – Duration 0.43.3 – 1:49.0, conversation between Major and Grek

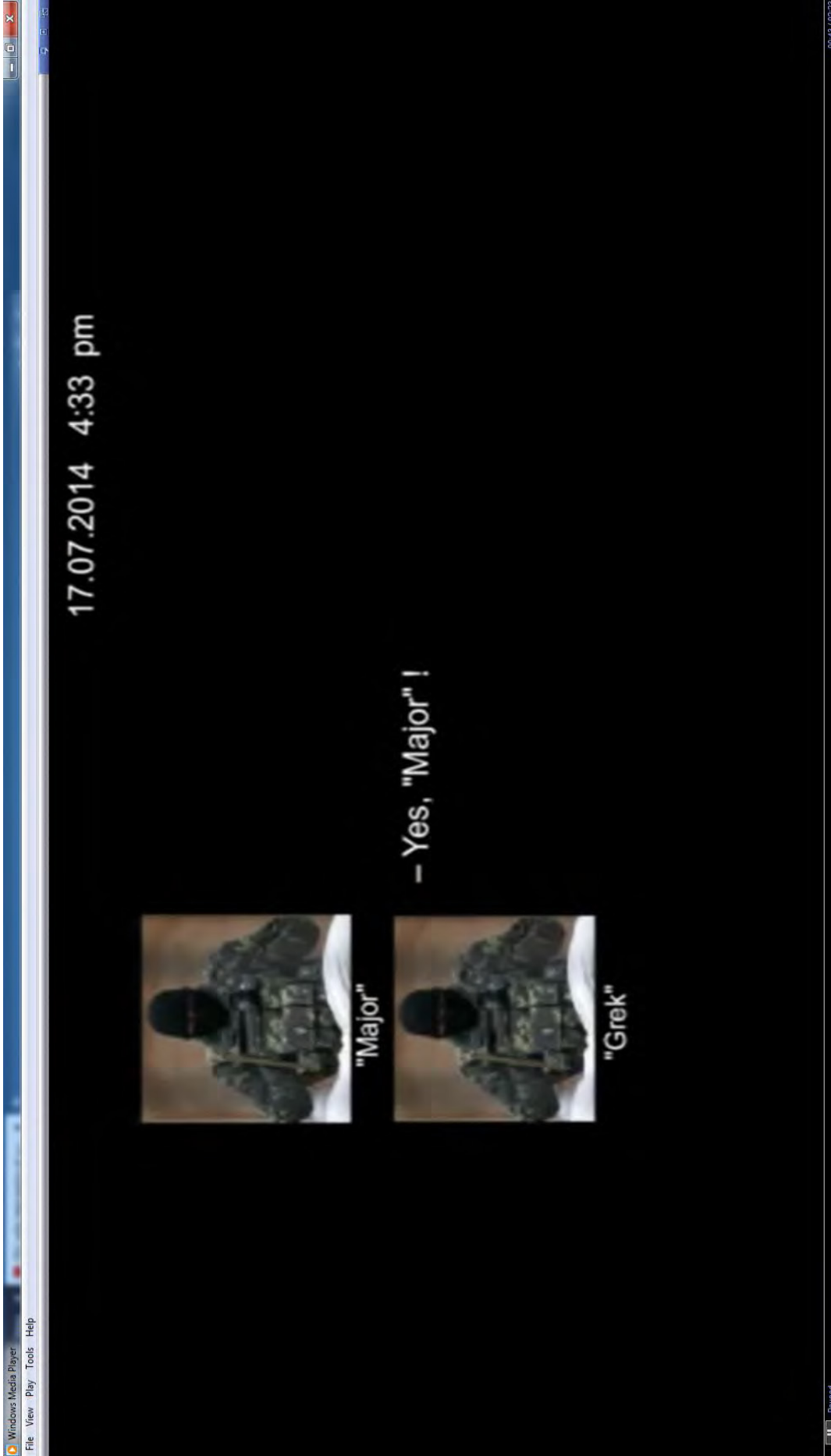


Figure 4.2.1: Audio 2 Track - Conversation between "Major" and "Grek" had been recorded in 3 different timings. Time frame in the video between 0.43.3 - 0.52.9, 0.54.5 - 1:08.0 & 1:09:4 - 1:49.0



Project-MH17

4.2.1 Audio 2, Track-2 - 0.43.3 - 0.52.9 - Conversation between Major and Grek.

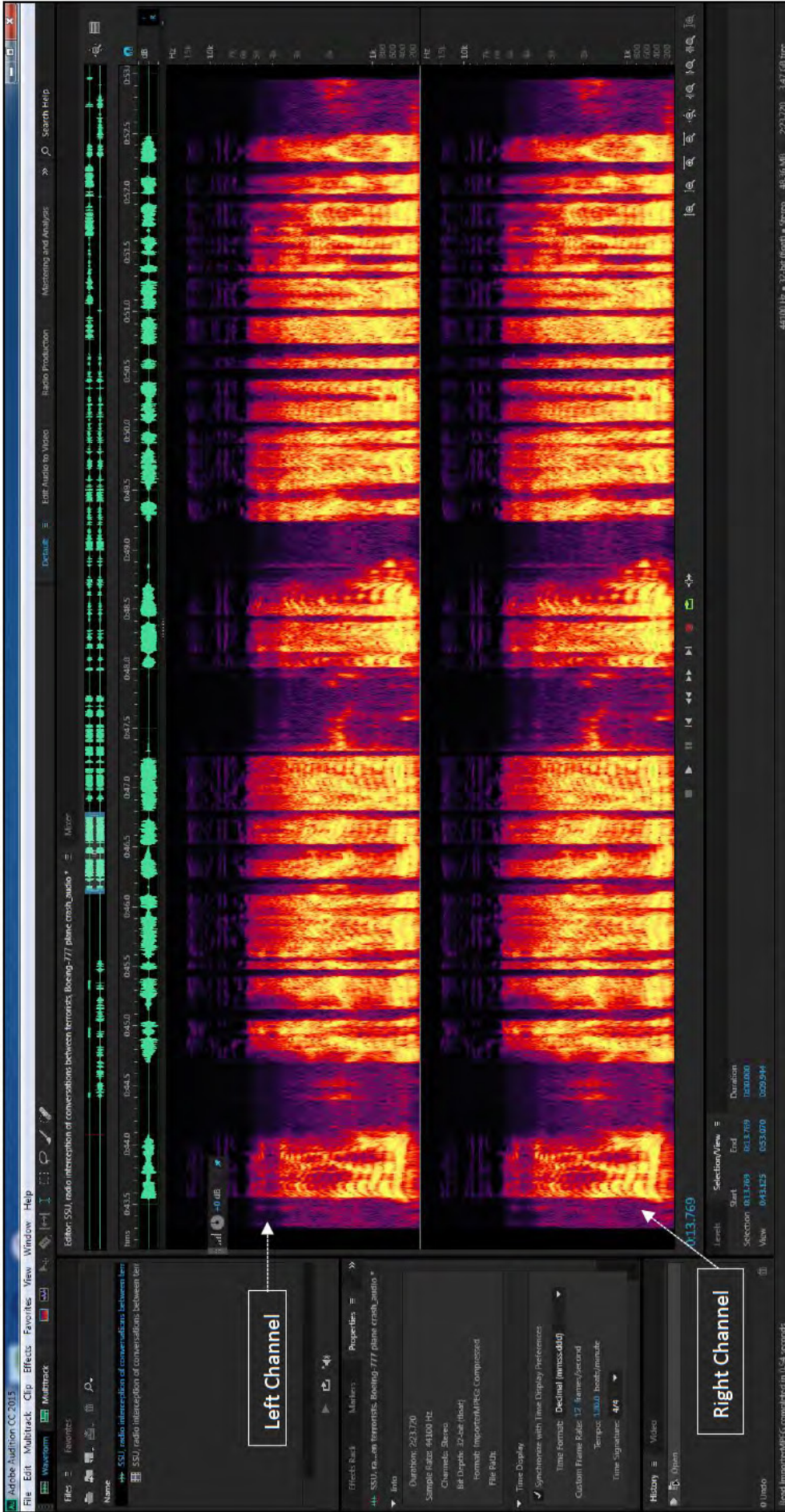


Figure 4.2.1.1: SSU, radio interception of conversations between terrorists/militants, Boeing-777 plane crash.mp4, Audio 2 and Track-2 conversation between Major and Grek audio duration between 0:43.3 – 0:52.9



Project-MH17

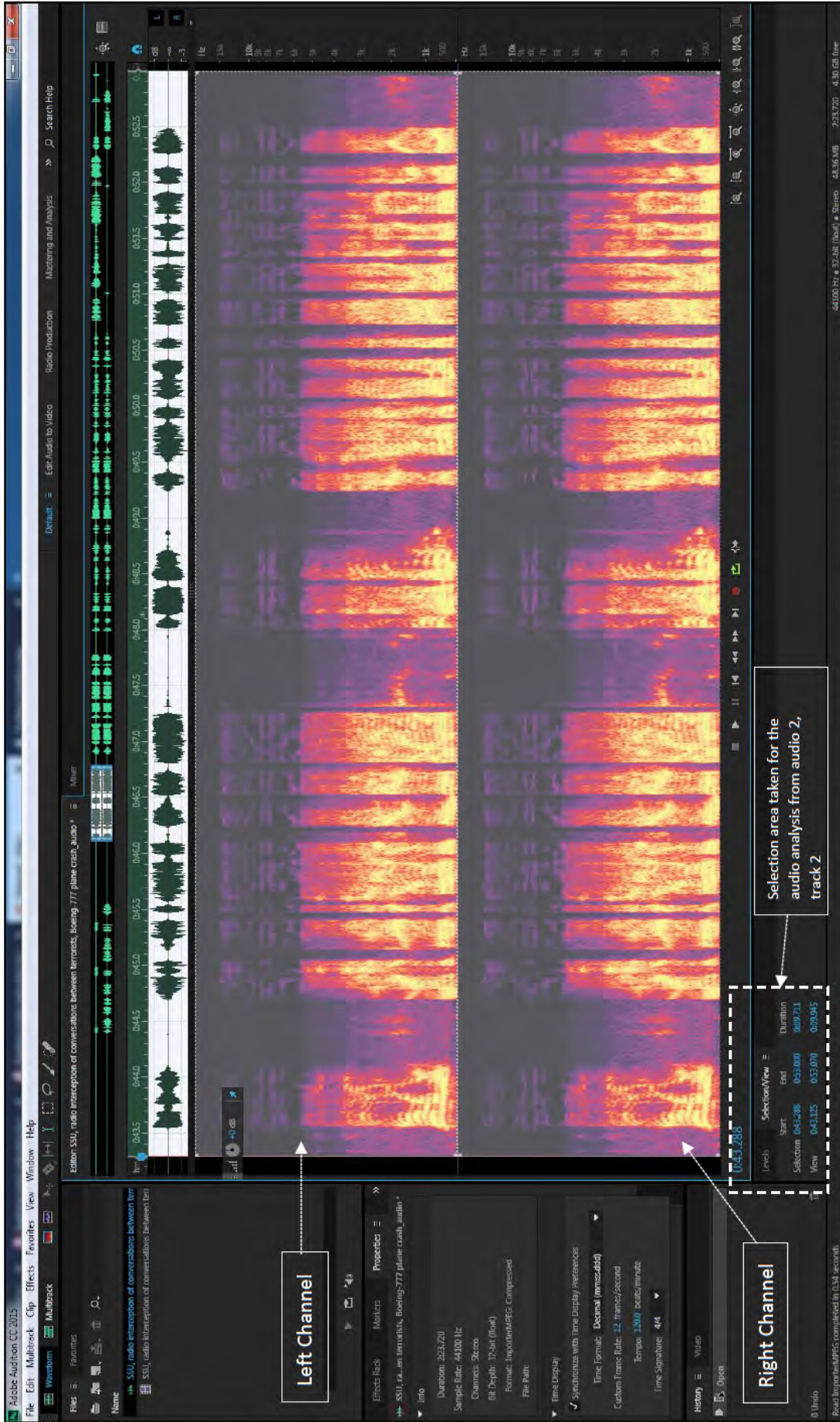


Figure 4.2.1.2: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 2 and Track-2--selection/view



Project-MH17

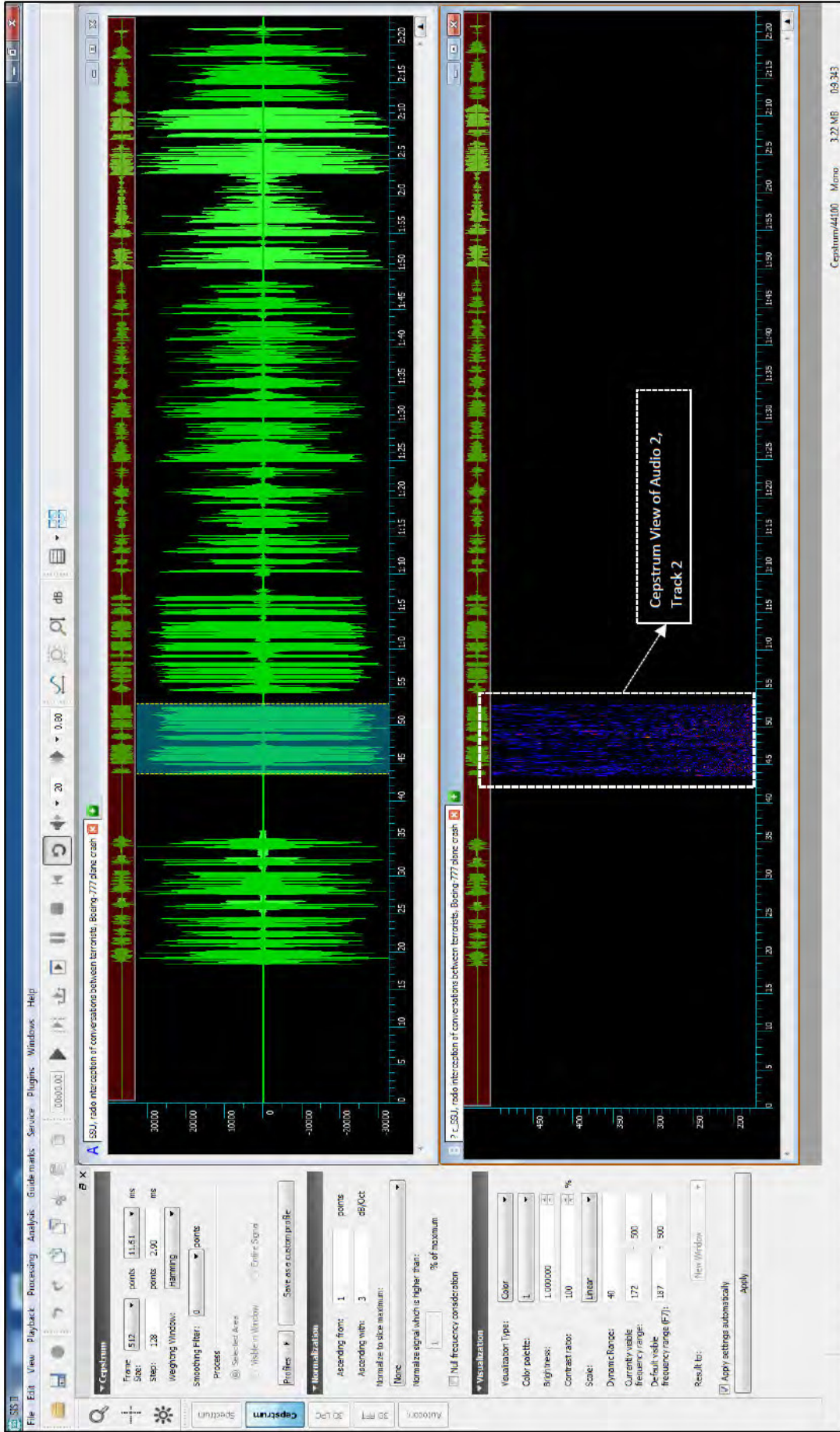


Figure 4.2.1.3: Cepstrum view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 2 Track-2 conversation between Major and Grek audio duration between 0:43.3 – 0:52.9



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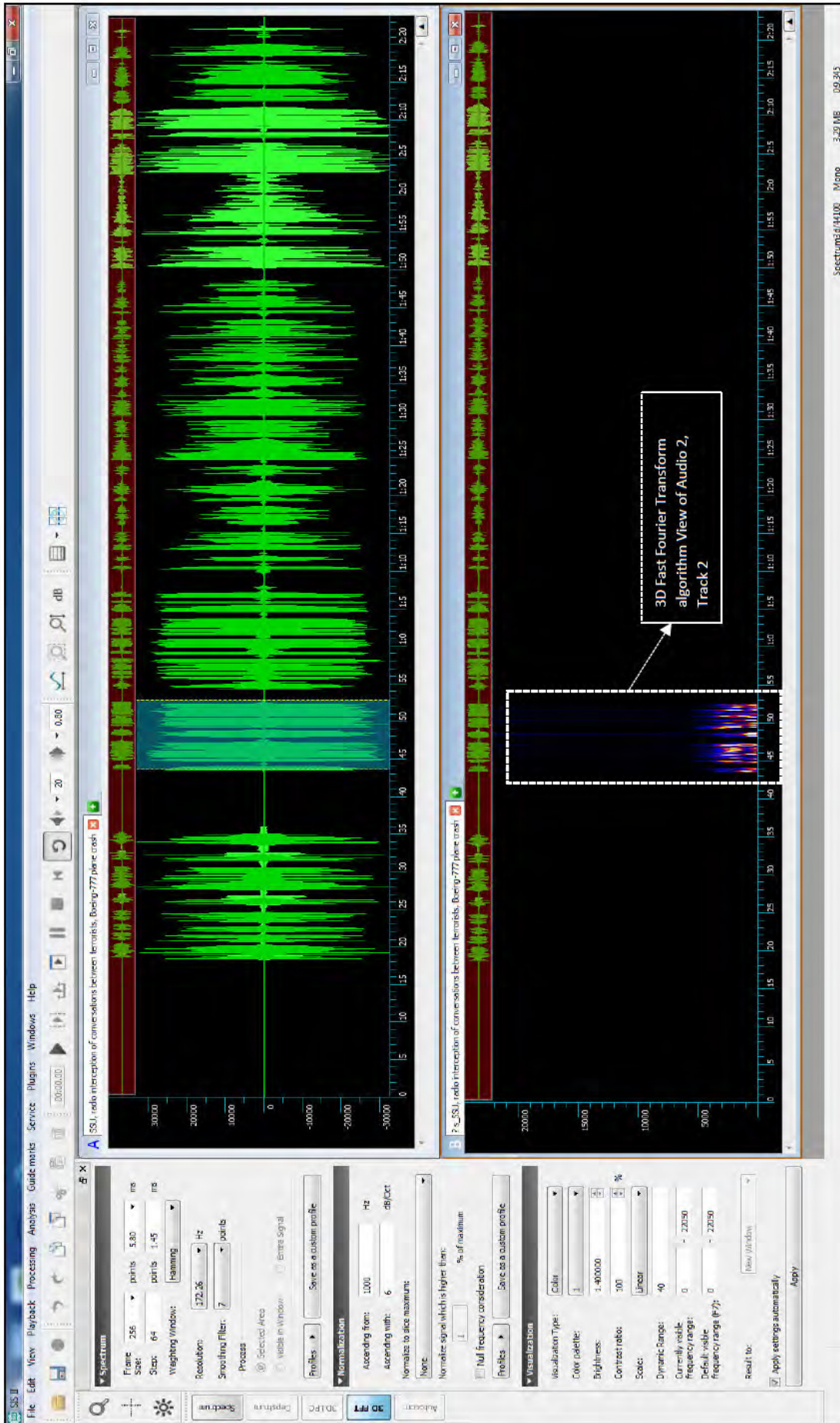


Figure 4.2.1.4: 3D FTT view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 2 Track-2 conversation between Major and Grek audio duration between 0:43.3 – 0:52.9



Project-MH17

- i. There are two channels (Stereo) in this audio 2 - track 2, conversation between Major and Grek audio duration between 0.43.3 - 0.52.9.
- ii. Audio Selection view for audio 2, track 2 is 0:43.288 seconds. Refer Figure 4.2.1.2
- iii. Recording Audio Source: Telephone. Refer to Section 4.5.
- iv. Recorded time mentioned in the video is 4:33 PM on 17/07/2014 which is on the same day of MH17 fatal accident. Original audio created date is unknown from the audio analysis.
- v. Major and Grek both their voices can be heard in left channel and right channel.
- vi. Imported media format is in MPEG (Media Pictures Expert Group)
- vii. Audio sample rate is 44100Hz.
- viii. Audio bit depth is 32-bit (float)
- ix. Audio channels are in stereo format, which are Left and Right channels.
- x. The audio quality is very low although it is hearable.
- xi. Figure 4.2.1.3 is showing the Cepstrum view which is used for pitch determination/analysis.
- xii. Figure 4.2.1.4 is showing 3D Fast Fourier Transform (3D FFT) is an algorithm that computes the Discrete Fourier transform (DFT) of a sequence, or its inverse (IDFT).
- xiii. Difference level of noise in the background seen, which clearly indicating of editing/addition of different audio into this part of the audio track.



Project-MH17

4.2.2 Audio 2, Track-3 – Duration 0:54.5 - 1:08.0, conversation between Major and Grek.

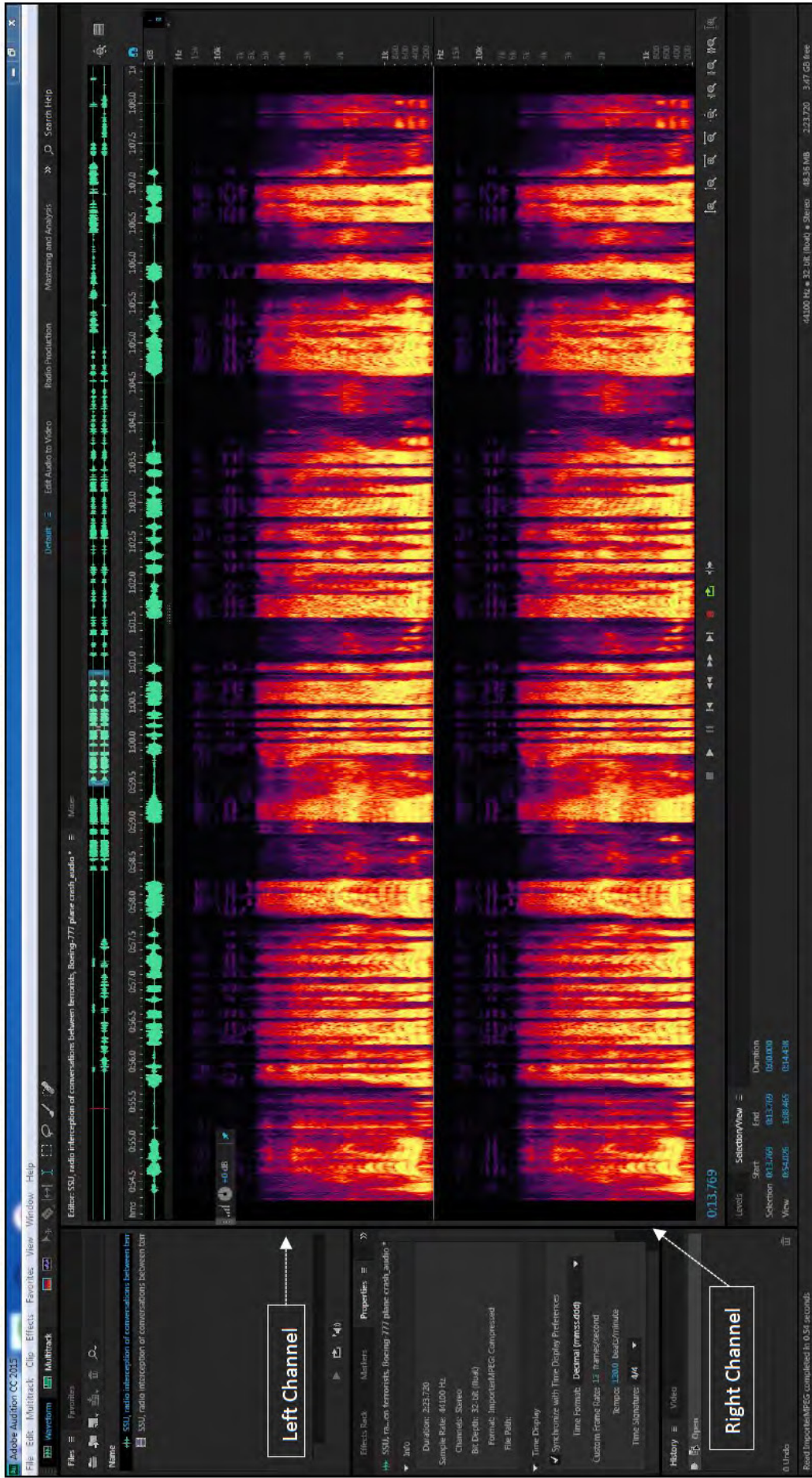


Figure 4.2.2.1: SSU, radio interception of conversations between terrorists/militants, Boeing-777 plane crash.mp4, Audio 2 Track-3 conversation between Major and Grek audio duration between 0:54.5 - 1:08.0

Project-MH17

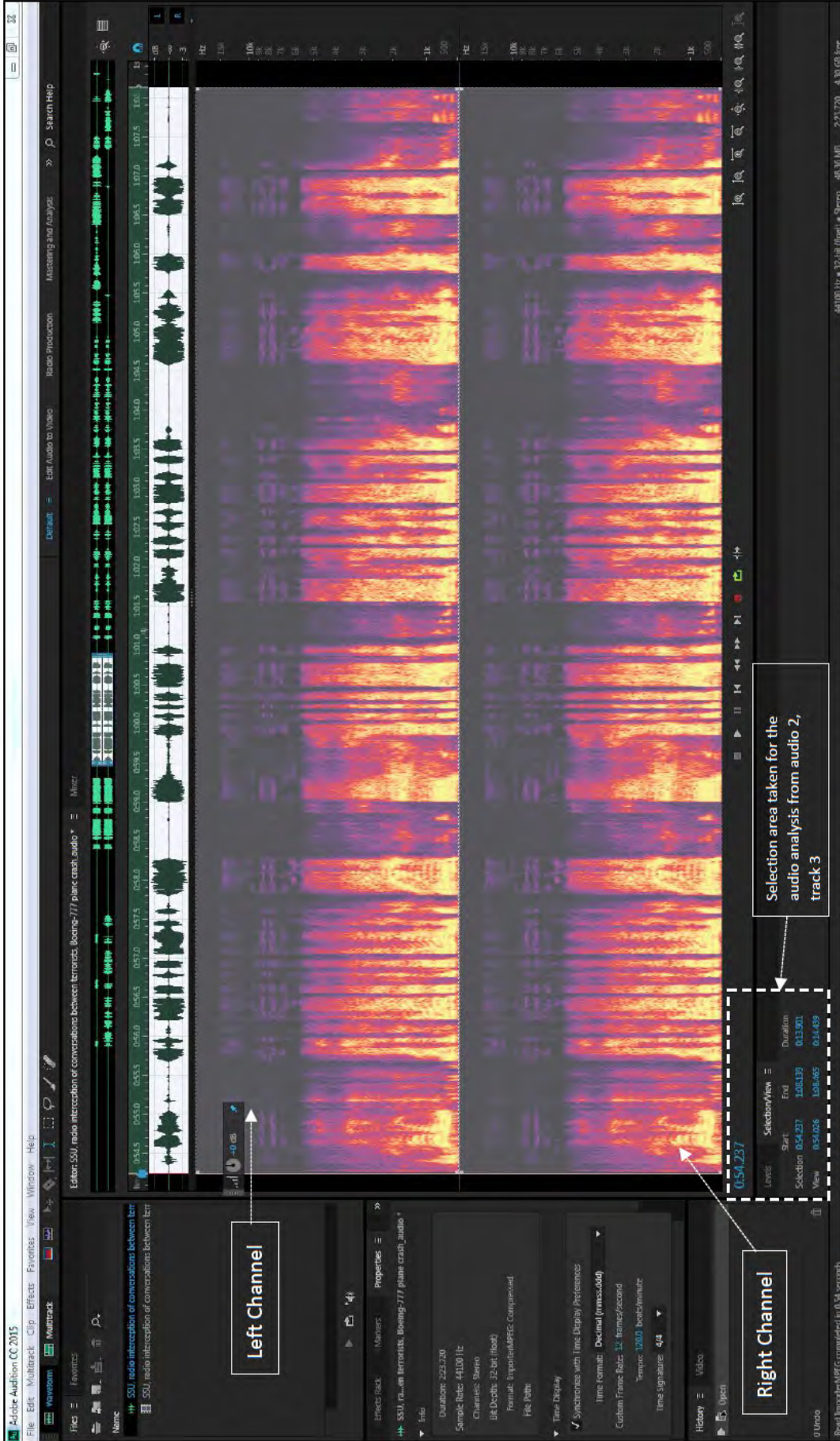


Figure 4.2.2.2: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 2, Track 3 – Selection/View



Project-MH17

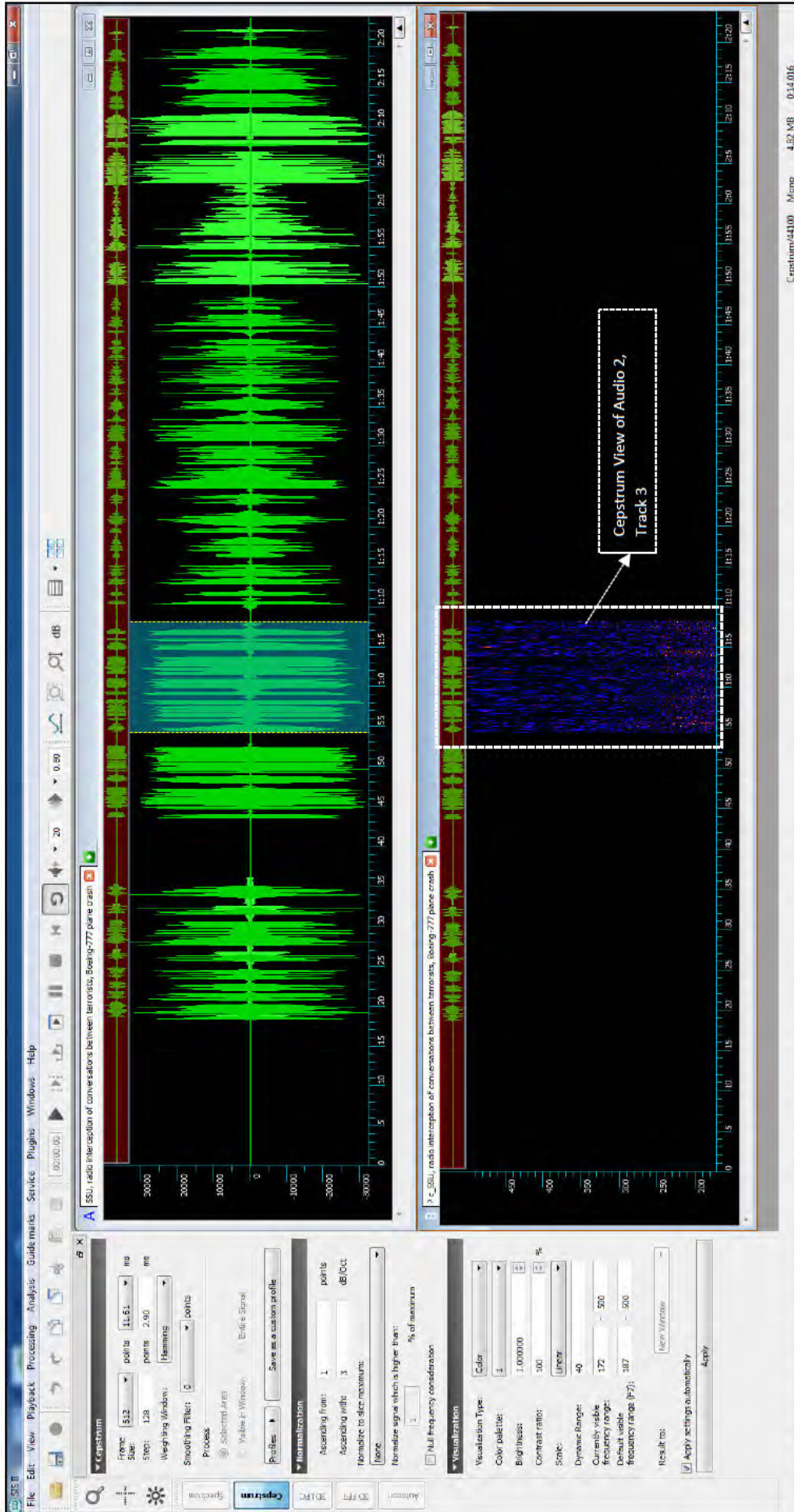


Figure 4.2.2.3: Cepstrum view from the SIS II -SSU, radio interception of conversations between terrorists, Boeing-777 plane crash, Audio 2 Track-3 conversation between Major and Grek audio duration between 0:54.5 - 1:08.0

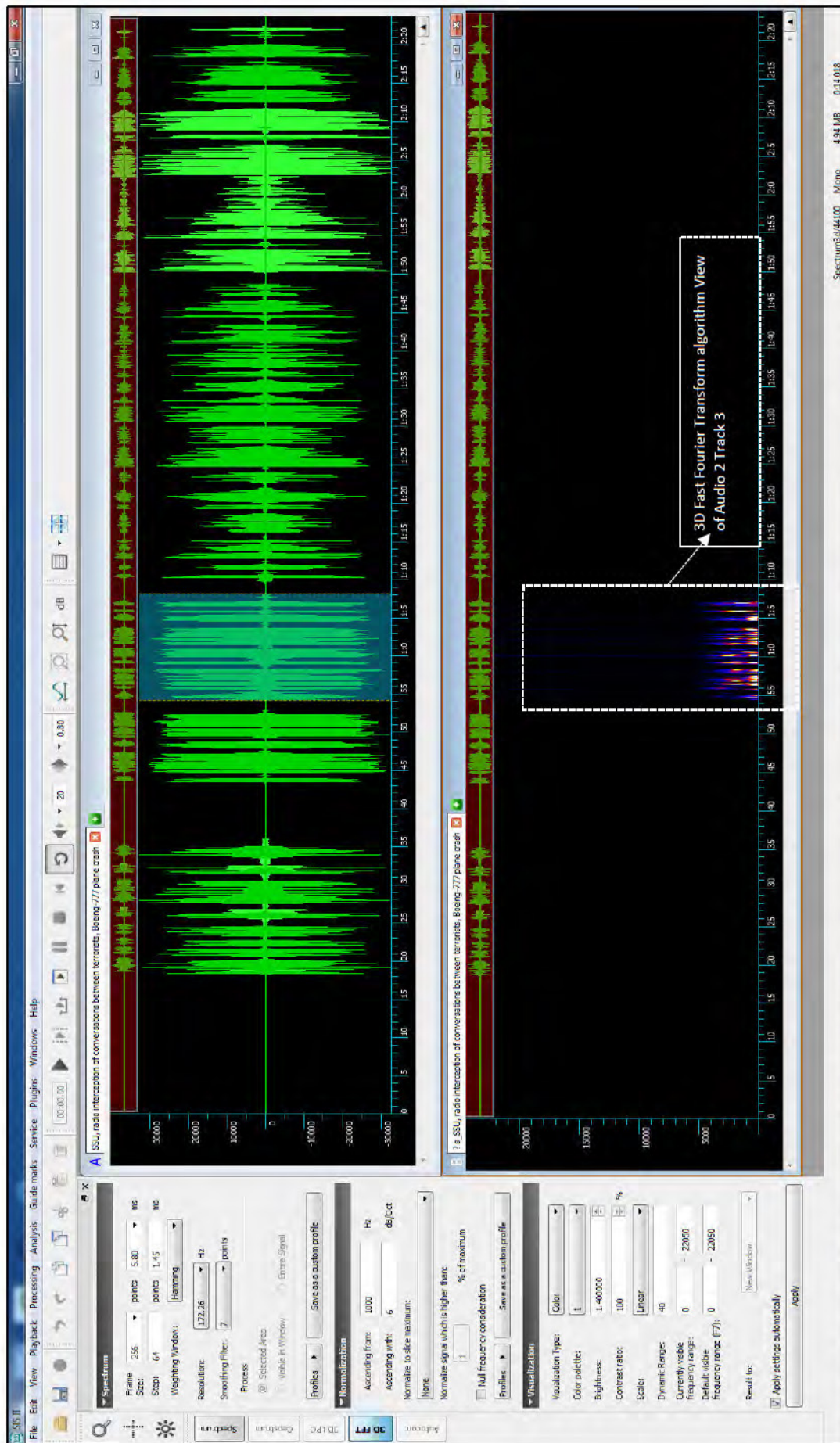


Figure 4.2.2.4: 3D FFT view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 2 Track-3 conversation between Major and Grek audio duration between 0:54.5 - 1:08.0



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- i. There are two channels (stereo) in this audio 2, Track-3, conversation between Major and Grek audio duration between 0:54.5 – 1:08.9. Refer to Figure 4.2.2.1.
- ii. Total Audio Selection view for audio 2, track 3 is 0:54.237 seconds.
- iii. Recording Audio Source: Telephone. Refer to Section 4.5.
- iv. Recorded time mentioned in the video is 5:11 PM on 17/07/2014 which is on the same day of MH17 fatal accident. Original audio created date is unknown from the audio analysis.
- v. Major and Grek both their voices can be heard in left channel and right channel.
- vi. Imported Media format is in MPEG (Media Pictures Expert Group)
- vii. Audio sample rate is 44100Hz.
- viii. Audio bit depth is 32-bit (float)
- ix. Audio channels are in stereo format, which are Left and Right channels.
- x. The audio quality is very low although it is hearable.
- xi. Figure 4.2.2.3 is showing the Cepstrum view which is used for pitch determination/analysis.
- xii. Figure 4.2.2.4 is showing 3D Fast Fourier Transform (3D FFT) is an algorithm that computes the Discrete Fourier transform (DFT) of a sequence, or its inverse (IDFT).
- xiii. Possible merging can be seen, and background noises appear to be different.



Project-MH17

4.2.3 Audio 2, Track-4 – Duration 1:09.4 – 1:49.0, conversation between Major and Grek.

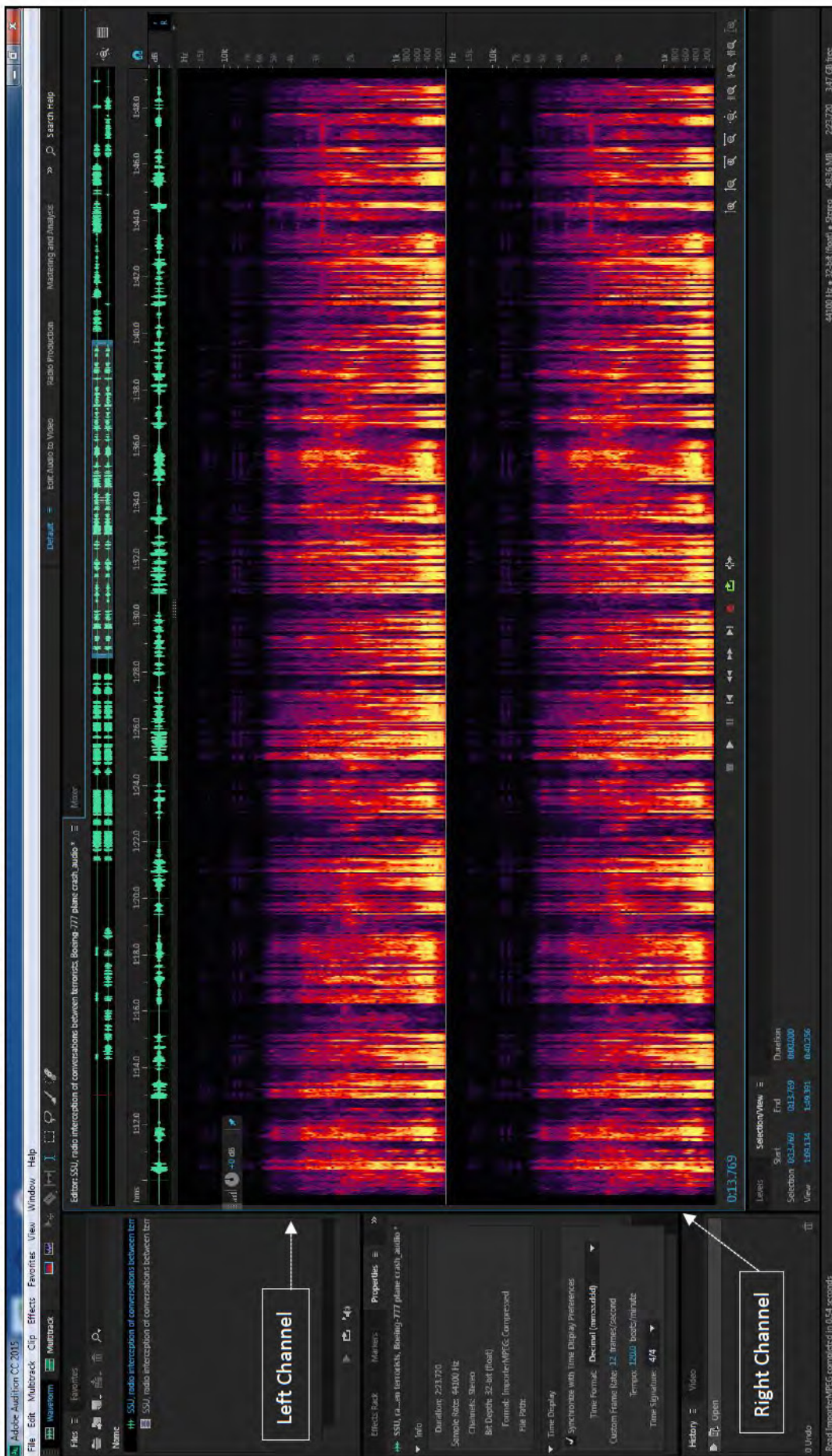


Figure 4.2.3.1: SSU, radio interception of conversations between terrorists/militants, Boeing-777 plane crash.mp4, Audio 2 and Track 4 conversation between Major and Grek audio duration between 1:09:4 - 1:49:0

Confidential



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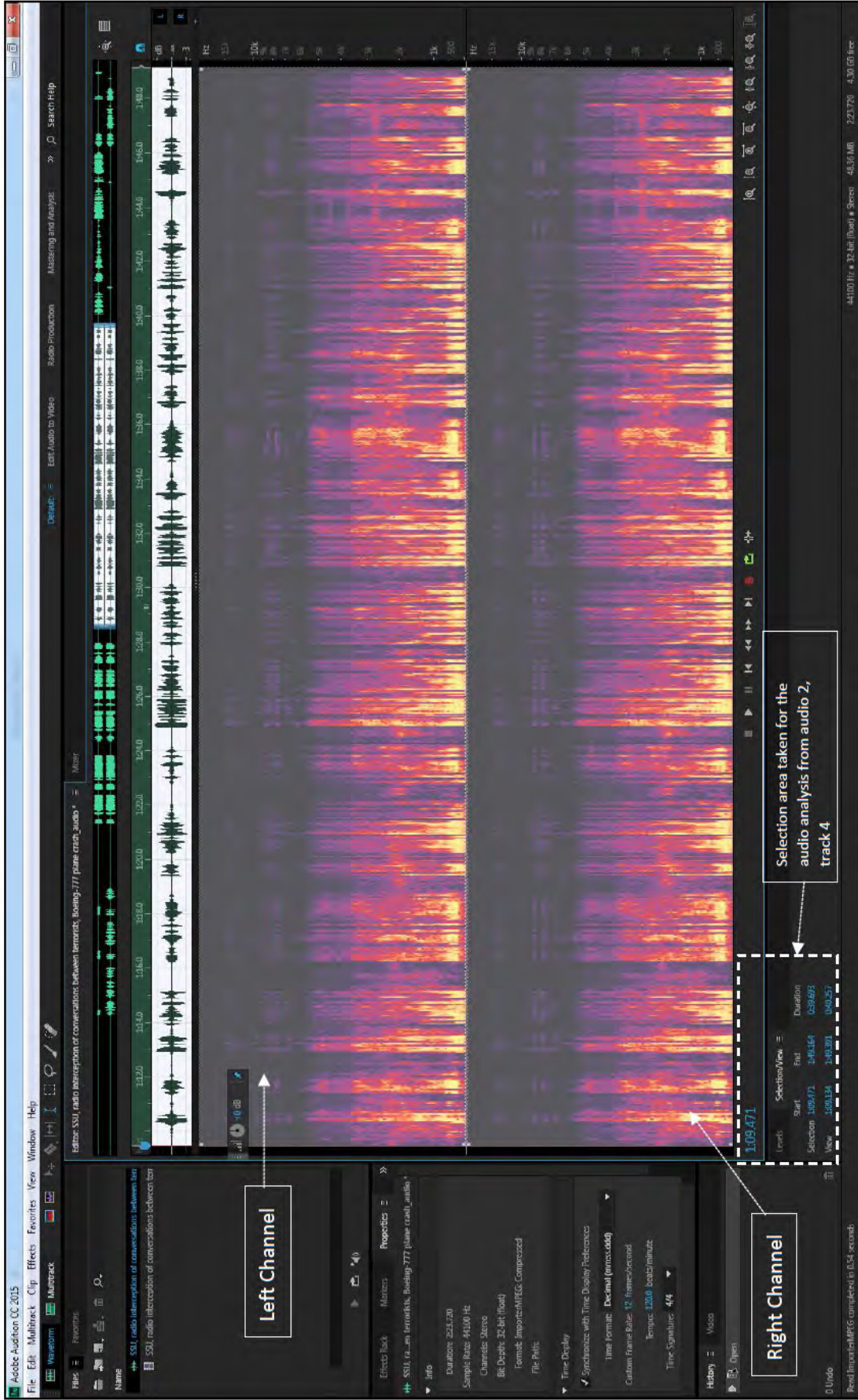


Figure 4.2.3.2: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 2 and Track 4 – Selection/View

Project-MH17

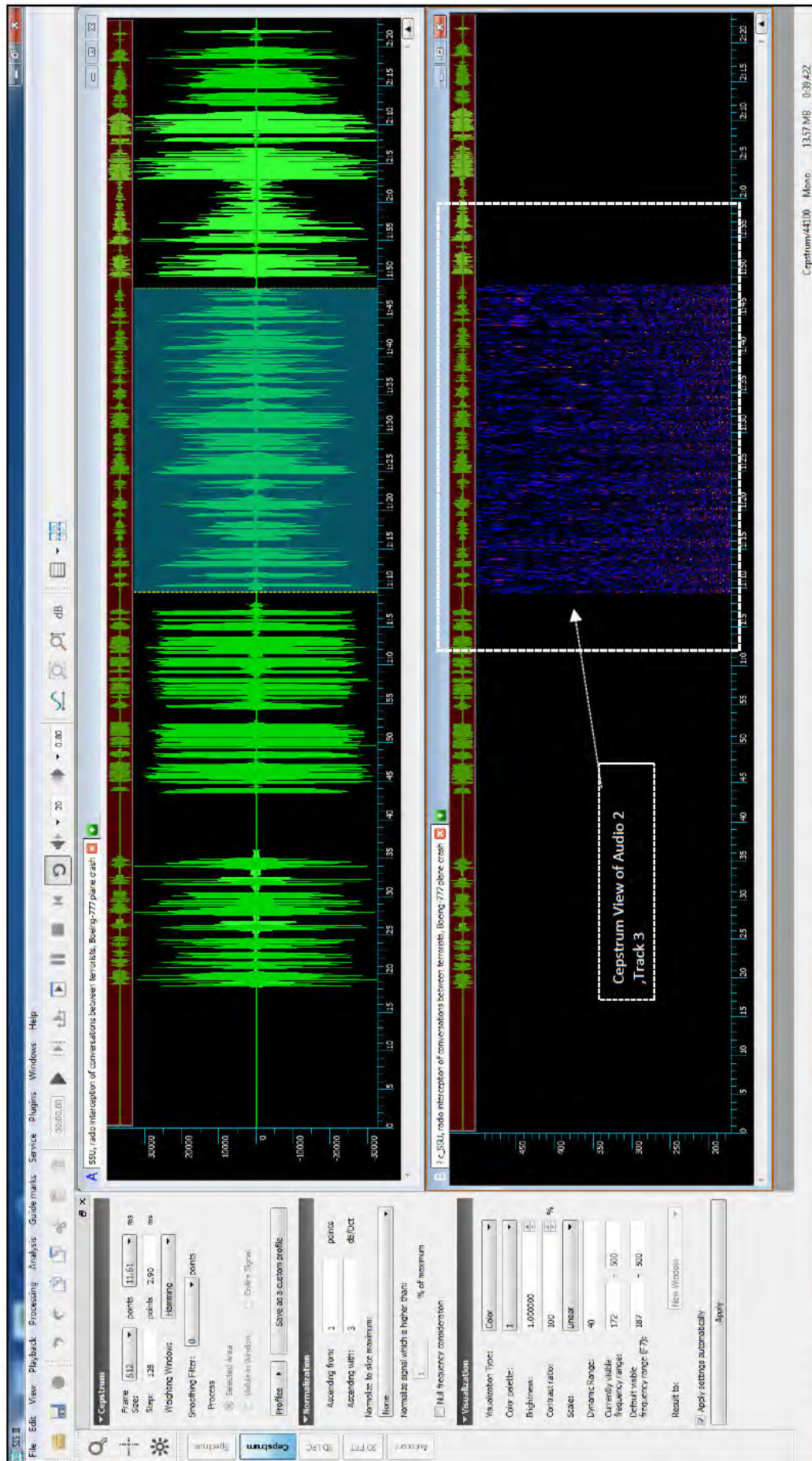


Figure 4.2.3.4: Cepstrum view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 2 Track-4 conversation between Major and Grek audio duration between 1:09.4 - 1:49.0



Project-MH17

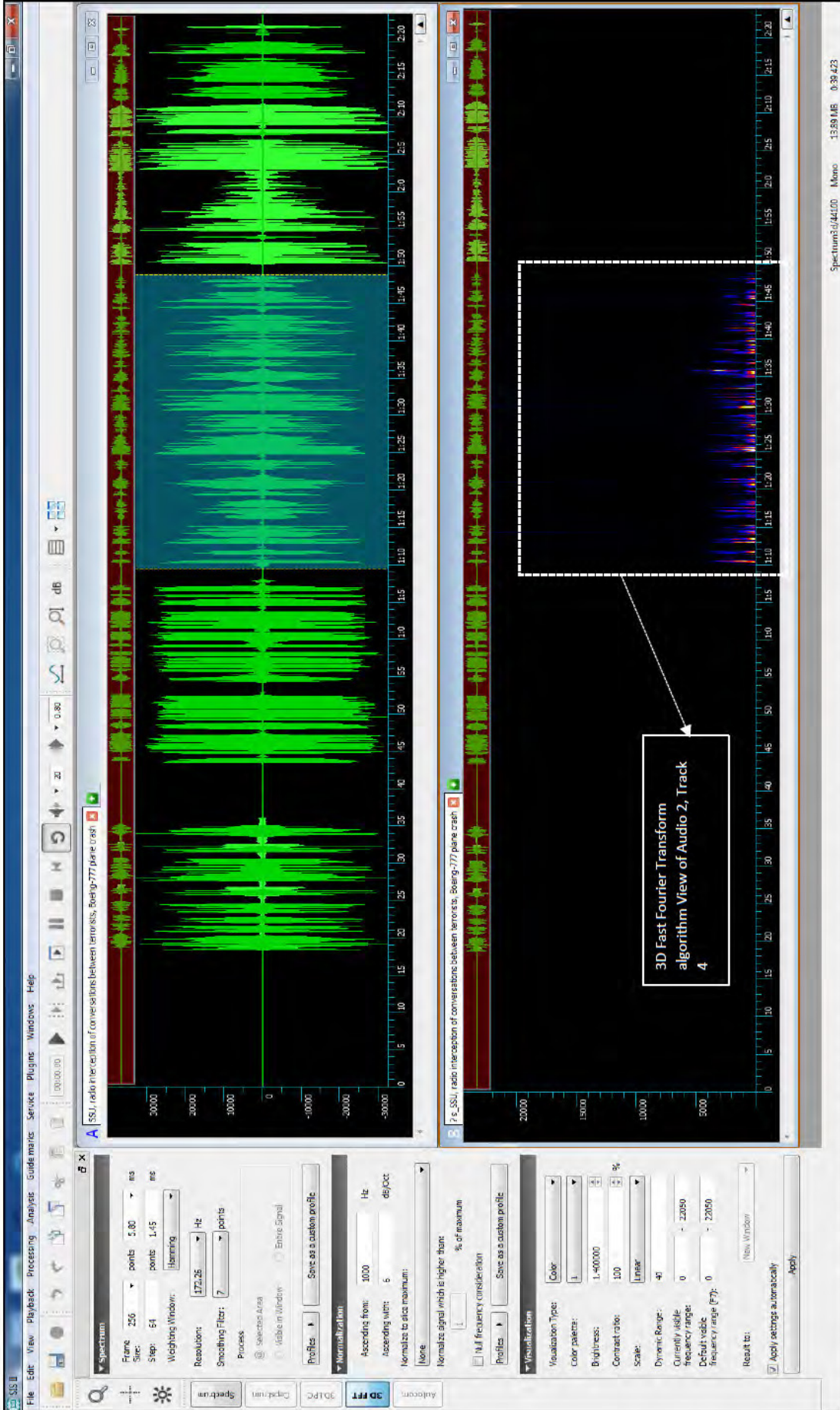


Figure 4.2.3.5: 3D FFT view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 2 Track-4 conversation between Major and Grek audio duration between 1:09:4 - 1:49.0



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- i. There are two channels in this Audio 2, Track-4, conversation between Major and Grek audio duration between 1:0.4 – 1:49.0. Refer to Figure 4.2.3.1.
- ii. Total Audio Selection view for audio 2, track 4 is 1:09.382 minutes (1 minute and 09.382 seconds). Refer to Figure 4.2.3.1.
- iii. Recording Audio Source: Telephone. Refer to Section 4.5.
- iv. Recorded time mentioned in the video is 5:32 PM on 17/07/2014 which is on the same day of MH17 fatal accident. Original audio created date is unknown from the audio analysis.
- v. Major and Grek both their voices can be heard in left channel and right channels (Stereo).
- vi. Imported Media format is in MPEG (Media Pictures Expert Group)
- vii. Audio sample rate is 44100Hz.
- viii. Audio bit depth is 32-bit (float)
- ix. Audio channels are in stereo format, which are Left and Right channels.
- x. The audio quality is very low although it is hearable.
- xi. Figure 4.2.3.4 is showing the Cepstrum view which is used for pitch determination/analysis.
- xii. Figure 4.2.3.5 is showing 3D Fast Fourier Transform (3D FFT) is an algorithm that computes the Discrete Fourier transform (DFT) of a sequence, or its inverse (IDFT).
- xiii. Audio seems to be cut between time frame 1.24.2 and 1.24.3. Different frequency level appears in many places and different background noises level were seen.
- xiv. A new person voice was heard between 1:09.5 and 1:49.0 throughout this track instead of Grek.
- xv. A new person voice was heard between 1:09.5 and 1:49.0 throughout this track instead of Major.



Project-MH17

4.3 Audio 3 - Track 5 - from time 1:50 to 2:22.8

Figure 4.3.1: Audio 3 Track- Conversation between “Kozitsyn” and “Militant” had been recorded



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i. Audio 3, Track 5 from 1:50 - 2:22.8 - conversation between Kozitsyn and Militant

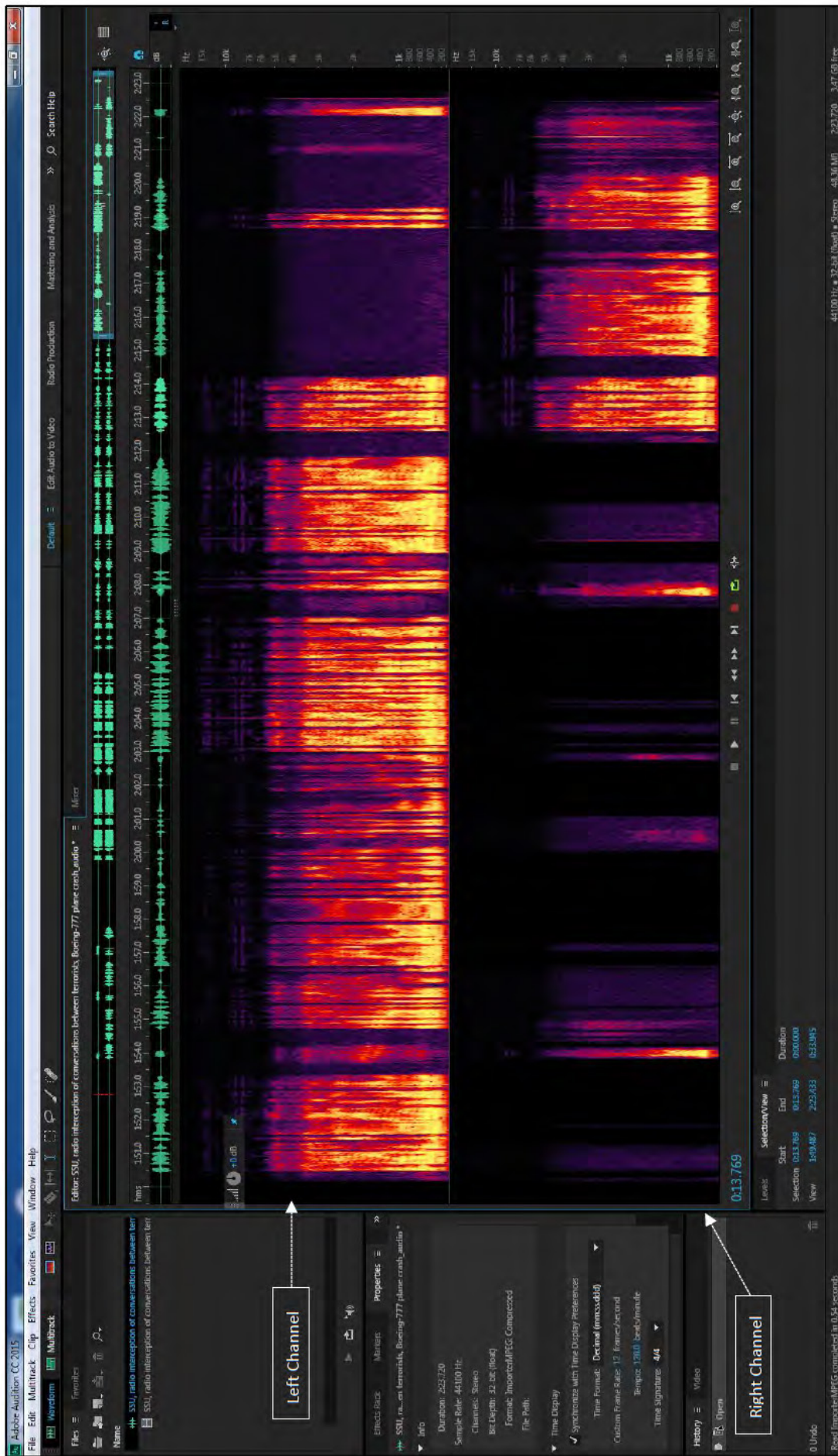


Figure 4.3.2: SSU, radio interception of conversations between terrorists/militants, Boeing-777 plane crash.mp4, Audio 3 and Track 5 conversation between Kozitsyn and Militant audio duration between 1:50 - 2:22.8



Project-MH17

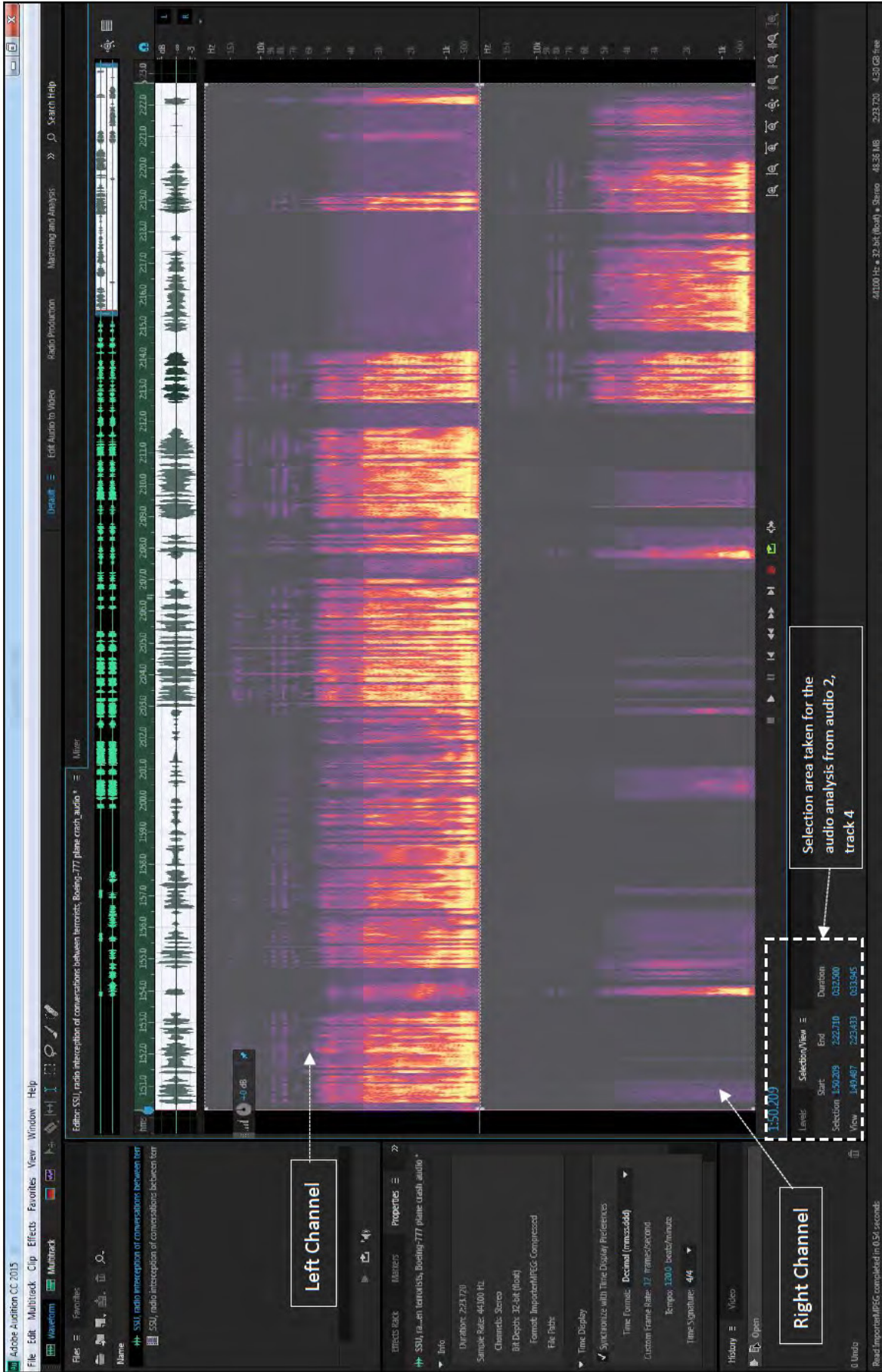


Figure 4.3.3: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 3 and Track 5 – Selection/View

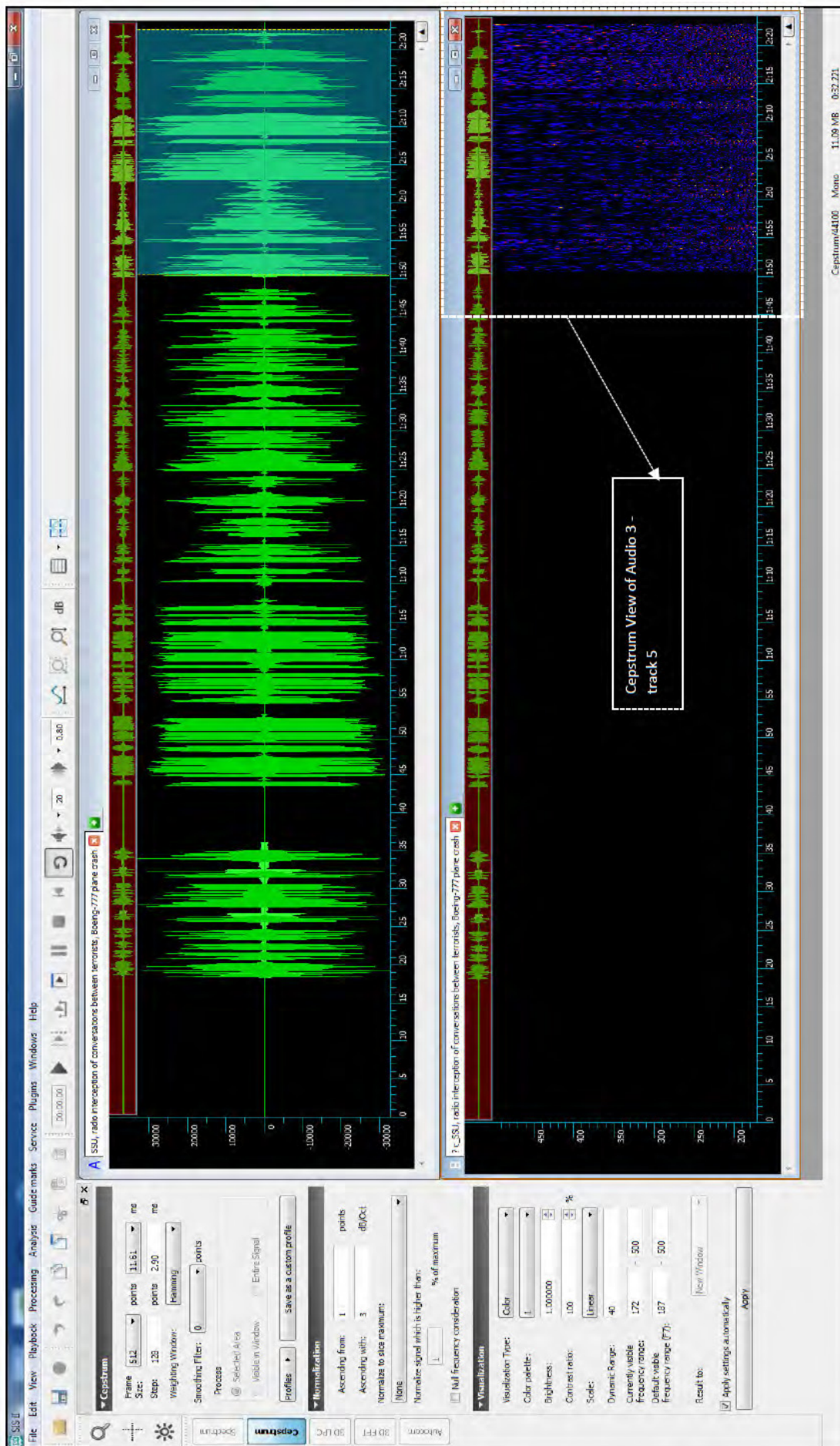


Figure 4.3.4: Cepstrum view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4, Audio 3 Track-5 conversation between Kozitsyn and Militant audio duration between 1:50 - 2:22.8



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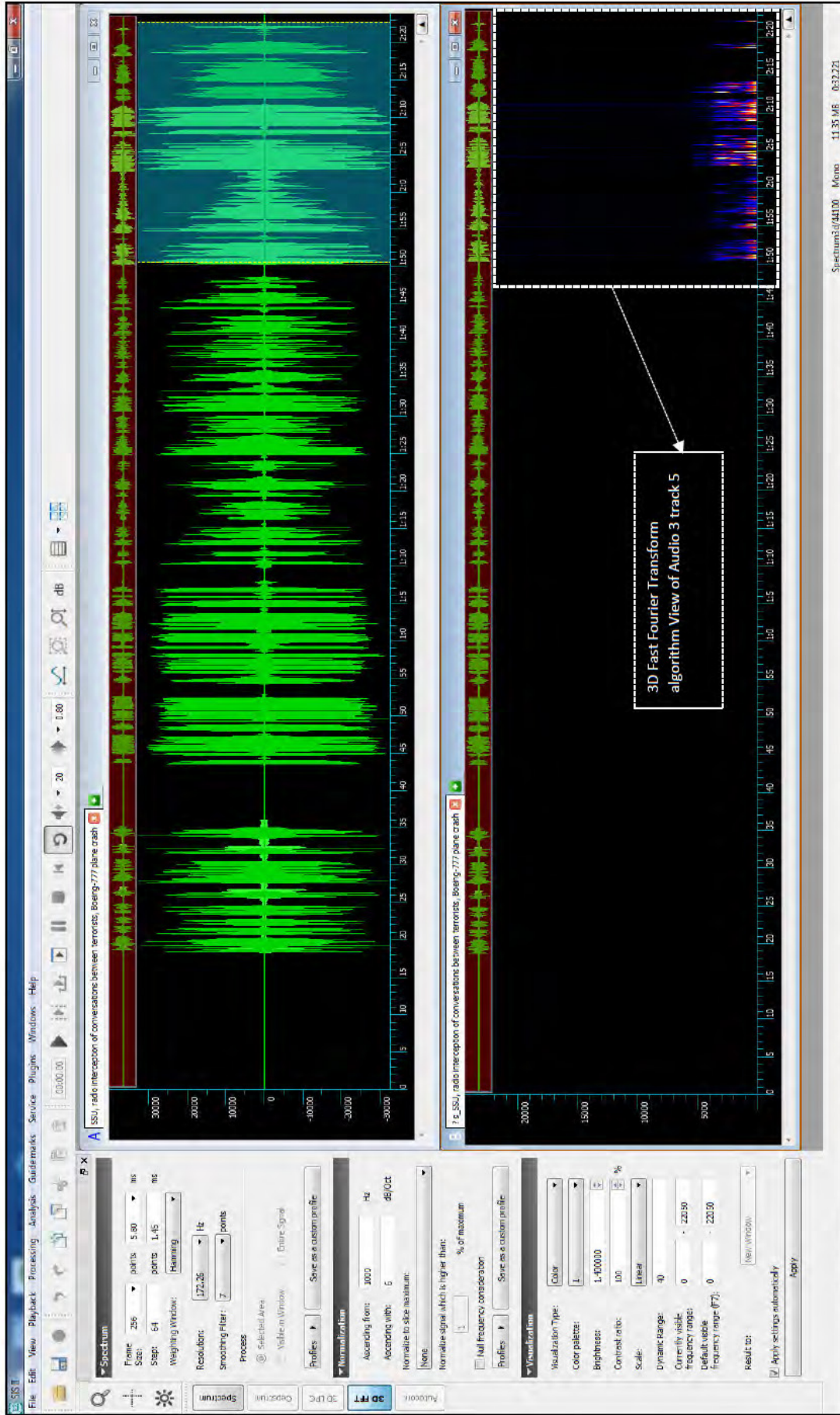


Figure 4.3.5: 3D FFT view from the SIS II - SSU, radio interception of conversations between terrorists, Boeing-777 plane crash, Audio 3 Track-5 conversation between Kozytsyn and Militant audio duration between 1:50 - 2:22.8



Project-MH17

- i. There are two channels in this audio 3, track 5, conversation between Kozitsyn and Grek audio duration between 1:50.0 – 2:22.8.
- ii. Total Audio Selection view for audio 3, track 5 is 1:50.209 minutes. (1 minute 50.209 seconds)
- iii. Recording Audio Source: Telephone. Refer to Section 4.5.
- iv. Recorded time mentioned in the video is 5:42 PM on 17/07/2014 which is on the same day of MH17 fatal accident. Original audio created date is unknown from the audio analysis.
- v. Militants 1 & 2 are speaking in the left channel and Kozitsyn is speaking the right channel.
- vi. Imported Media format is in MPEG (Media Pictures Expert Group)
- vii. Audio sample rate is 44100Hz.
- viii. Audio bit depth is 32-bit (float)
- ix. Audio channels are in stereo format, which are Left and Right channels.
- x. Figure 4.3.4 is showing the Cepstrum view which is used for pitch determination/analysis.
- xi. Figure 4.3.5 is showing 3D Fast Fourier Transform (3D FFT) is an algorithm that computes the Discrete Fourier transform (DFT) of a sequence, or its inverse (IDFT).
- xii. Possible merging can be seen between 2:02.94 and 2:02.97, also sudden difference in the spectrum frequency from 2:02:98.
- xiii. Two different militants speaking in the track 5. But no information about this in the video.
- xiv. Back noises were not heard only when Kozitsyn speaks background noise are heard.



Project-MH17
4.4 Video 1 Audio Tracks Edit/Manipulation
4.4.1 Audio 1, Track-1

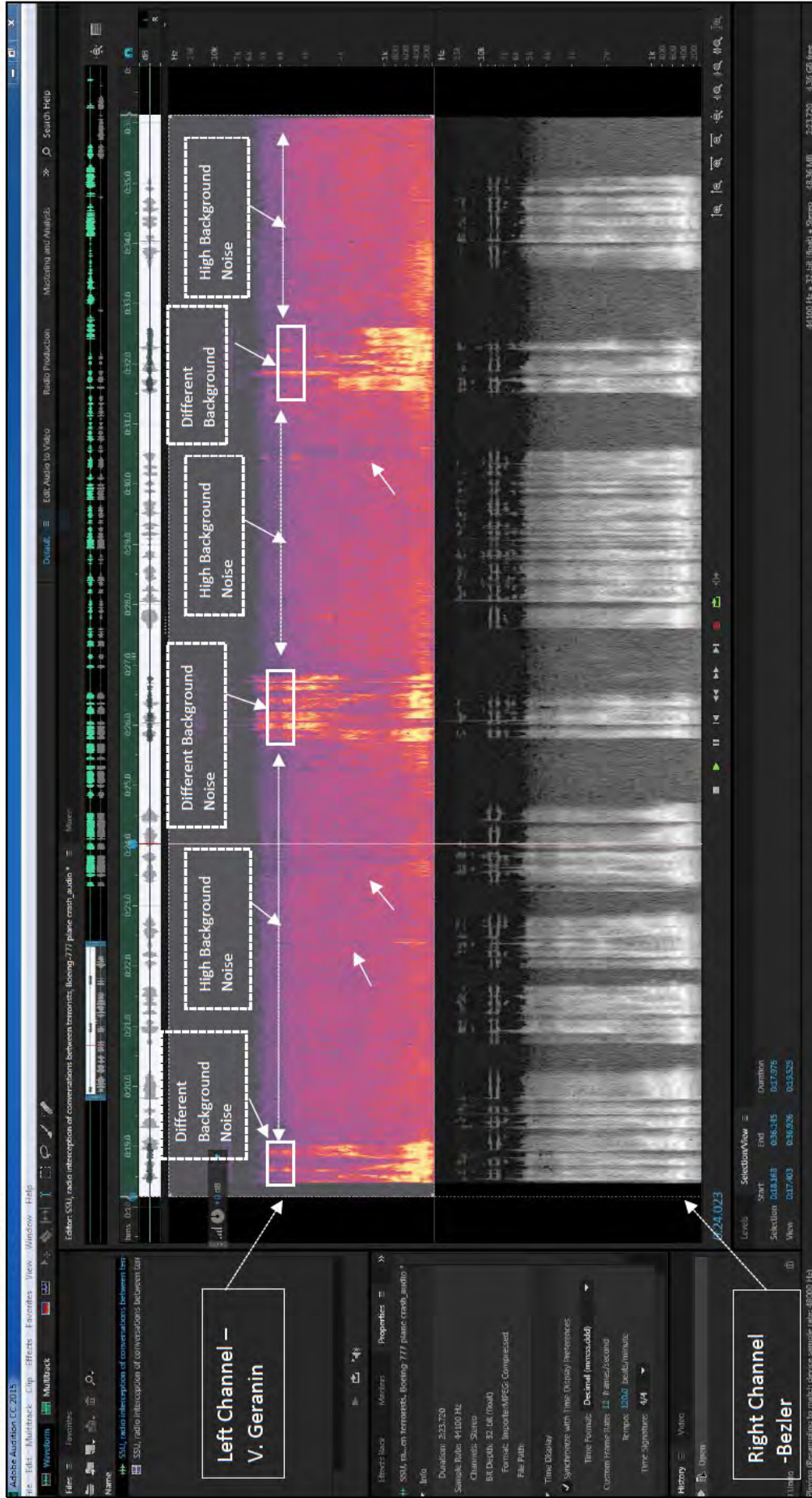


Figure 4.4.1.1: Background noises appears in the V. Geranin's part of audio Track-1 (Left Channel) are different at 0:18.5, 0:25.75 & 0:31.5. The noise is different suddenly once he starts to talk. The background noise in between of phrases present in Audio 1, Track 1 between the duration of 0:19.5 and 0:25.5, between 0:26.8 and 0:31.4 and between 0:32.6 and 0:36.0. Arrows (bottom – up) showing merging of audios at 0:22.5, 0:23.5 and 0:30.5.

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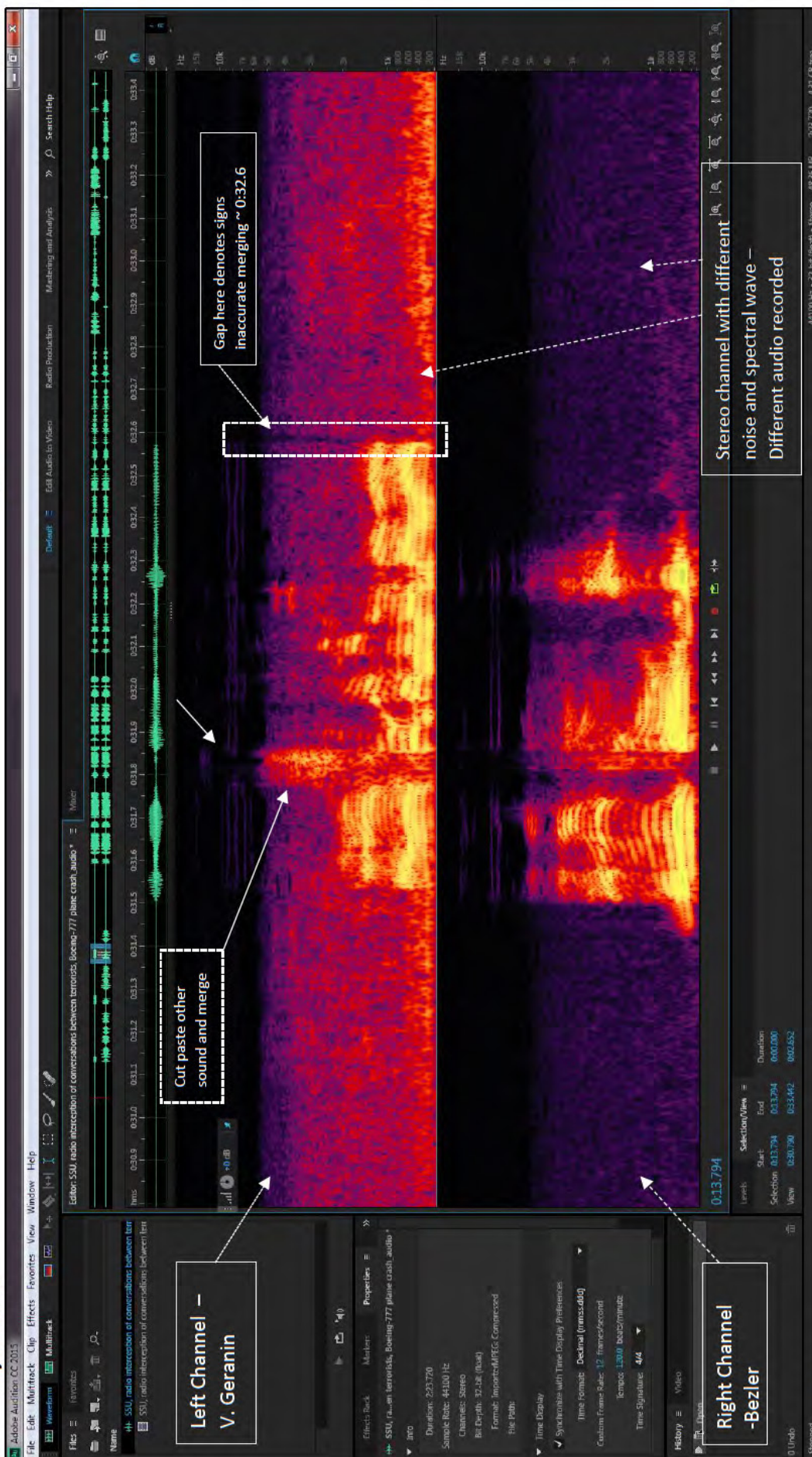


Figure 4.4.1.2: A gap which appears at the end of third phrase ~0:32.6 uttered by V. Geranin in the audio Track-1 (Left Channel) is possible indication that Geranin voices are merged into the conversation. Audio spectral at 0:31.75 – 0:31.85 (Left Channel) showing added cut, paste and merger of other sound in this audio.



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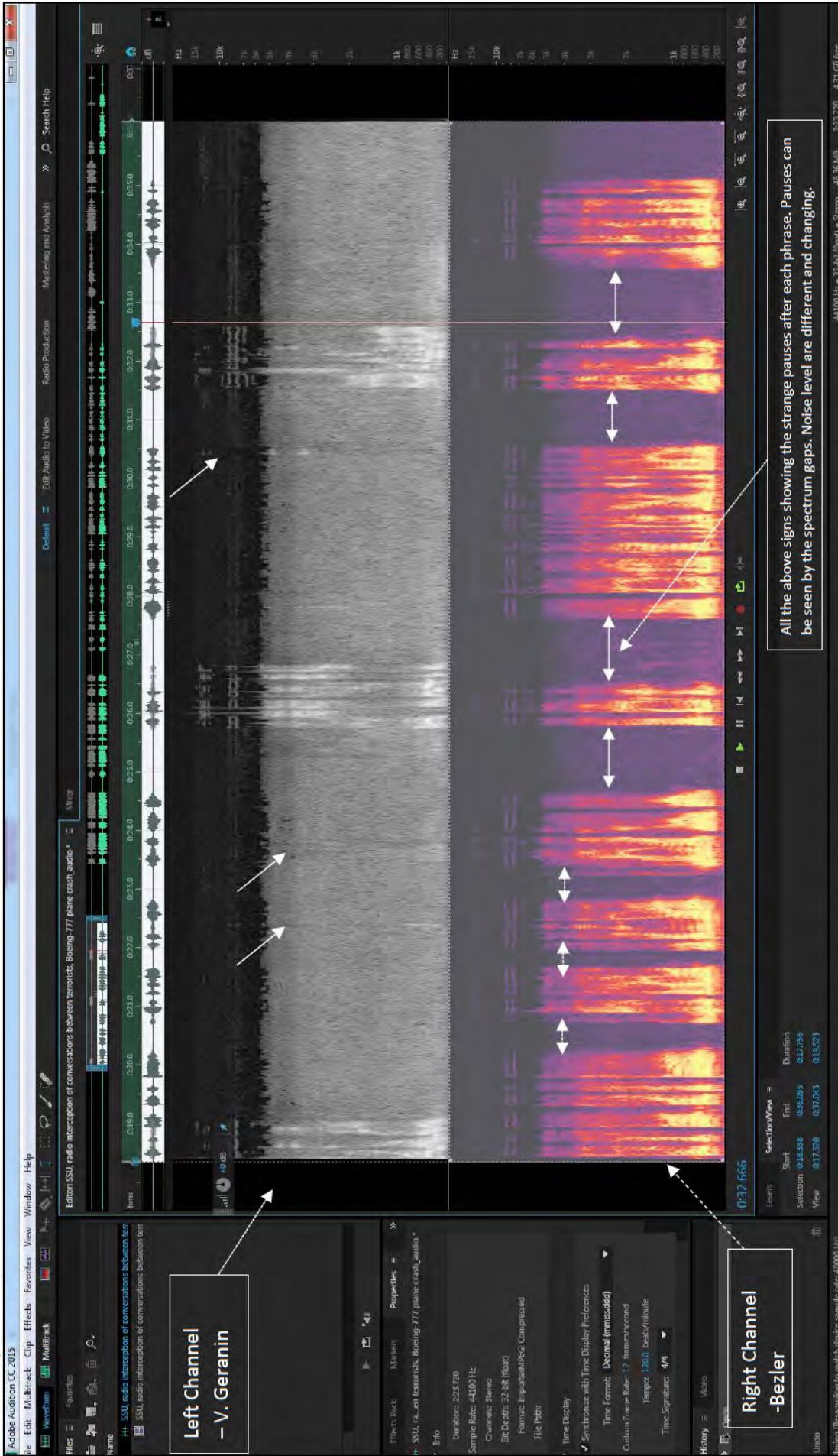


Figure 4.4.1.3: Bezler's voice audio Track 1 (Right Channel) have long pauses after each phrase, appears strange. Long pauses seen between 0:24.7 and 0:25.7, between 0:26.55 and 0:27.55, between 0:36 and 0:31.45, between 0:32.4 and 0:33.5. Arrows (up-bottom) in Left Channel showing merging of audios at 0:22.5, 0:23.5 and 0:30:5.

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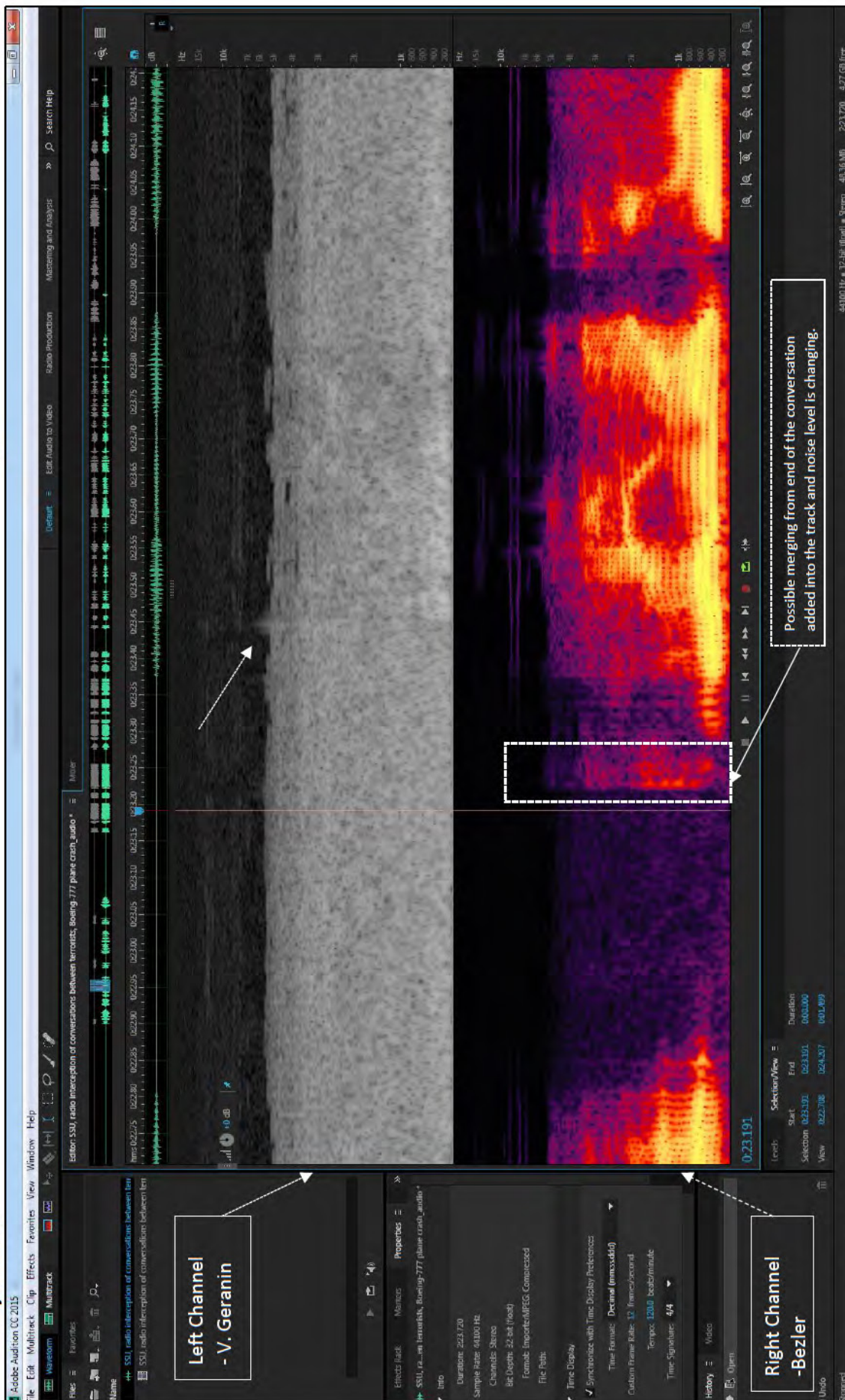


Figure 4.4.1.4: Right Channel - It appears that the audio was cut down and merged at 0:23.20 from the end of a conversation. Different audio conversation starts at 0:23.30. Left channel (arrow up-bottom) showing merging of audio at 0:23.43.



Project-MH17 4.4.2 Audio 2, Track-2

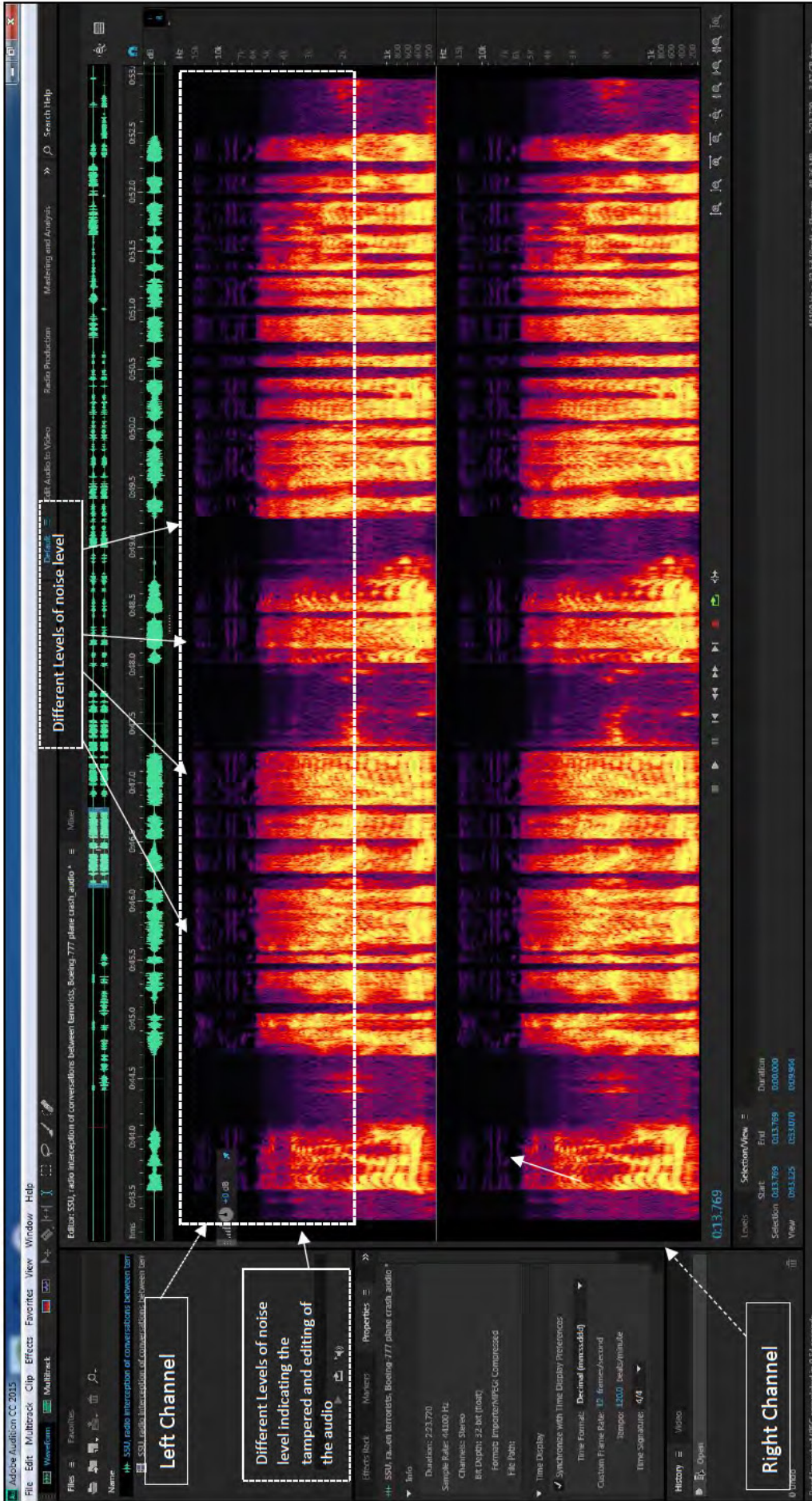


Figure 4.4.2.1: SSU, radio interception of conversations between militants, Boeing-777 plane crash.mp4, Audio 2 and Track-2 conversation between Major and Grek audio duration between 0:43.3 – 0:52.9. Possible edit can be seen as the noise level is different

Project-MH17 4.4.3 Audio 2, Track-3

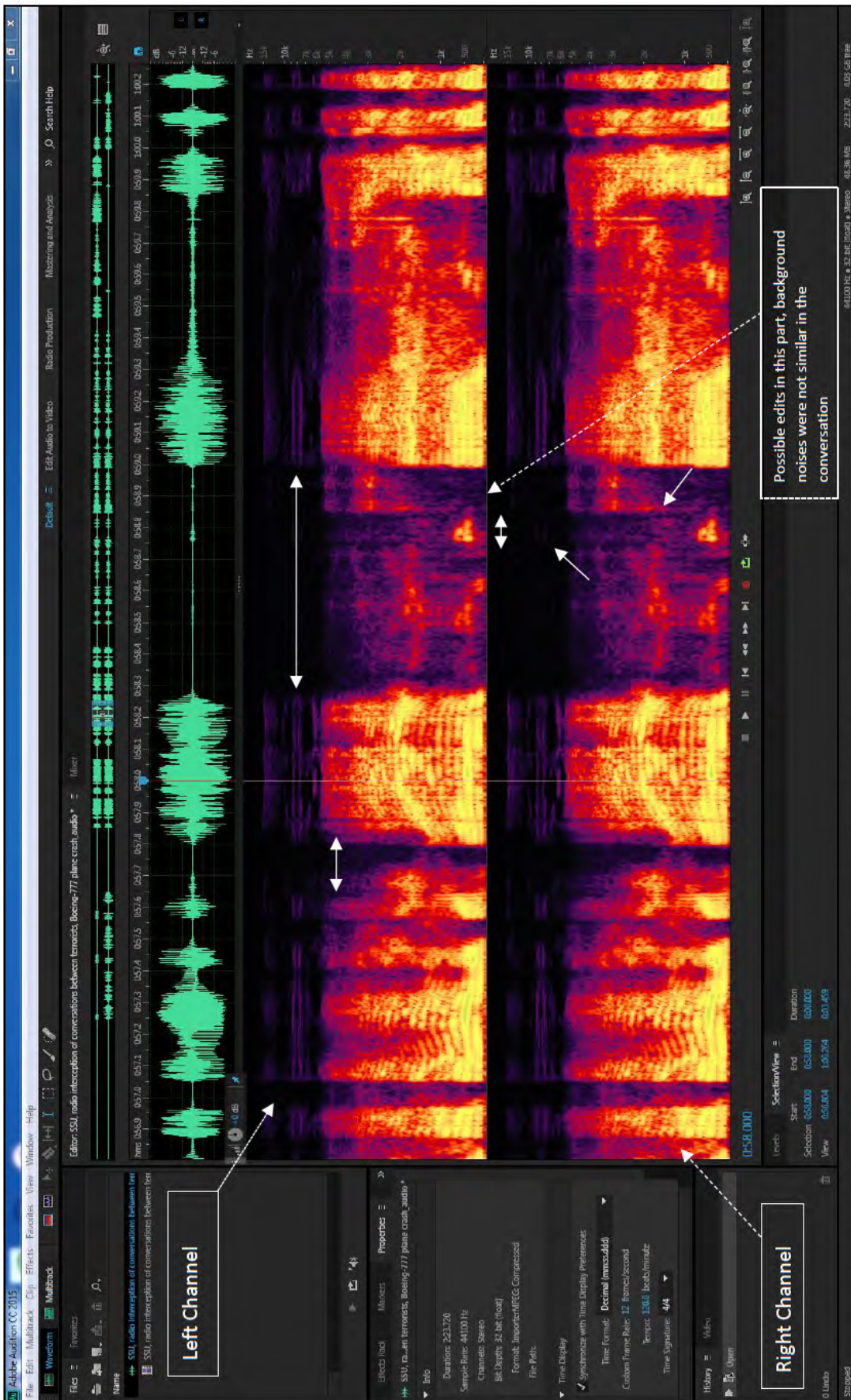


Figure 4.4.3.1: In Audio 2, Track-3, background noises are not similar in this part from 0:58:75 and 0:59:0. At 0:58:85 another difference noise were seen.



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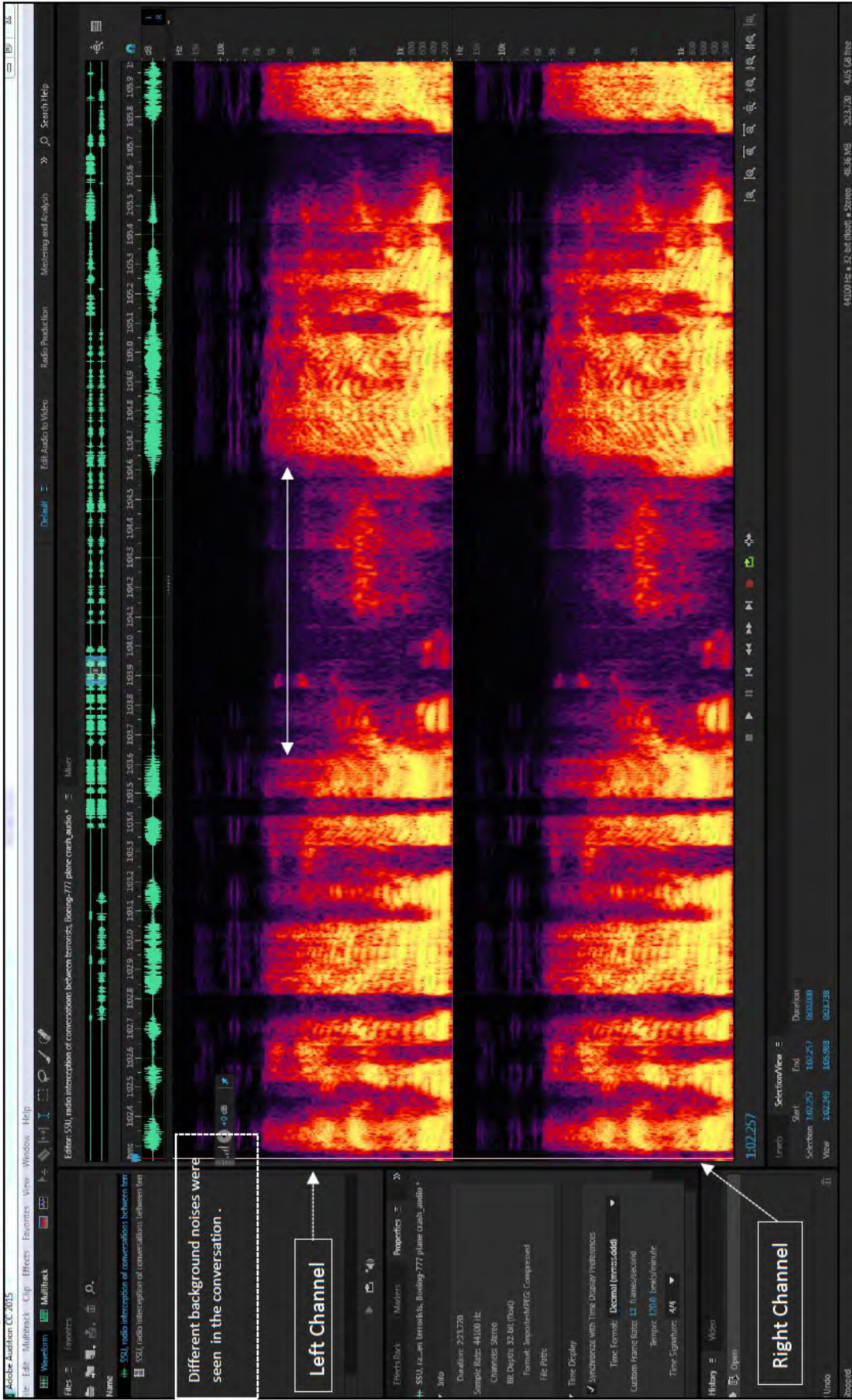


Figure 4.4.3.2: In Audio 2, Track-3, possible edits can be seen between 1:03:85 and 1:04:55, background noise suddenly appears from nowhere completely unrelated to the speakers' background atmosphere.

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4.4.4 Audio 2, Track-4

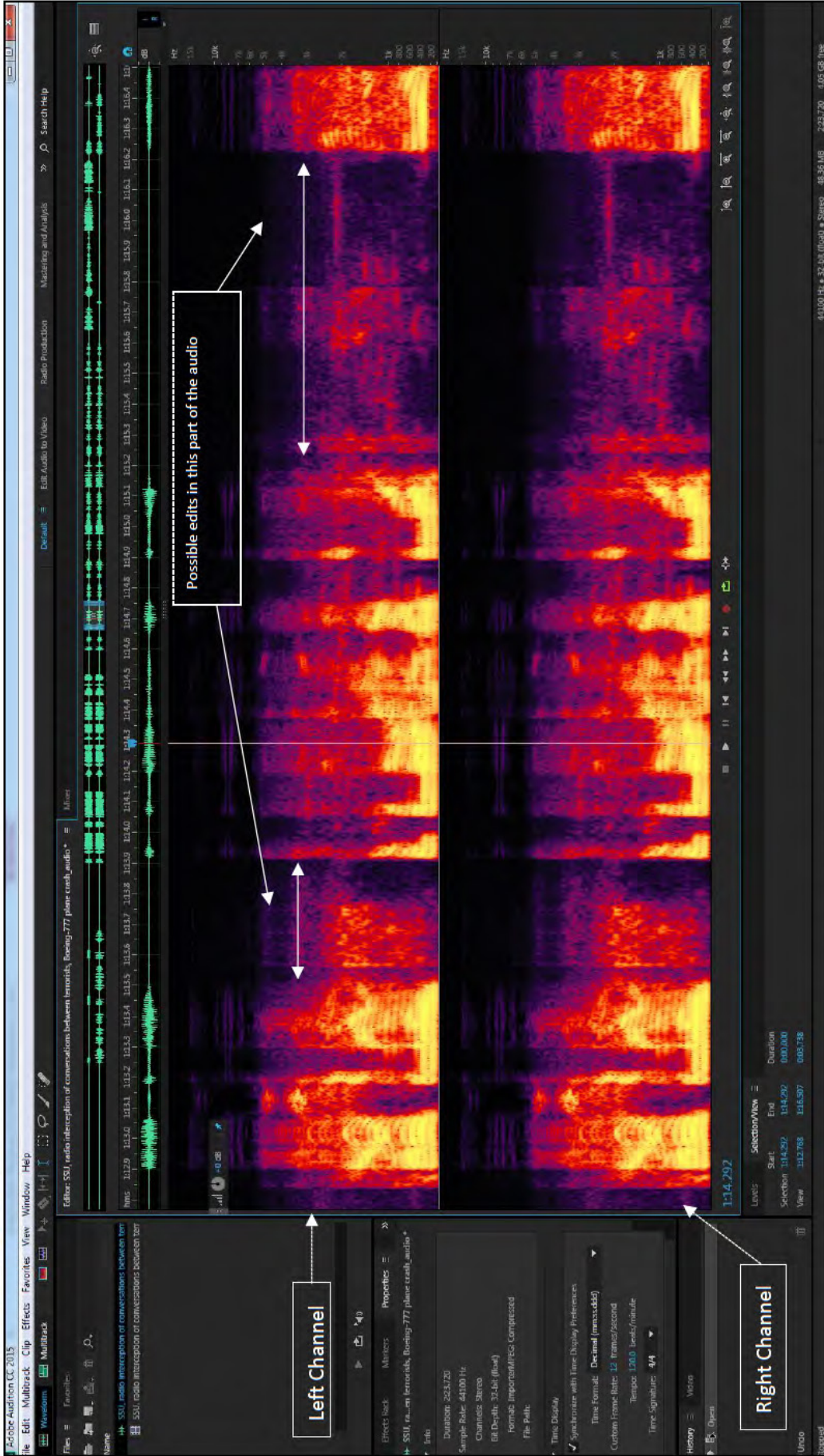


Figure 4.4.4.1: In Audio 2, Track-4 possible edits can be seen between 1:13:55 and 1:13:5 and between 1:15:20 and 1:16:20, background noise suddenly appears from nowhere completely unrelated to the speakers' atmosphere.



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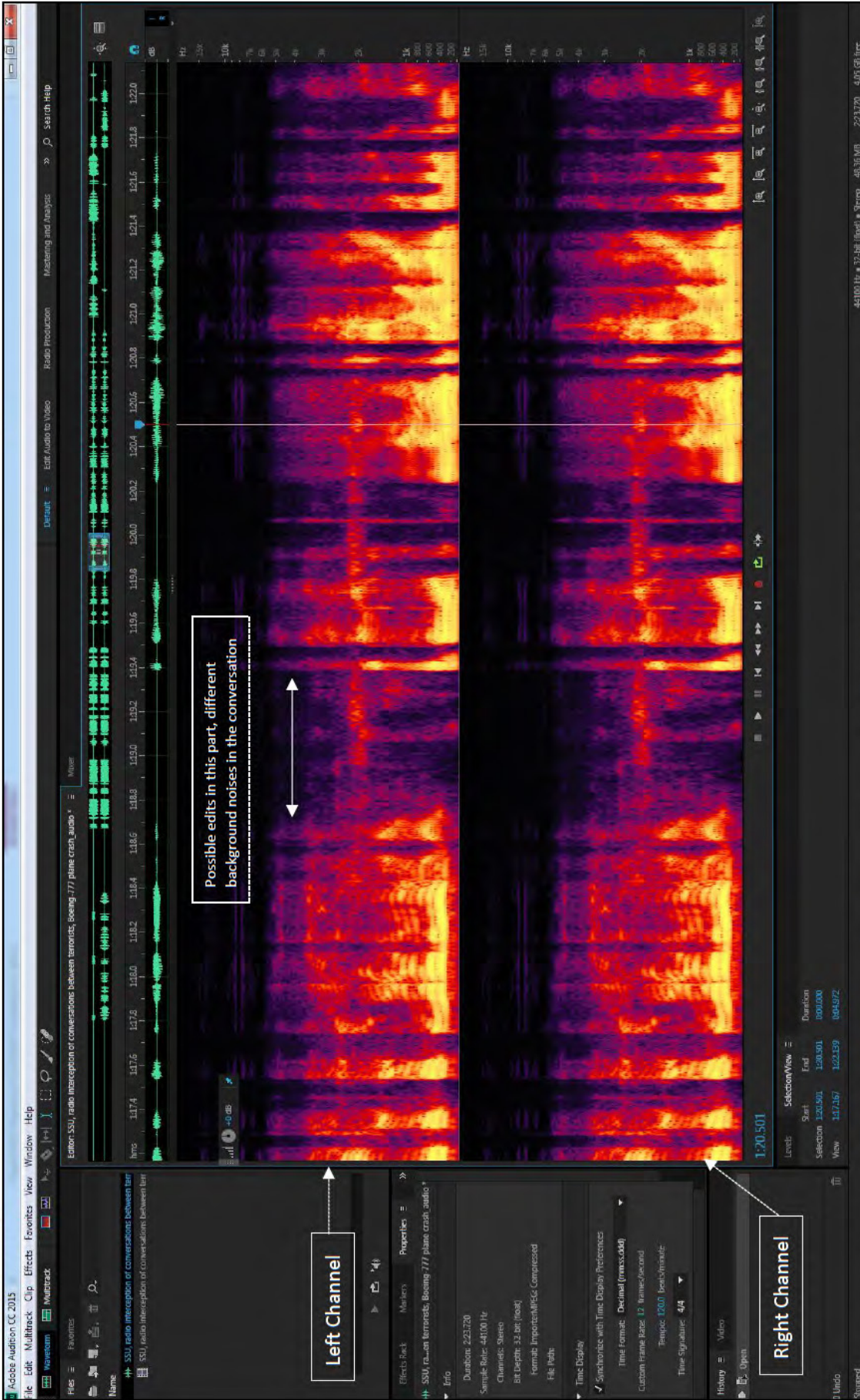


Figure 4.4.4.2: In Audio 2 Track-4, possible edits can be seen between 1:18:80 and 1:19:30, background noise suddenly appears from nowhere completely unrelated to the speakers' atmosphere.

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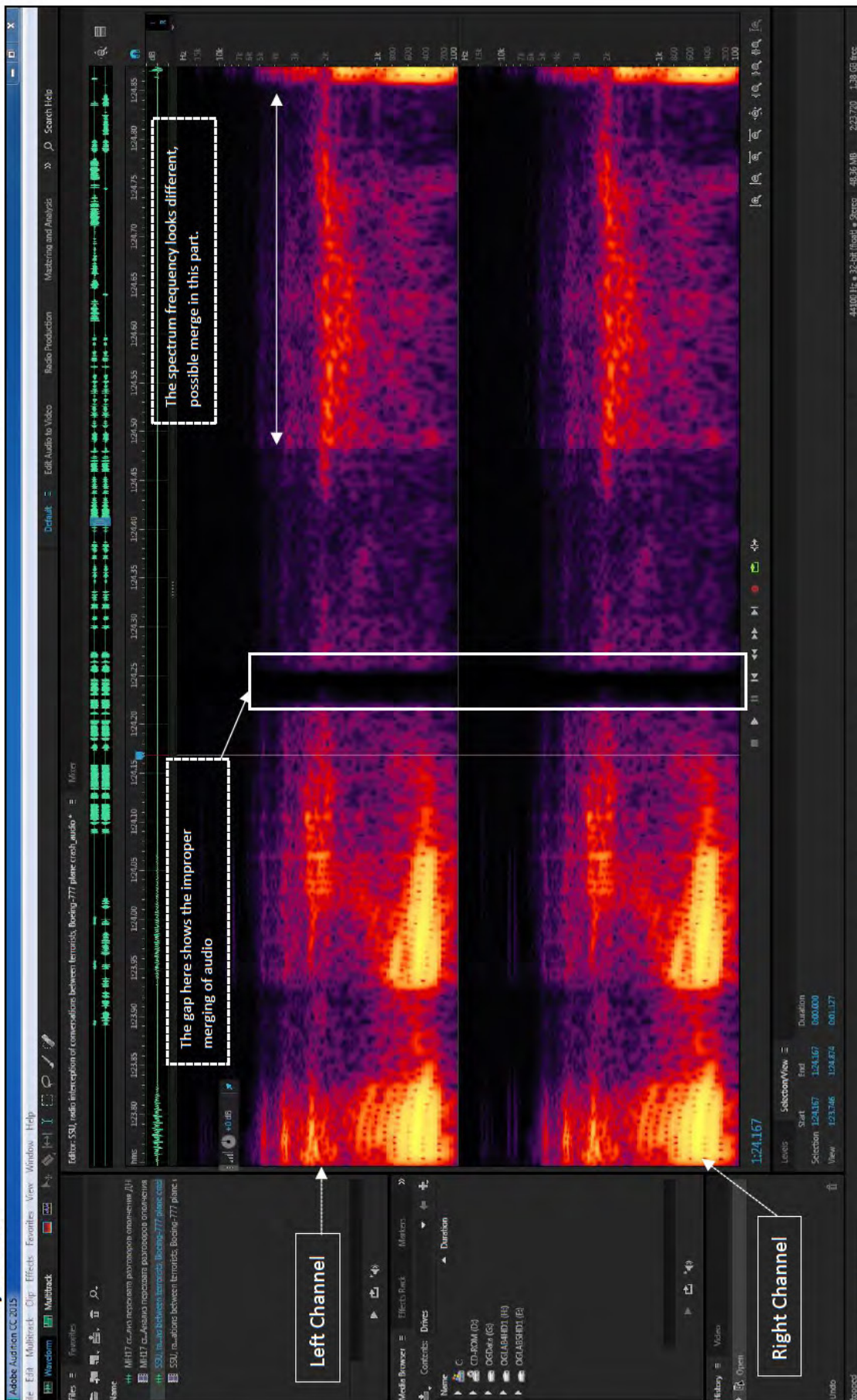


Figure 4.4.4.3: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 in Audio 2 Track-4, failed to overlay of the merging between time frame 1:24.20 and 1:24.30 another merging between 1:24.50 and 1:24.85.



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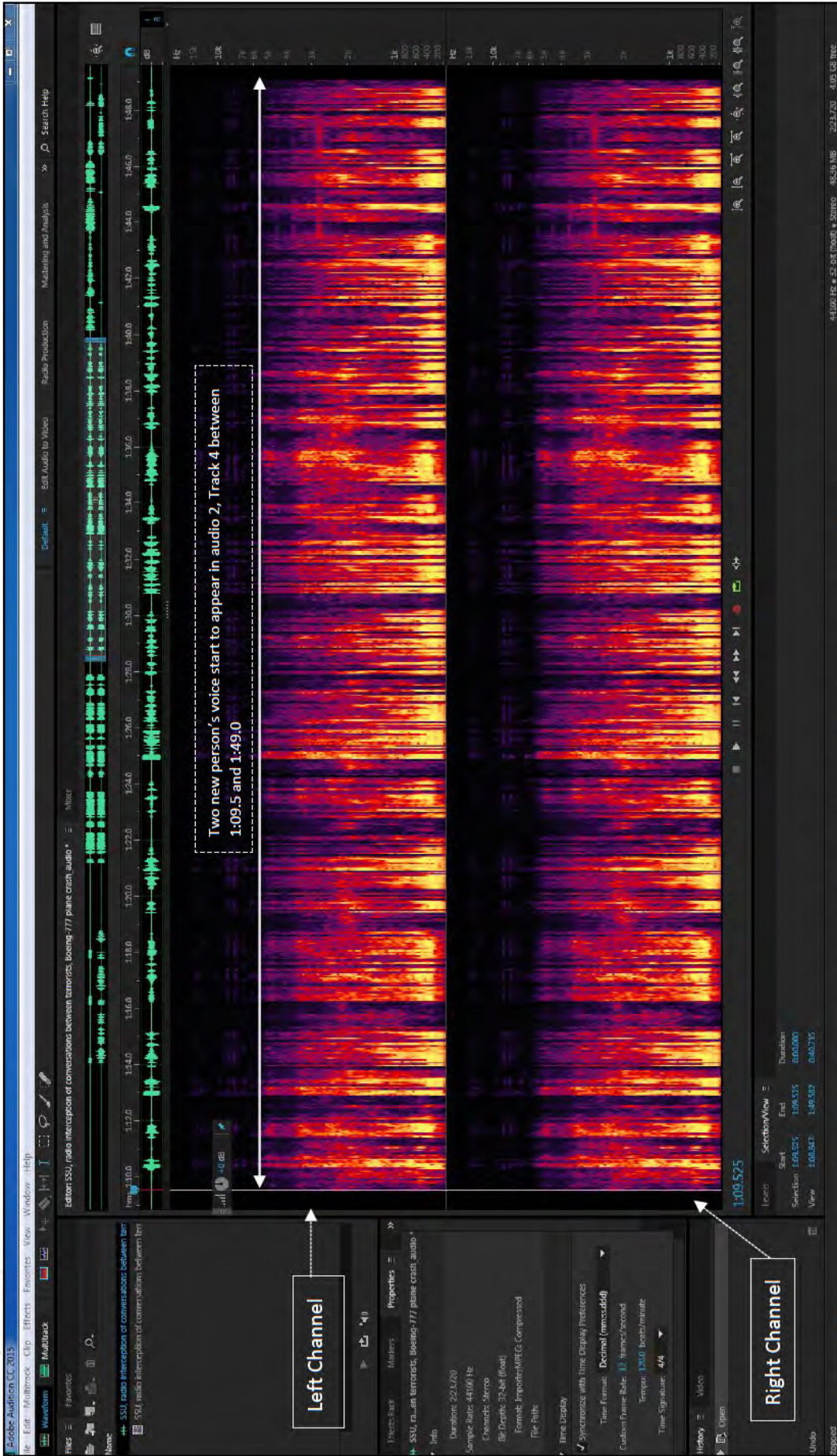


Figure 4.4.4.4: SSU, radio interception of conversations between terrorists, Boeing-777 plane crash.mp4 in Audio 2 Track-4. A new speaker voice appears between 1:09.5 and 1:49.0. However, SBU stated that the conversation was between Major and Grek.

Project-MH17 4.4.5 Audio 3, Track-5



Figure 4.4.5.1: Audio 3 Track-5 begins from 1:50.2 and ends at 2:22.7. This segment of audio has 3 different individual voices, it appears to be two different militants speaking to Kozitsyn. 2 Different audios in different channels. Cut of audio in Right channel at ~1:51.0 – 1:54.0, ~1:57.5-2:00.0, ~2:01.0-2:02.5, ~ 2:04.5-2:07.5 & ~2:10.5-2:12.0



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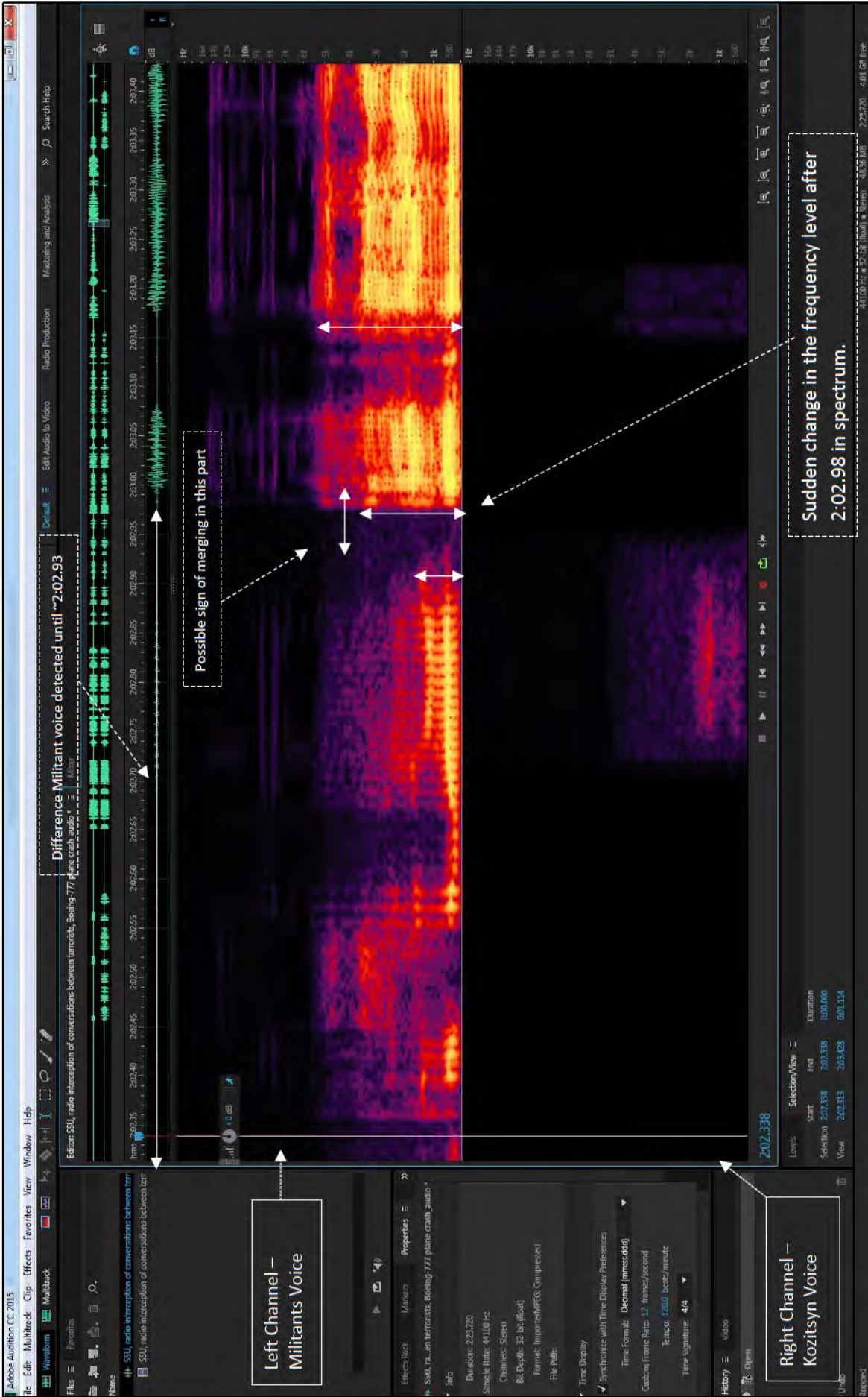


Figure 4.4.5.2: Militant voice between ~1:50.15 and ~2:02.93 is not the same as Militant voice appears after ~2:02.98 till the end of the audio Possible merging can be seen between 2:02.94 and 2:02.97 (Left Channel), also sudden difference in the spectrum frequency from 2:02:98

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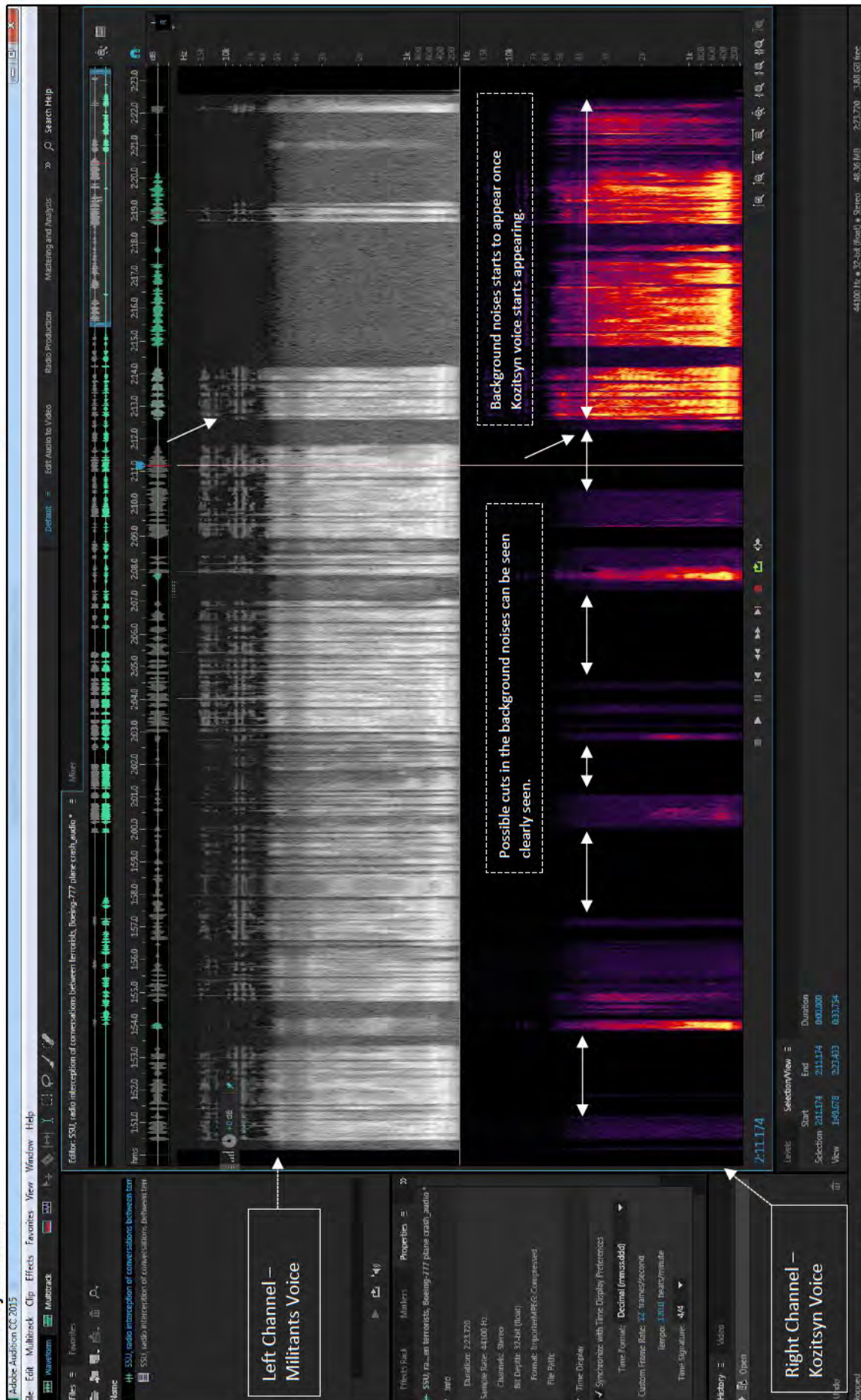


Figure 4.4.5.3: Muffled and no background noise appears were seen between 1:50.2 and 1:53.6 (Right Channel). However, background noise appears normal after 1:53.8 till the end of the track. Two different channels. Left Channel - (Arrow Up-Bottom) – adding of audio between ~2:12.6 and 2:14.2.

Right Channel (Arrow Up-Bottom) – merging ~2:12.3 until 2:22.28. This is clear editing/adding of audios



Project-MH17

4.5 Voice Biometric (Voice ID) Analysis - From Video 1 Audio Tracks

Voice biometric are used for voice Identification and verification from any unknown sample of voices to a known suspect voice speaker. It can access any source of audio recording, communication channels such as telephone or microphone for verification of a speaker. The voice speech is text independent and it can be any conversational style.

Hearing analysis in Audio 2-Track 4 and Audio 3-Track 5 showing difference speakers as stated in Video 1 transcript. In order to determine they are same or difference speakers, a voice comparison can be done by taking the samples of each speaker's voice from each audio tracks. Table 4.1.1 showing the list of voice captured and Table 4.5.2 showing the list of voice samples which was extracted in WAV (raw format) from video 1 audio tracks separately to confirm the speaker is the same in the video. By determining the speaker is the same as stated in the Video 1 transcripts, analysis can conclude the transcript shown with the speaker are genuine. Refer Table 4.5.1 showing Voice ID Analysis details.

Minimum requirement of each speaker voice sample must be at least ~15 seconds and frequency response of ~3000 Hz. Unfortunately, the analysis of voice comparison can't be performed due the quality of voice of each speaker was not meeting the requirement for the analysis. Analysis concluded based on hearing as there are difference speakers in the audio tracks of Audio 2-Track 4 and Audio 3-Track 5.



Project-MH17

Table 4.5.1: Voice Biometric (Voice ID) Analysis - Audio Tracks from Video 1

Audio Aired in the Video	Audio Tracks	Parties in the Conversation	Time Frames of Voice Captured	Audio Details	Remarks
Audio 1	Track-1	<ul style="list-style-type: none"> - I. Bezler ("Bes") and Vasyi Mykolaiovych Geranin (9031921428) (Refer Section 4.1) - Left and Right channels have different speakers in Audio 1, Track-1, Hence the original audio recorded are Mono. 	<ul style="list-style-type: none"> - Left Channel: I. Bezler - 0:18.4 – 0:36.09 - Right Channel: V. Geranin - 0:18.4 – 0:36.09 <p>Refer to Section 4.5.1</p>	<ul style="list-style-type: none"> i. Bezler's Audio recording Frequency Response: ~ 2013 Hz SNR 53 dB Reverberation Time: 222 ms Dispersion 31 Voice: 7.66 s Total 45.29 % Source: Telephone ii. V. Geranin's Audio recording Frequency Response: ~ 3510 Hz SNR 53 dB Reverberation Time: 228 ms Dispersion 48 Voice: 2.24 s Total 59.18 % Source: Telephone 	<ul style="list-style-type: none"> i. The voice of individual speaker is in different channels, therefore the entire signal of left and right channels was captured separately from Track-1. ii. Bezler's Audio recording cannot be accepted for Voice ID Analysis. (Refer to 4.5.1) iii. V. Geranin's Audio recording cannot be accepted for Voice ID Analysis (Refer to 4.5.2) iv. Therefore the speaker voice in the audio track cannot be validate and verify



Project-MH17

<p>Audio 2</p>	<p>Track-2</p>	<p>- Major and Grek (Refer Section 4.2) - Both the left and right channels have the similar audio tracks in Audio 2, Track-2. Recording were in Stereo.</p>	<p>- Grek: 0:43.55 – 0:44.08 - Major: 0:44.70-0:52.95 Refer to Section 4.5.2</p>	<p>i. Grek’s Audio recording Frequency Response: ~2692 Hz SNR 13 dB Reverberation Time: 0 ms Dispersion 0 Voice: 0.51 s Total 80.38 % Source: Telephone ii. Major’s Audio recording Frequency Response: ~2810 Hz SNR 24 dB Reverberation Time: 185 ms Dispersion 27 Voice: 4.13 s Total 67.97 % Source: Telephone</p>	<p>i. The voice of individual speakers is in both channels. ii. Voice samples are not suitable, when two individuals are speaking at one time. Hence only single speaker voices are taken for analysis. iii. Major’s Audio recording cannot be accepted for Voice ID Analysis. iv. Grek’s Audio recording cannot be accepted for Voice ID Analysis v. Therefore the speaker voice in the audio track cannot be validate and verify</p>
<p>Audio 2</p>	<p>Track-3</p>	<p>- Major and Grek (Refer Section 4.2) - Both the left and right channels have the similar audio tracks in Audio 2, Track-3. Recording were in Stereo.</p>	<p>Grek: 0:54.25 – 0:55.40 Major: 0:55.70-1:08.10 Refer to Section 4.5.3</p>	<p>i. Grek’s Audio recording Frequency Response: ~1744 Hz SNR 16 dB Reverberation Time: 0 ms Dispersion 0 Voice: 0.54 s Total: 66.41 % Source: Telephone ii. Major’s Audio recording Frequency Response: ~2627 Hz SNR 34 dB Reverberation Time: 221 ms Dispersion 24 Voice: 5.11 s Total 52.43 % Source: Telephone</p>	<p>i. The voice of individual speakers is in both channels. ii. Voice samples are not suitable, when two individuals are speaking at one time. Hence only single speaker voices are taken for analysis. iii. Major’s Audio recording cannot be accepted for Voice ID Analysis. iv. Grek’s Audio recording cannot be accepted for Voice ID Analysis. v. Therefore the speaker voice in the audio track cannot be validate and verify</p>



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Audio 3	Track-4	<p>- Different speaker in place of Major and Different speaker in place of Grek (Refer Section 4.2) Both the left and right channels have the same values in Audio 2, Track 4.</p>	<p>- Different Speaker of (Grek) from Track-2 and Track-3 <u>Time from:</u> 1:1.30-1:12.20; 1:16.90-1:18.80; 1:22.22-1:24.23; 1:34.85-1:36.15; 1:42.75-1:43.54 - Different Speaker of (Major) from Track-2 and Track-3: <u>Time from:</u> 1:10.30-1:10.56; 1:12.80-1:15.30; 1:19.35-1:22.15; 1:24.85-1:33.55 1:36.6-1:42.8; 1:44.0-1:49.0 Refer to Section 4.5.4</p>	<p>i. Grek's Audio recording Frequency Response: ~2110 Hz SNR 38 dB Reverberation Time: 195 ms Dispersion 15 Voice: 12.70 s Total 47.37 % Source: Telephone</p> <p>ii. Major's Audio recording Frequency Response: ~2918 Hz SNR 34 dB Reverberation Time: 243 ms Dispersion 39 Voice: 3.99 s Total 61.52 % Source: Telephone</p>	<p>i. The voice of individual speakers is in both channels. ii. Voice samples are not suitable, when two individuals are speaking at one time. Hence only single speaker voices are taken for analysis. iii. Major's Audio recording cannot be accepted for Voice ID Analysis. iv. Grek's Audio recording partially be accepted for Voice ID Analysis. v. Therefore the speaker voice in the audio track cannot be validate and verify</p>
Track-5	Track-5	<p>- Kozitsyn and Militant1 and Militant 2 (Refer Section 4.3) Left and Right channels have different values in Audio 3, Track 5</p>	<p>i. Left Channel Militant 1 – 1:50.40 – 2:02.90 Right Channel Militant 2 – 2:02.95 – 2:14.20 Right Channel – Kozitsyn – 2:14.80 – 2:20.20 Refer to Section 4.5.5</p>	<p>i. Kozitsyn's Audio recording Frequency Response: ~2207 Hz SNR 23 dB Reverberation Time: 328 ms Dispersion 75 Voice: 3.59 s Total 30.51 % Source: Telephone</p> <p>ii. Militant 1 Audio recording Frequency Response: ~2186 Hz SNR 35 dB Reverberation Time: 296 ms Dispersion 43 Voice: 6.02 s Total 17.96 % Source: Telephone</p>	<p>i. The voice of individual speaker is in different channels, therefore the entire signal of left and right channels is captured separately from track 1. ii. Kozitsyn's Audio recording cannot be accepted for Voice ID Analysis. (Refer to 4.5.5) iii. Militant 1's Audio recording cannot be accepted for Voice ID Analysis (Refer to 4.5.6) iv. Militant 2's Audio recording cannot be accepted for Voice ID Analysis (Refer to 4.5.7) v. Therefore the speaker voice in the audio track cannot be validate and verify</p>



Project-MH17

			iii. Militant 2 Audio recording Frequency Response: ~2885 Hz SNR 37 dB Reverberation Time: 226 ms Dispersion 24 Voice: 6.64 s Total 19.82 % Source: Telephone	
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Table 4.5.2: Details of Individual Voice ID for Voice Biometrics Analysis Exported

No	Individual Voice ID	MD5 HashValue	Speaker	Remarks
1	Audio1,Track1-LeftChannel - GeraninVoiceID.wav	E5EE5D0D3A0E175D93E6A595698473FB	V. Geranin	-Voices are captured from the Left Channel of Track-1. -Not suitable for Voice biometric/comparison. -Not suitable for Voice biometric/comparison.
2	Audio1,Track1-RightChannel - BezlerVoiceID.wav	1D79DB6EEFEC615595EA599C97440CBC	I. Bezler	-Voices are captured from the Right Channel of Track-1 - Not suitable for Voice biometric/comparison.
3	Audio2,Track2- Grek-VoiceID.wav	5260DB415015836A26AA187EC320EDE2	Grek	-Track-2 Grek is same as Track-3 Grek -Not suitable for Voice biometric/comparison.
4	Audio2,Track2- Major-VoiceID.wav	09734793E5B5B344E6C547133CBE6B90	Major	-Track-2 Major is same as Track-3 Major -Not suitable for Voice biometric/comparison.
5	Audio2,Track3- Grek-VoiceID.wav	5DF78A4F06B8DD01C10A9B24A1D2AEE0	Grek	-Track-3 Grek is same as Track-2 Grek -Not suitable for Voice biometric/comparison.
6	Audio2,Track3- Major-VoiceID.wav	94B165D00CFB1026B70DC4AF3512C010	Major	-Track-3 Major is same as Track-2 Major -Not suitable for Voice biometric/comparison.
7	Audio2,Track4- UnknownNewVoice(Grek)-VoiceID.wav	54DE1D3C7F9BD3E3BCA938339E60C911	Different Voice (Grek)	-Track-4 Grek is not same as Track-2 and Track-3 -Not suitable for Voice biometric/comparison.
8	Audio2,Track4- UnknownNewVoice(Major)-VoiceID.wav	10E7B587637B72307DE001A85479F9EC	Different Voice (Major)	-Track-4 Major is not same as Track-2 and Track-3 - Audio can be partially accepted Voice biometric/comparison.
9	Audio3,Track5- LeftChannel-Militant1-VoiceID.wav	394E9F22CBA24D5B5EF71D8D731AB2C4	Militant Voice 1	-Voices are captured from the Left Channel of Track-5, Militant1 voice is not same as Militant2 voice. -Not suitable for Voice biometric/comparison.
10	Audio3,Track5- LeftChannel-Militant2-VoiceID.wav	676760F206D9CE5963FC5CB5BA72327	Militant Voice 2	-Voices are captured from the Left Channel of Track-5, Militant2 voice is not same as Militant1 voice. -Not suitable for Voice biometric/comparison.
11	Audio3,Track5- RightChannel-Kozitsyn-VoiceID.wav	78C726BD29F7530C0E42B072B021E508	Kozitsyn	-Voices are captured from the Right Channel of Track-1 -Not suitable for Voice biometric/comparison.



Project-MH17

4.5.1 Audio 1, Track 1 Voices

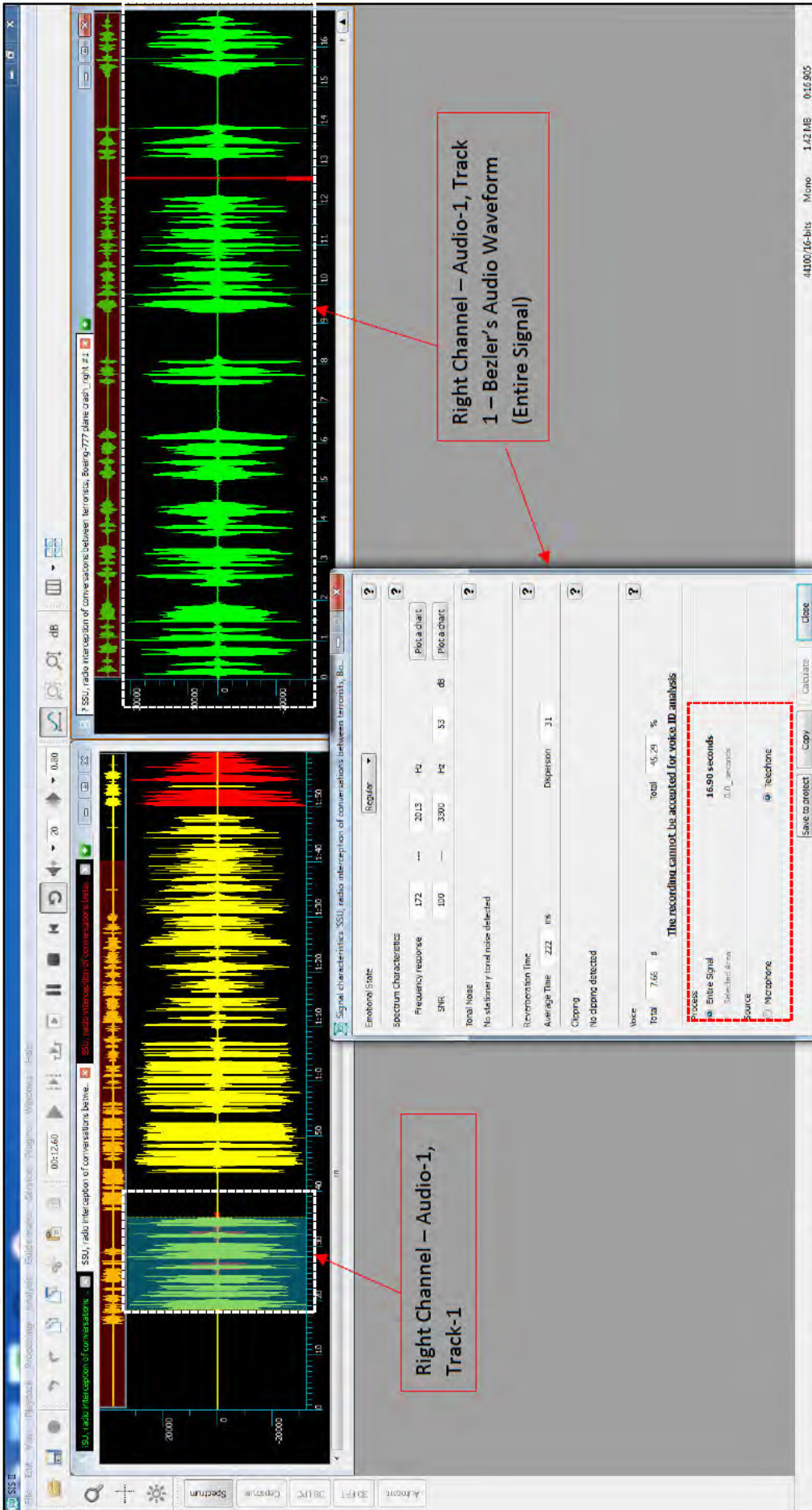


Figure 4.5.1.1: Audio1, Track 1 - Bezler's Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis

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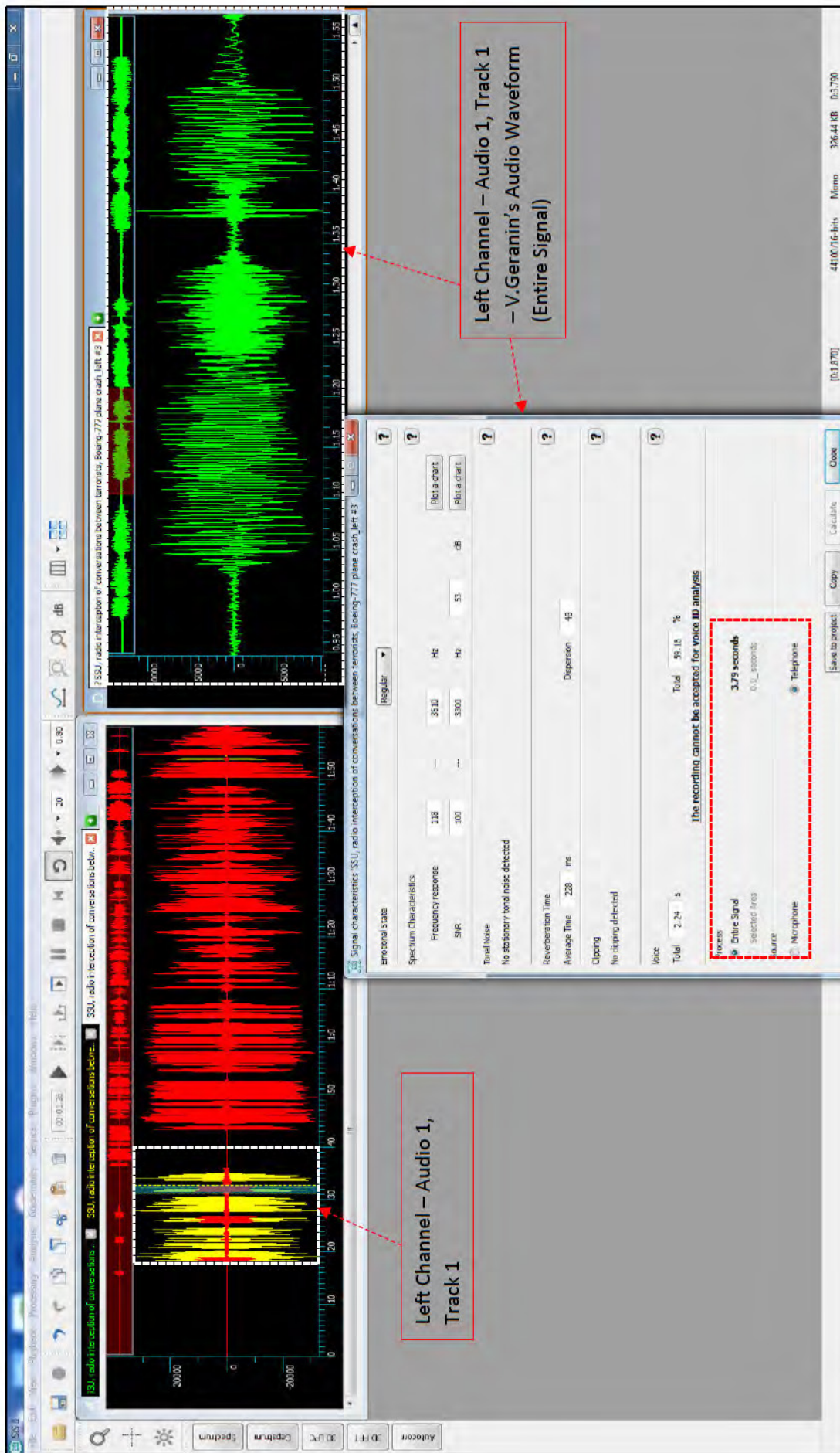


Figure 4.5.1.2: Audio1, Track1 - V. Geranin Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis

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4.5.2 Audio 2, Track 2 Voices

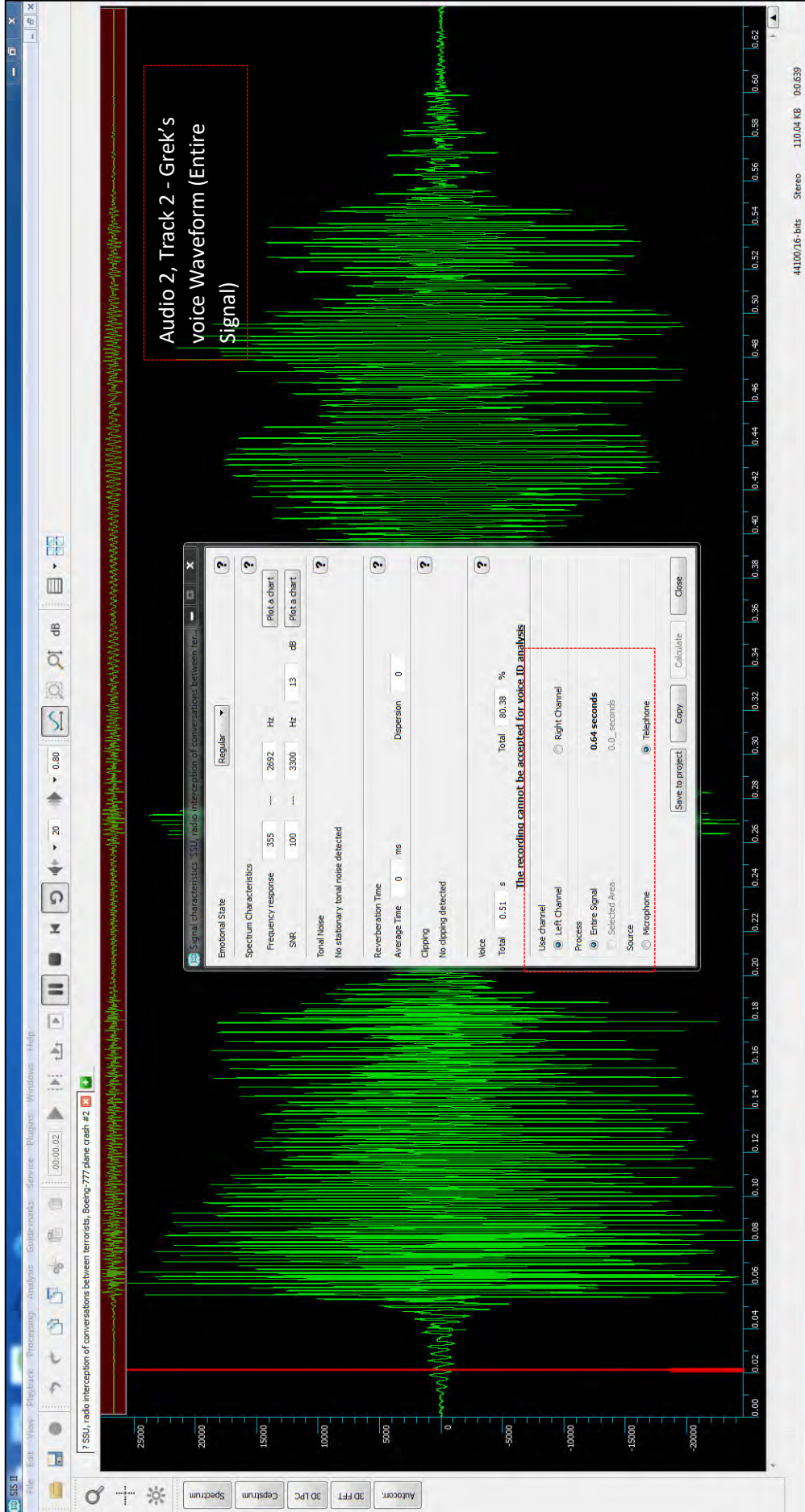


Figure 4.5.2.1: Audio 2, Track 2 - Grek's Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis

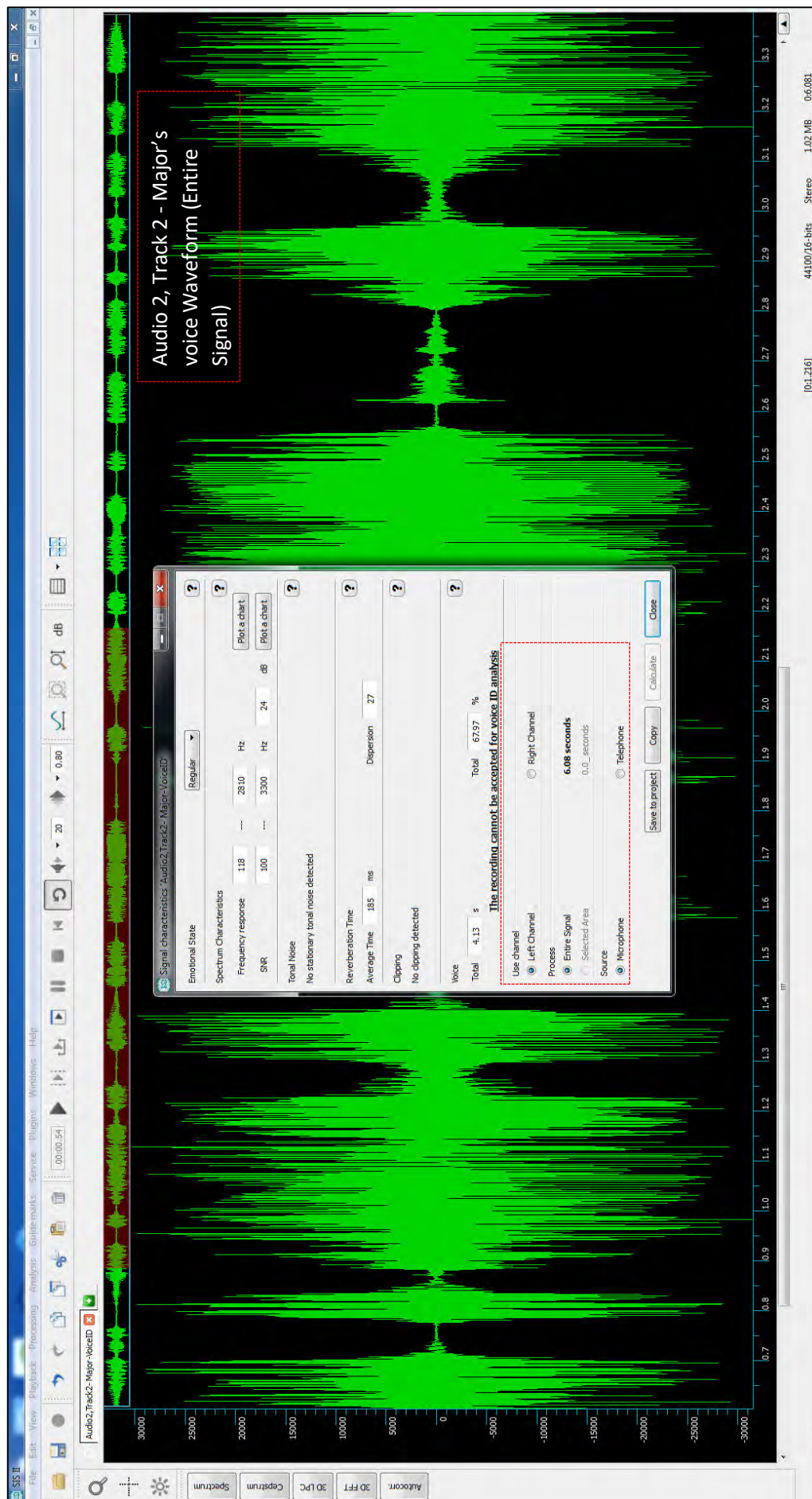


Figure 4.5.2.2: Audio 2, Track 2 - Major's Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis



Project-MH17

4.5.3 Audio 2, Track3 Voices

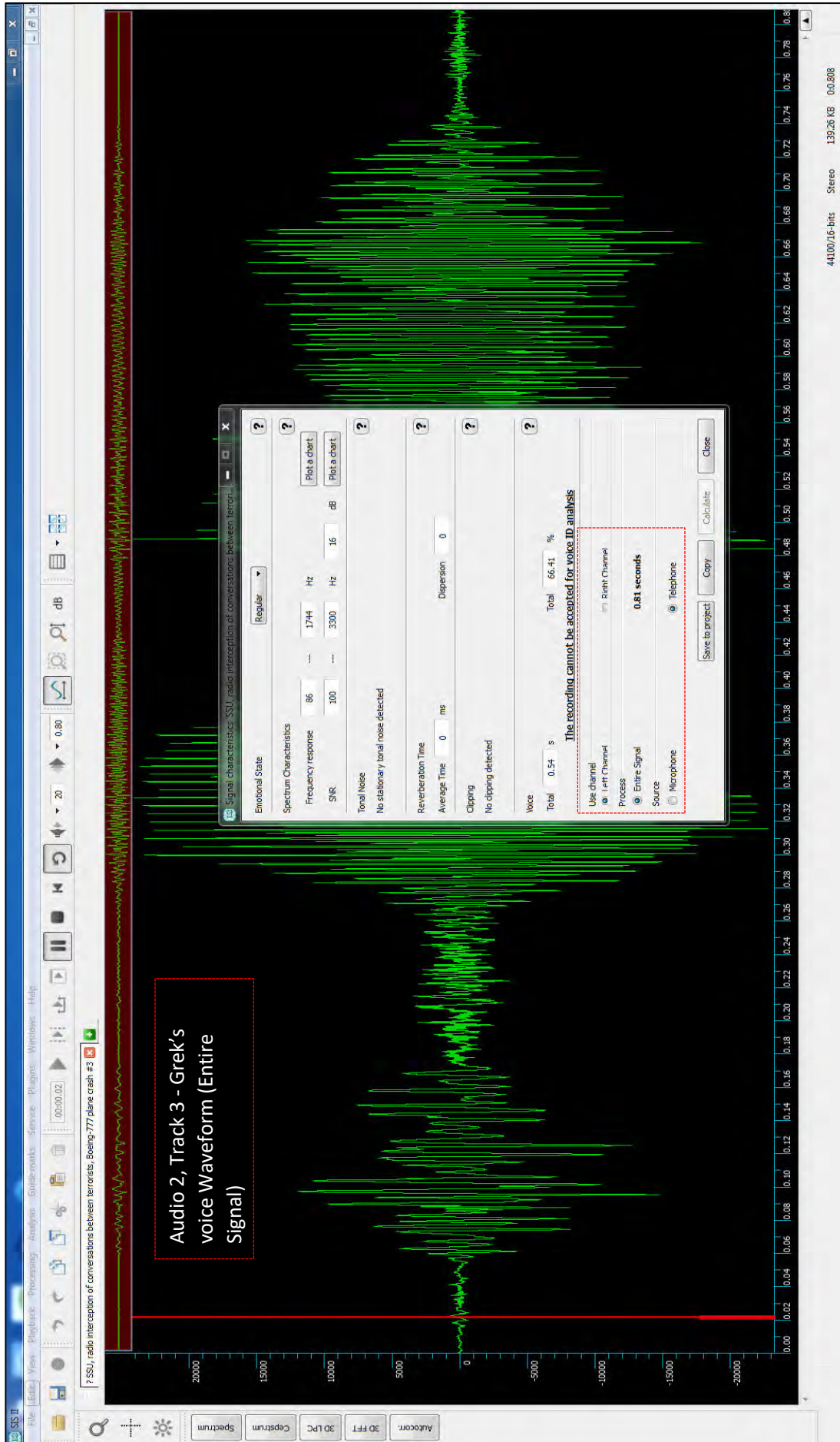


Figure 4.5.3.1: Audio 2, Track 3 - Grek's Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis



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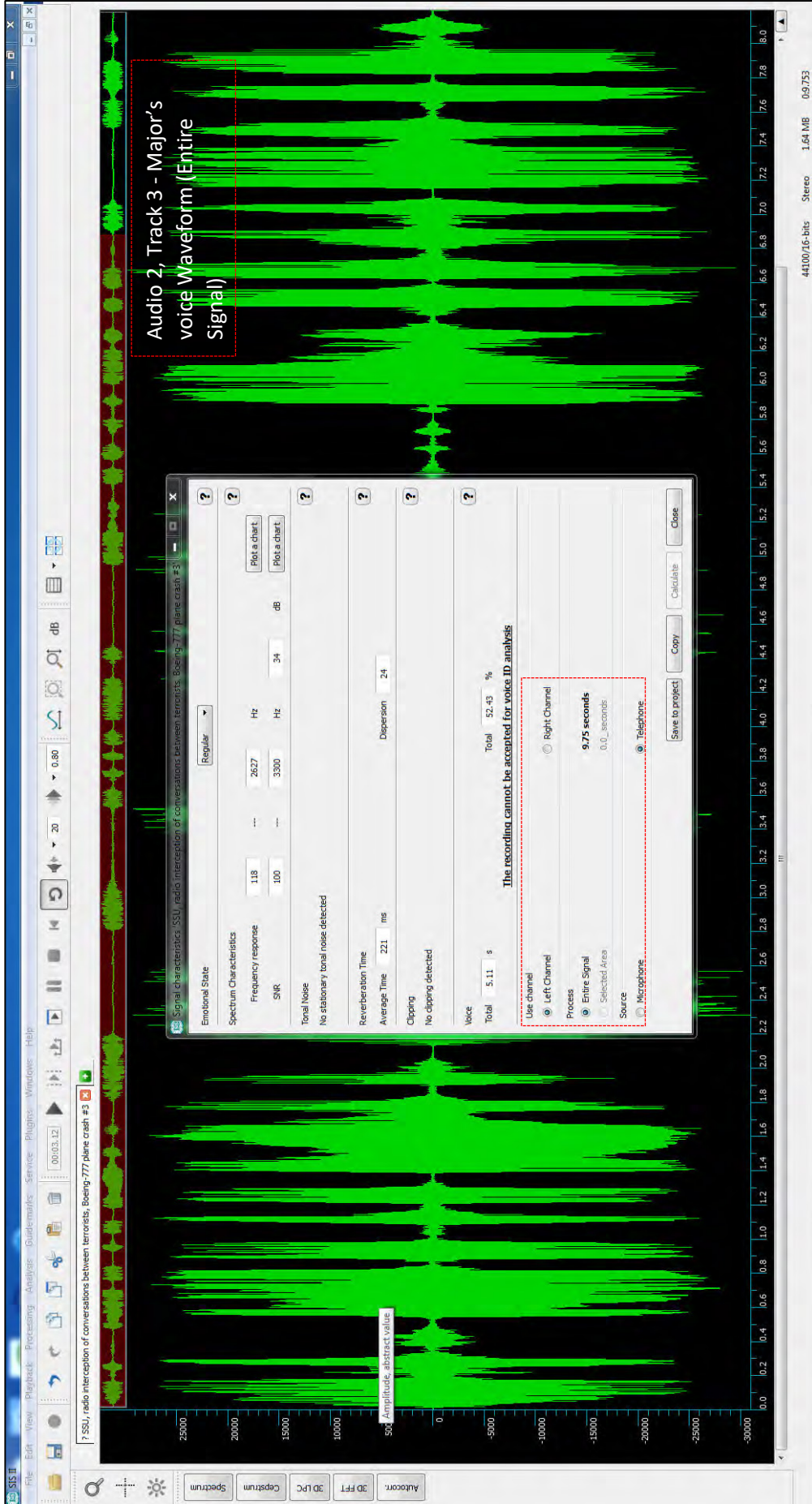


Figure 4.5.3.2: Audio 2, Track 3 - Major's Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis



Project-MH17
4.5.4 Audio 2, Track 4 Voices

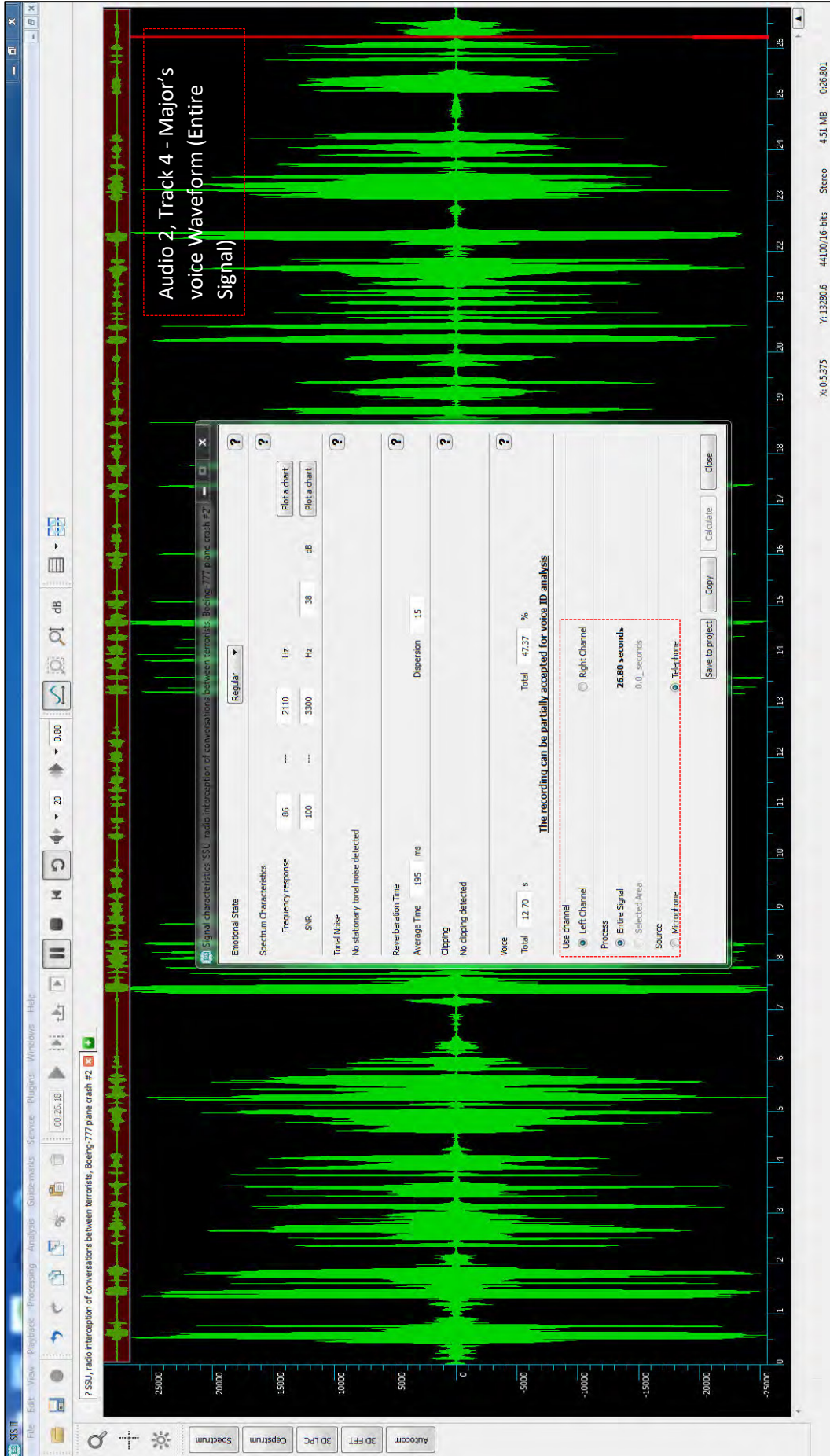


Figure 4.5.4.1: Audio 2, Track 4 - Grek's Voice Signal Characteristics - Audio can be partially accepted for Voice ID analysis

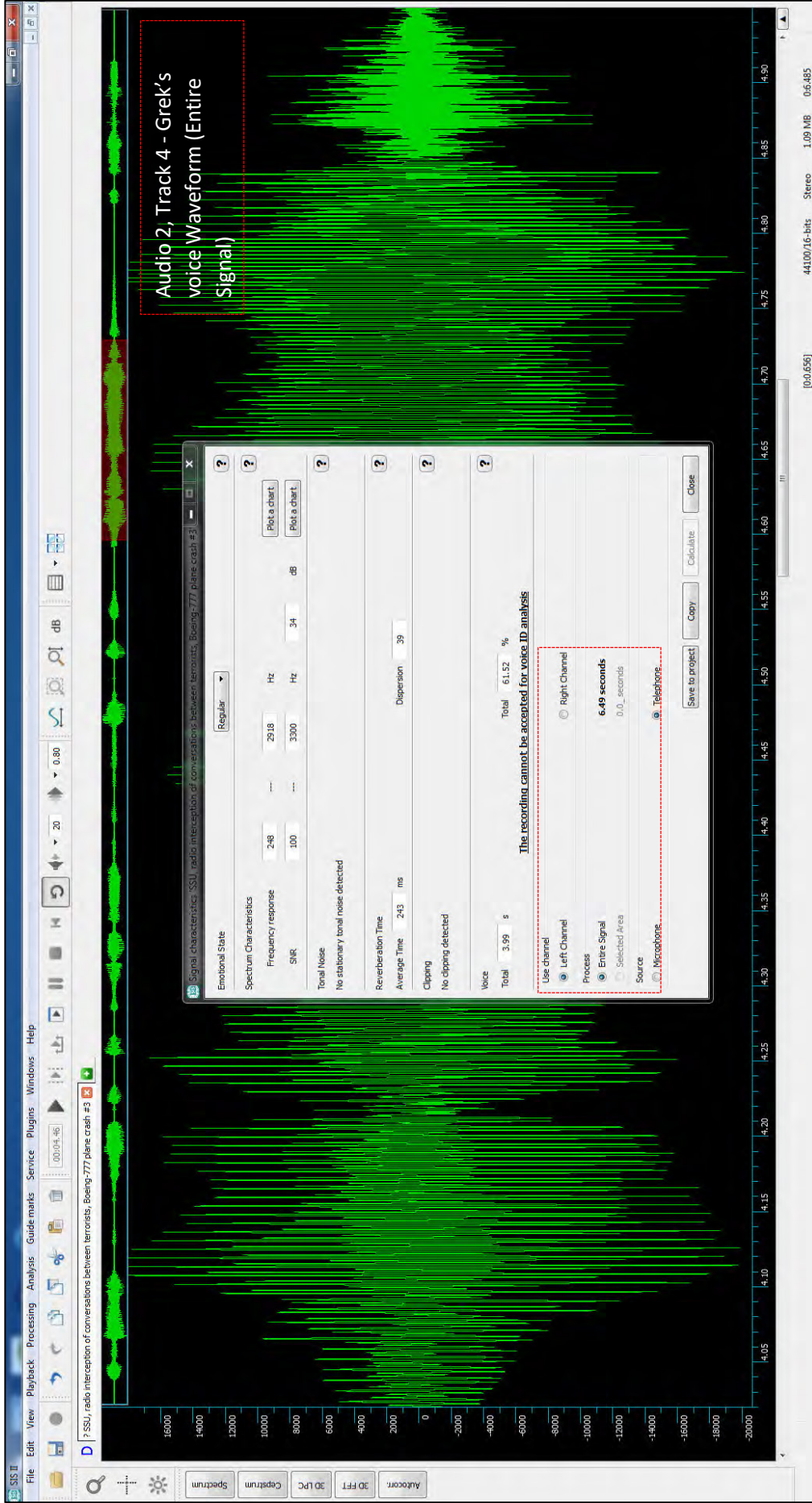


Figure 4.5.4.2: Audio 2, Track 4 - Major's Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis



Project-MH17
4.5.5 Audio 3, Track 5 Voices

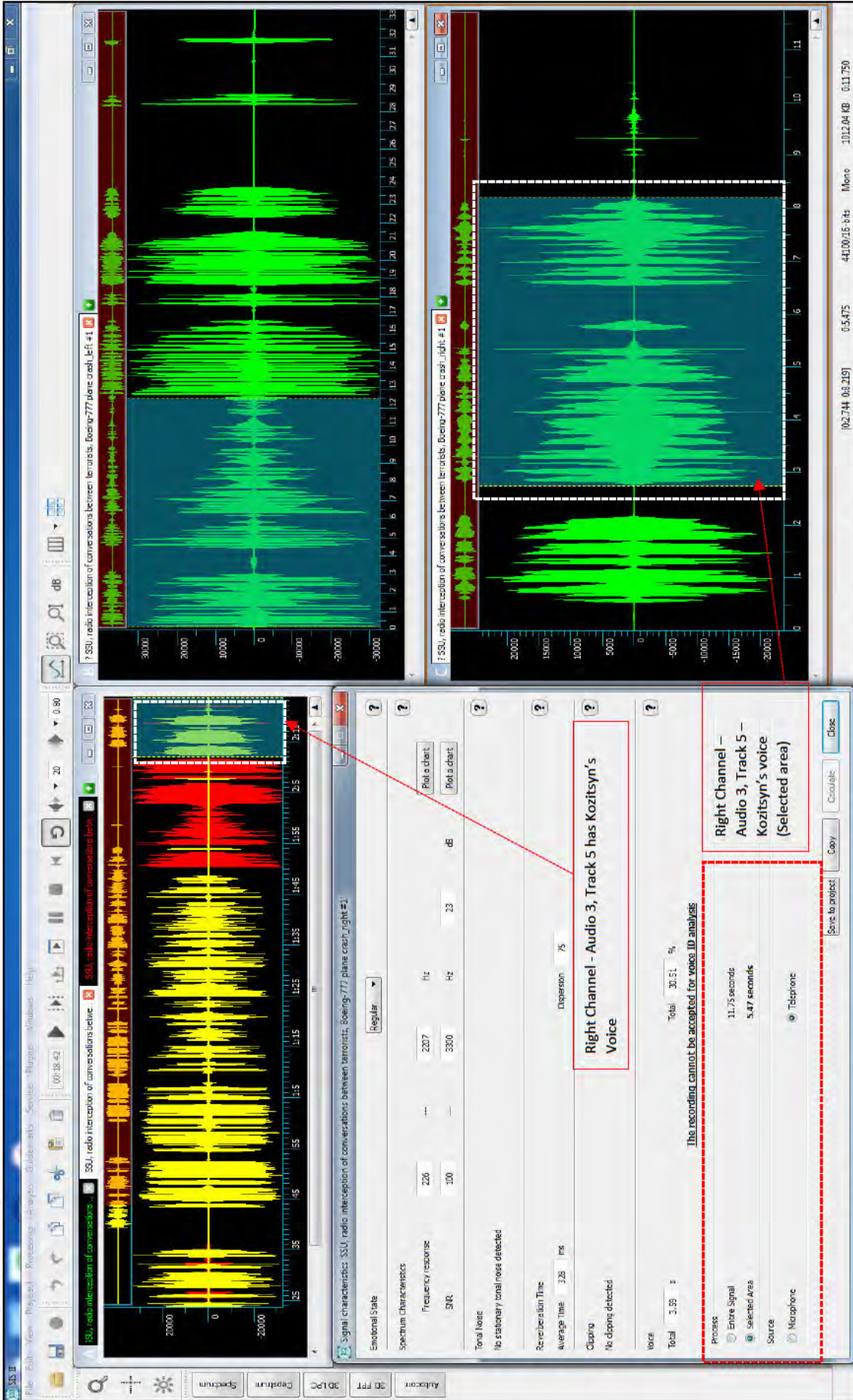


Figure 4.5.5.1: Audio 3 - Kozitsyn's Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis

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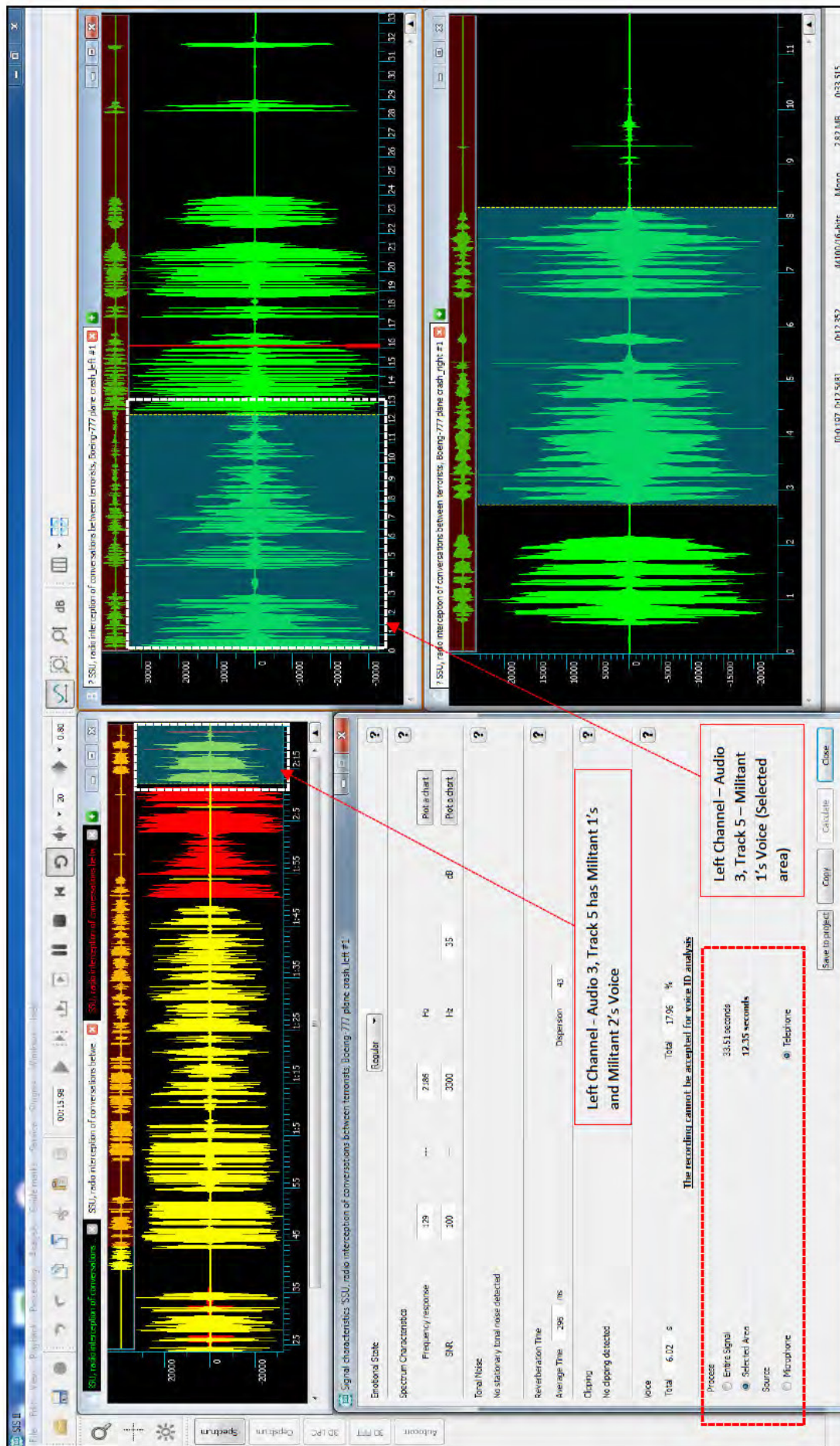


Figure 4.5.2: Audio 3 – Militant -1 Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis



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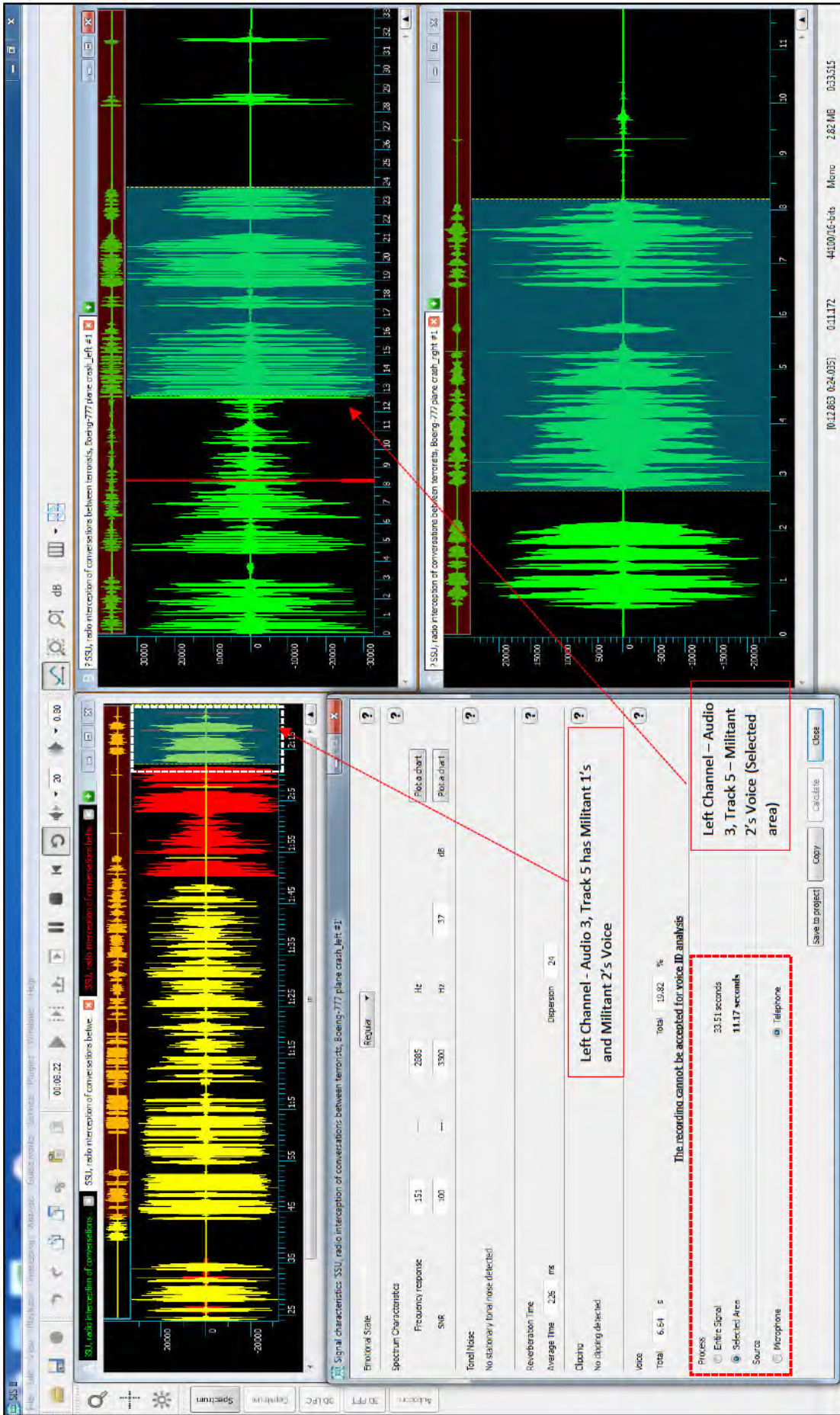


Figure 4.5.3: Audio 3 – Militant - 2 Voice Signal Characteristics - Audio cannot be accepted for Voice ID analysis



Project-MH17

5.0 5.0 Video 2 - MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4

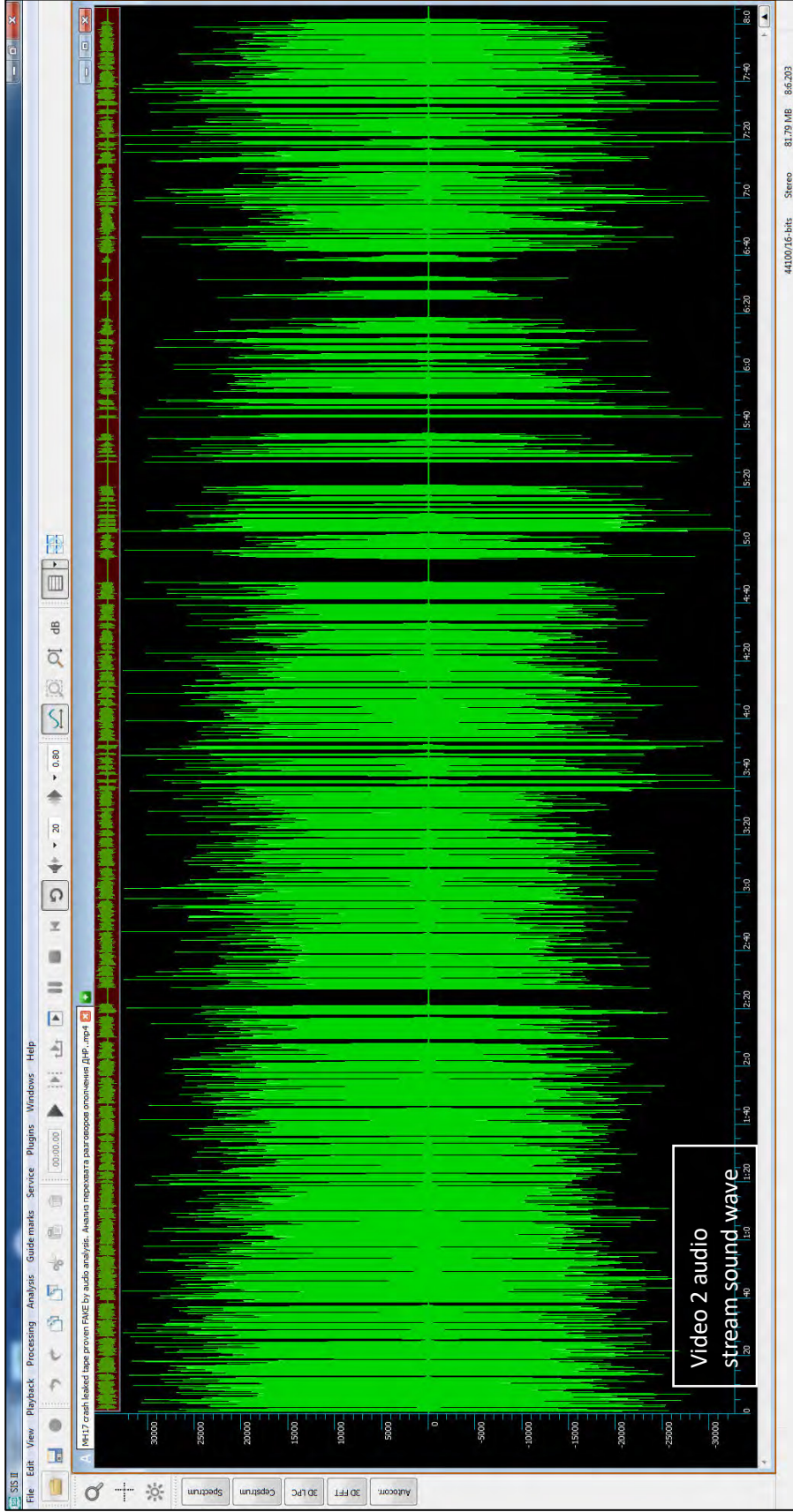


Figure 5.1: MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4- Waveform Shows there were no edits seen in the audio



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The screenshot shows the Adobe Audition CC 2015 interface. The top menu bar includes File, Edit, Multitrack, Clip, Effects, Favorites, View, Window, and Help. Below the menu is a toolbar with various editing tools. The main workspace is divided into several panels:

- Track List:** Shows a single track named "MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4". The track's properties are listed as: Name: MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4; Status: 3:06.100; Duration: 3:06.100; Sample Rate: 44100 Hz; Channels: Stereo; Bit Depth: 32 (float); Source Format: ImporterMPEG-Compressed; Media Type: Audio; Frame Rate: 30.000 fps; Access Order: 1; Open Order: 2.
- Media Browser:** Shows the selected file: "MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4".
- Properties Panel:** Displays the following information:
 - Duration: 3:06.100
 - Sample Rate: 44100 Hz
 - Channels: Stereo
 - Bit Depth: 32-bit (float)
 - Format: ImporterMPEG-Compressed
 - File Path:
- Time Display:** Shows "Synchronize with Time Display Preferences" checked. Custom Frame Rate is set to 12. Time Signature is 4/4. Subdivisions are 15.
- History:** Shows "Read ImporterMPEG completed in 2.73 seconds".

A callout box with a white background and black border contains the text: "Video duration is 8:03.100 and audio sample is 44100Hz". Arrows point from this box to the "Duration" field in the Properties panel and the "Sample Rate" field in the Track List.

Figure 5.2: MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4- detailed Audio Properties



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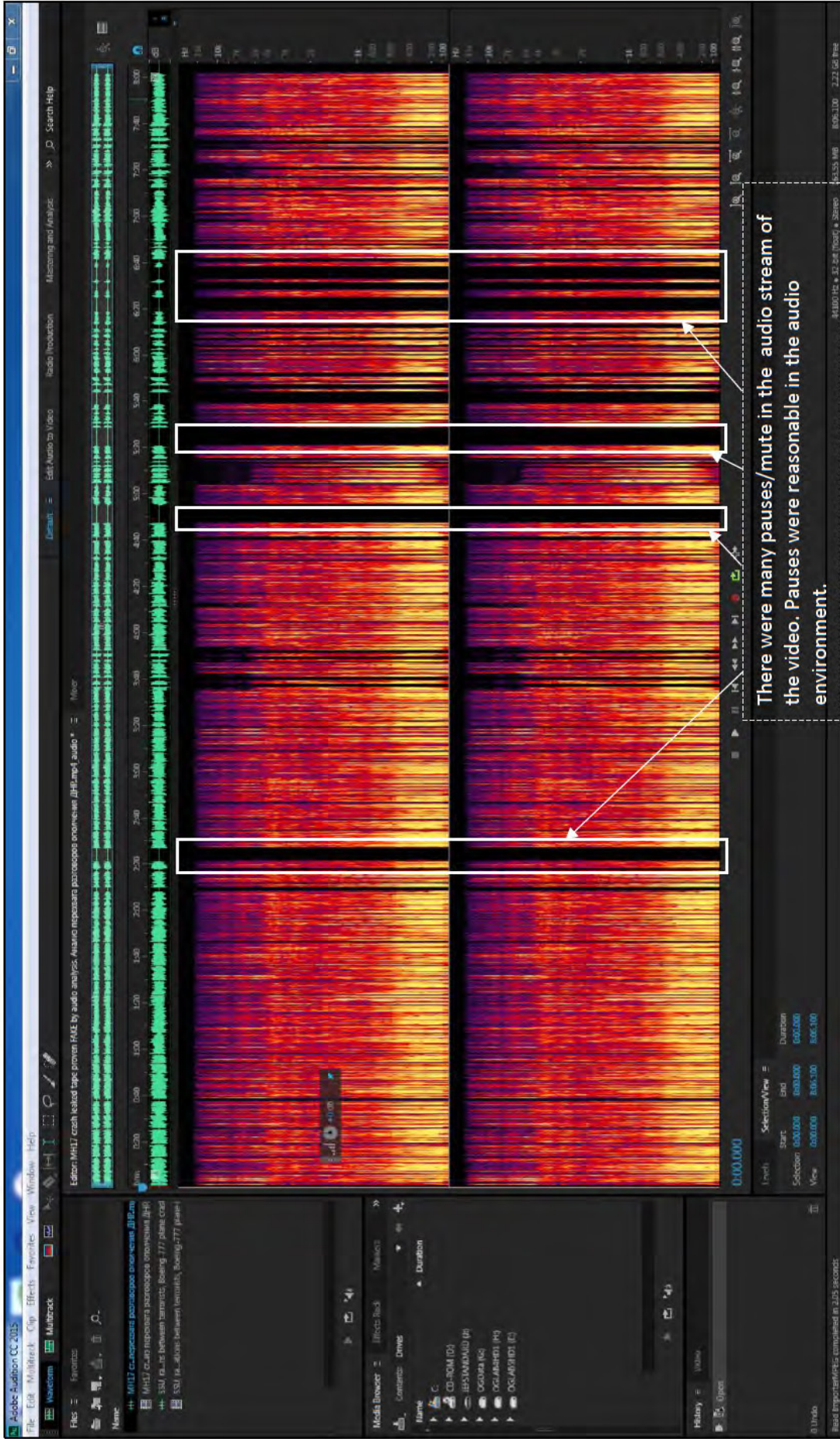


Figure 5.3: MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4– Waveform and Spectral Frequency Background Noise Shows there were no edits in the audio.



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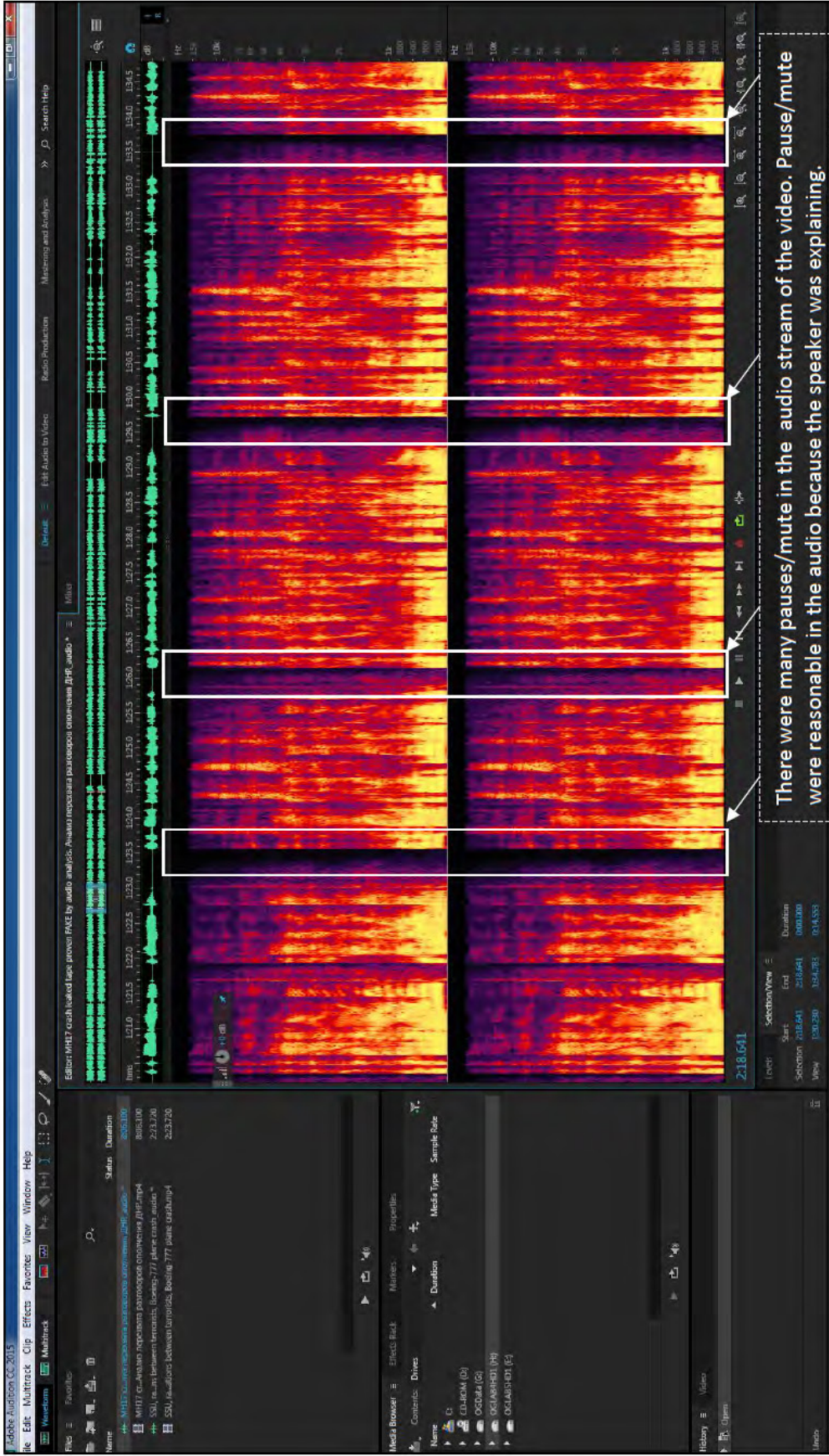


Figure 5.4: MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР .mp4– Waveform and Spectral Frequency Background Noise Shows there no were edits in the audio, audio was paused and played by the speaker.

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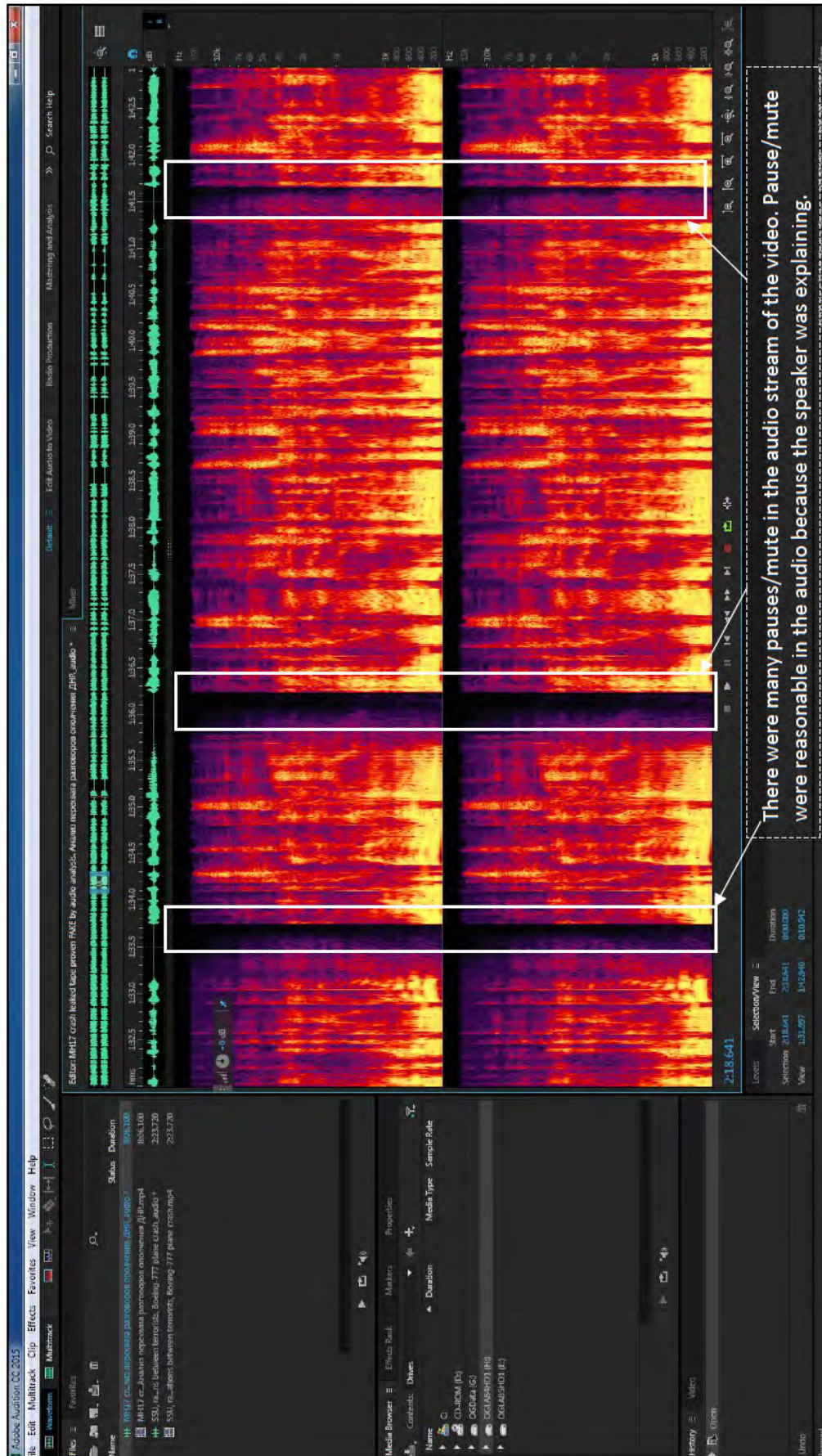


Figure 5.5: MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4— Waveform and Spectral Frequency Background Noise Shows there were edits in the audio., audio was paused and played by speaker.



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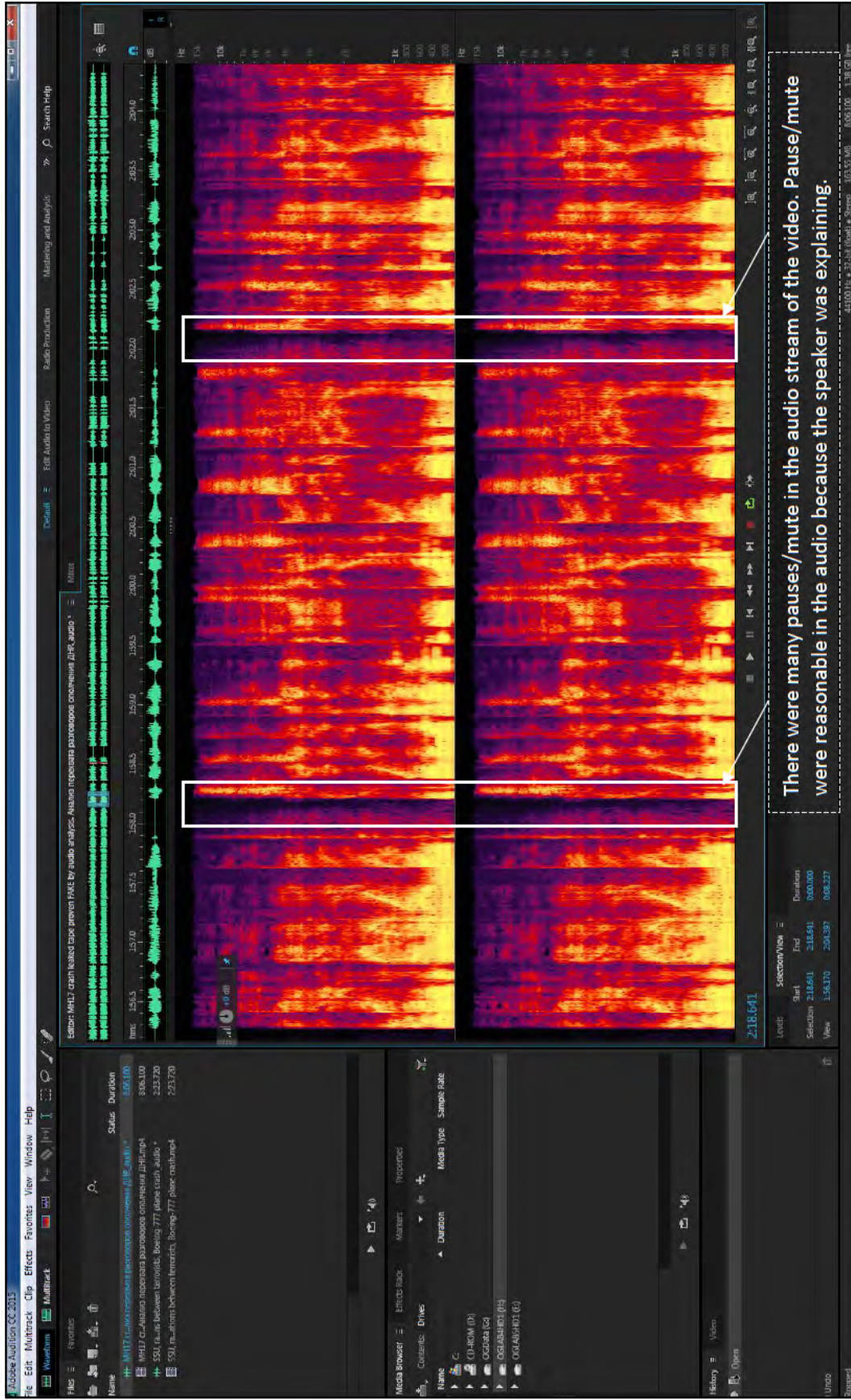


Figure 5.6: MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4 – Waveform and Spectral Frequency Background Noise Shows there were edits in the audio., audio was paused and played by speaker.



Project-MH17

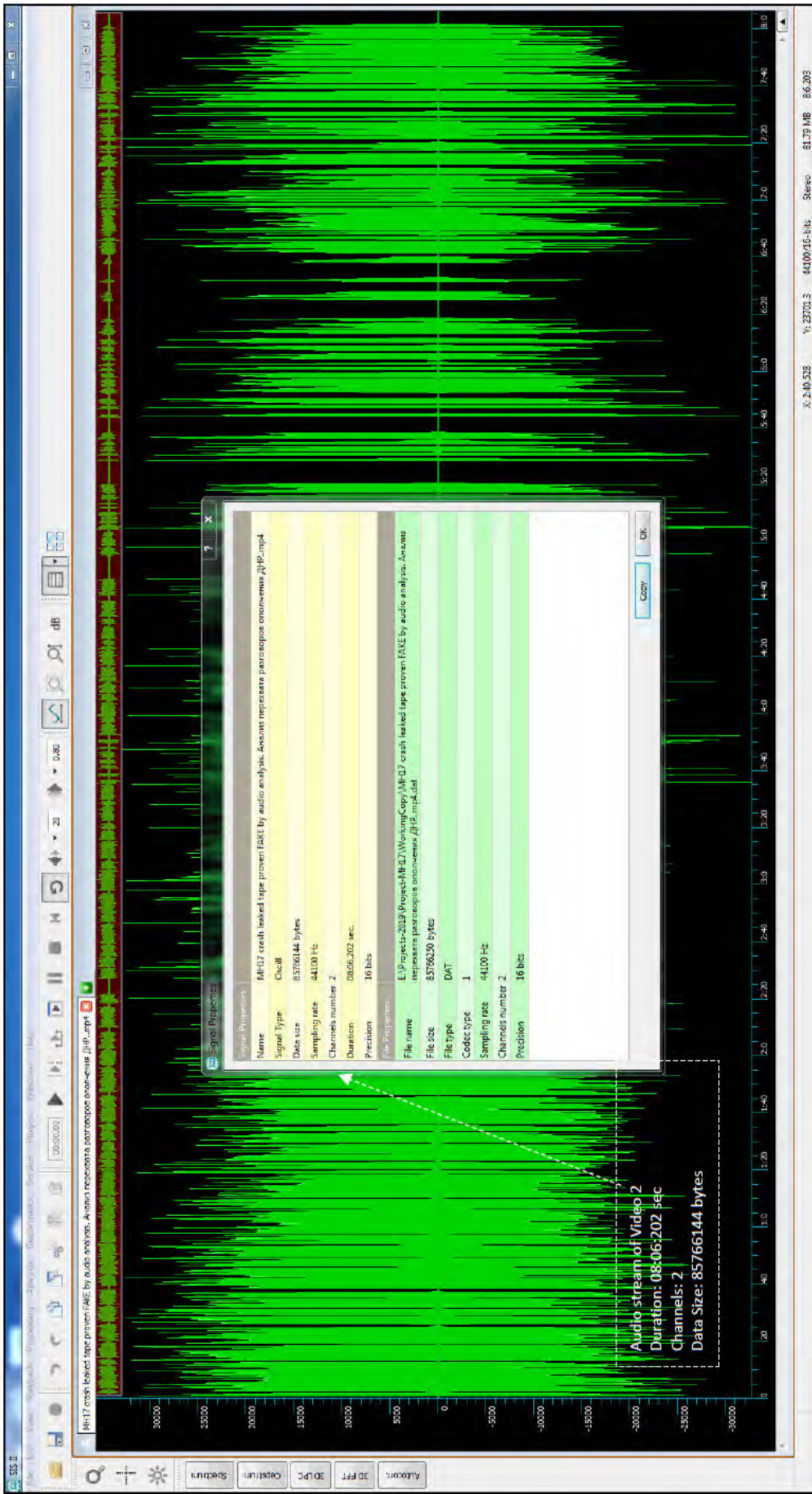


Figure 5.7: Signal Properties MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговорной ополчения ДНР..mp4



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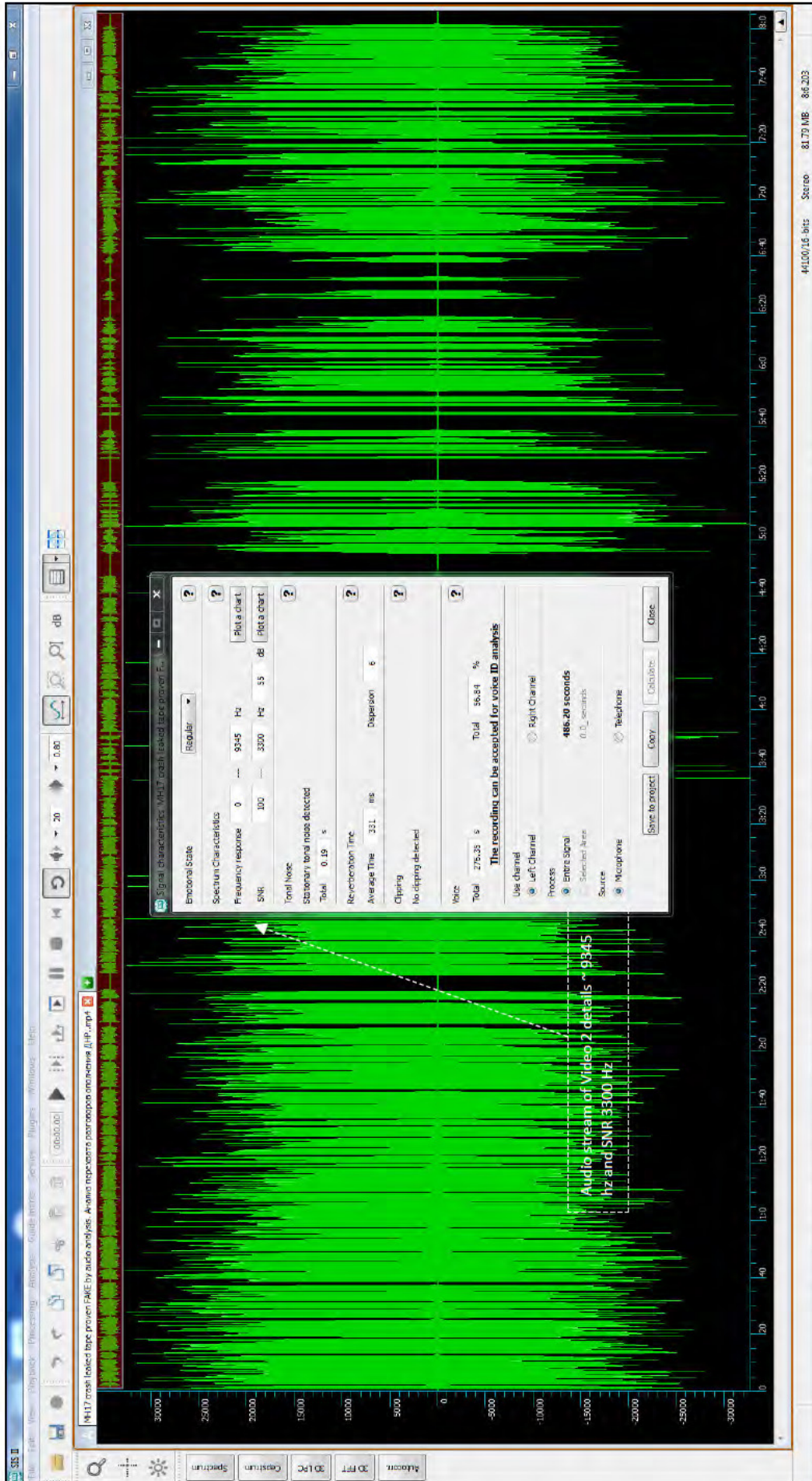


Figure 5.8: Voice Signal Analysis MH17 crash leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР..mp4

Note: Analysis of Video 2 was done at high level, focus was on Video 1 audio tracks.



Project-MH17

6.0 Summary

In conclusion, the first and foremost analysis on the video files is the authenticity of the both videos as listed in Table 1.5.1 and Table 2.1.1. In YouTube channel, Video 1 - 'SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash' showing that it was published on the 17th Jul 2014 but the encoded/created date was showing 01/11/2018 ~ 02:44:30 (UTC) which is after ~ 4 years 3 months of MH17 fatal incident happened (17/7/2014). Video 1 date modified (in YouTube header) is also showing last modified on 1st Nov 2018 (Refer Figure 2.1.1.3). This clearly means that this video is not genuine and had been tampered and can't be accepted as digital evidence to be relied upon. Refer to Section 1.8 showing the Timeline.

In Video 2 - 'MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров ополчения ДНР.', the published date is showing as 17th Jul 2014 and last modified date (in YouTube header) showing last modified on 4th Aug 2014 (Refer Figure 2.1.2.3). This also showing the video is also considered not genuine. Refer to Section 1.8 showing the Timeline.

Forensic verification analysis of the audios in Video 1, there was no any metadata showing any details of the audio tracks original source of the recorded audio tracks, thus making the audio tracks in this Video 1's audio stream cannot be trusted/relied upon, not genuine, as it has no authenticity and cannot be accepted as any kind of digital evidence.

The audio forensic analysis on the main audio streams of Video 1 showing there are total of 3 separate audio files with 5 tracks of audio conversation between militants were aired in Video 1 audio stream as listed below. Refer to Table 3.2.1 and Figure 4.4 showing the details of Audio tracks.

- i. Audio 1, Track 1 - Time Frame: 0:18.3 – 0:36.1 (a mono channel recorded audio track)
- ii. Audio 2, Track-2 - Time Frame: 0:43.3 - 0:52.9 (a stereo channel recorded audio track)
- iii. Audio 2, Track-3 - Time Frame: 0:54.5 - 1:08.0 (a stereo channel recorded audio track)
- iv. Audio 2, Track-4 - Time Frame: 0:54.5 - 1:08.0 (a stereo channel recorded audio track)
- v. Audio 3, Track-5 - Time Frame: 1:50 - 2:22.8 (a mono channel recorded audio track)

All the recorded audio tracks quality is very low, and the original source of the intercepted audio remain unknown. The audio recorded tracks channel in Video 1 are inconsistent with some are mono recorded audio and some are stereo recorded audio. This clearly showing that multiple source of the audio



Project-MH17

track recorded were taken to composed into Video 1 audio stream. Refer to Table 3.1.2 showing Video 1 Audio Tracks Analysis.

Forensic analysis on these audio tracks spectral and noise floor showing there are several anomalies and few edits with missing/inconsistence of recorded audio tracks in Video 1 - SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash.mp4. The edits, merging of other sources of audios tracks and cuts were seen as below. Refer to Section 4.0.

- a. In Audio 1, Track 1 - below are the edition/manipulation seen.
 - i. Refer to Figure 4.4.1.1
 - Background noises appear in the V. Gernanin's part of audio Track-1 (Left Channel) are different at 0:18.5, 0:25.75 & 0:31:5. The noise is different suddenly once he starts to talk. The background noise in between of phrases present in Audio 1- Track 1 between the duration of 0:19.5 and 0:25.5, between 0:26.8 and 0:31.4 and between 0:32.6 and 0:36.0.
 - Arrows (bottom – up) showing merging of audios at 0:22.5, 0:23.5 and 0:30:5.
 - ii. Refer to Figure 4.4.1.2:
 - Figure 4.4.1.2: A gap which appears at the end of third phrase ~0:32.6 uttered by V. Gernanin in the audio Track-1 (Left Channel) is possible indication that Geranin voices are merged into the conversation.
 - Audio spectral at 0:31.75 – 0:31.85 (Left Channel) showing added cut, paste and merger of other sound in this audio.
 - iii. Refer to Figure 4.4.1.3:
 - Bezler's voice audio Track 1 (Right Channel) have long pauses after each phrase, appears strange.
 - Long pauses seen between 0:24.7 and 0:25.7, between 0:26.55 and 0:27.55, between 0:36 and 0:31.45, between 0:32.4 and 0:33.5
 - Arrows in Left Channel showing merging of audios at 0:22.5, 0:23.5 and 0:30:5.
 - iv. Refer to Figure 4.4.1.4:
 - Right Channel - It appears that the audio was cut down and merged at 0:23.20 from the end of a conversation. Different audio conversation starts at 0:23.30.
 - Left channel (arrow up-bottom) showing merging of audio at 0:23.43.
- b. In Audio 2, Track 2 - below are the edition/manipulation seen.
 - i. Refer to Figure 4.4.2.1:
 - SSU, radio interception of conversations between militants, Boeing-777 plane crash.mp4, Audio 2 and Track-2 conversation between
 - Major and Grek audio duration between 0:43.3 – 0:52.9. Possible edit can be seen as the noise level is different



Project-MH17

c. In Audio 2, Track 3 - below are the edition/manipulation seen.

i. Refer to Figure 4.4.3.1

- In Audio 2, Track-3, background noises are not similar in this part from 0:58:75 and 0:59:0.
- At 0:58.85 another difference noise was seen.

ii. Refer to Figure 4.4.3.2

- In Audio 2, Track-3, possible edits can be seen between 1:03:85 and 1:04:55, background noise suddenly appears from nowhere completely unrelated to the speakers' background atmosphere.

d. In Audio 2, Track-4 - below are the edition/manipulation seen.

i. Refer to Figure 4.4.4.1

- In Audio 2, Track-4 possible edits can be seen between 1:13:55 and 1:13:5 and between 1:15:20 and 1:16:20
- Background noise suddenly appears from nowhere completely unrelated to the speakers' atmosphere.

ii. Refer to Figure 4.4.4.2

- In Audio 2 Track-4, possible edits can be seen between 1:18:80 and 1:19:30
- Background noise suddenly appears from nowhere completely unrelated to the speakers' atmosphere.

iii. Refer to Figure 4.4.4.3

- Failed to overlay the merging between time frame 1:24.20 and 1:24.30 another merging between 1:24.50 and 1:24.85.
- Hearing showing different speaker in this track,

iv. Refer to Figure 4.4.4.4

- A new person's voice appears between 1:09.5 and 1:49.0. However, SBU stated that the conversation was between Major and Grek.

e. Audio 3, Track-5 - below are the edition/manipulation seen.

i. Refer to Figure 4.4.5.1

- Audio 3 Track-5 begins from 1:50.2 and ends at 2:22.7. This segment of audio has 3 different individual voices.
- Two different channel seen showing two difference source of audio recordings.
- it appears to be two different militants speaking to Kozitsyn.
- Cut of audio in Right channel at ~1:51.0 – 1:54.0, ~1:57.5-2:00.0, ~2:01.0-2:02.5, ~ 2:04.5-2:07.5 & ~2:10.5-2:12.0

ii. Refer to Figure 4.4.5.2



Project-MH17

- Possible merging can be seen between 2:02.94 and 2:02.97 (Left Channel), also sudden difference in the spectrum frequency
- from 2:02:98

- iii. Refer to Figure 4.4.5.3
 - Muffled and no background noise appears were seen between 1:50.2 and 1:53.6 (Right Channel).
 - However, background noise appears normal after 1:53.8 till the end of the track. There are two different channels in this track. Left Channel - (Arrow Up-Bottom) showing adding of audio between ~2:12.6 and 2:14.2.
 - Right Channel (Arrow Up-Bottom) showing merging ~2:12.3 until 2:22.28. This is clear editing/adding of audios

Further analysis on the audio tracks were performed where set of voice samples were taken for details voice analysis where comparison of voices can be performed to identify speakers on each audio track can be identified if they are same speaker or different but unfortunately none of the voices are meeting the requirement for voice biometric analysis/comparison as it has very short speech below 15 seconds and it is the audio quality is low.

As a summary, all 5 audio tracks in the Video 1 - `SSU, Radio interception of conversations between terrorists, "Boeing-777" plane crash' published in YouTube by SSU is faked, tampered and not genuine. Release the original and genuine audio tracks officially is highly recommended.

Refer to Section 1.7 showing the Executive Summary of the video and audio stream analysis and Section 1.8 showing the Timeline of the Videos. Refer to Section 3.1 showing the Video File Analysis and Statements and Section 3.2 showing Audio Track Analysis and Finding Statements for further reference.



Project-MH17

7.0 Appendix

i. Reference of Video

Video 1 - SSU, radio interception of conversations between terrorists, "Boeing-777" plane crash
<https://www.youtube.com/watch?v=BbyZYgSXdyw>

Video 2 - MH17 crash: leaked tape proven FAKE by audio analysis. Анализ перехвата разговоров
ополчения ДНР. <https://www.youtube.com/watch?v=T34AB6ClmTE>

Refer to Table 2.1.1 and Table 2.2.1 for Video source and acquired videos details.

~END~

Annex 198

CNN, *Kerry: 'Drunken separatists' interfering at MH17 crash site* (24 July 2014)



World

Kerry: 'Drunken separatists' interfering at MH17 crash site

By Phil Black, Catherine E. Shoichet and Steve Almasy, CNN

🕒 Updated 1823 GMT (0223 HKT) July 24, 2014



Kerry: 'Moment of truth' for Putin

Are the same separatists accused of shooting down Malaysia Airlines Flight 17 now looting, tampering with the evidence and stopping investigators from combing through the wreckage?

Three days after the passenger plane plunged to the ground, criticism over the handling of the crash site in rebel-controlled eastern Ukraine showed no signs of slowing on Sunday.

Key questions remain unanswered: What will happen to the remains of the 298 people aboard the plane that crashed Thursday? Where are the black boxes? And is there any hope investigators will be able to determine who's responsible?

Malaysia's transportation minister said an international team was "effectively being prevented from entering the crash site," adding in a statement that officials were concerned that "the sanctity of the crash site has been severely compromised."

In an interview with CNN's Candy Crowley, Secretary of State John Kerry described what he said were "drunken separatists piling the remains of people into trucks in an unceremonious fashion ... interfering with the evidence in the location."

He told NBC's "Meet the Press" that there is a "buildup of extraordinary circumstantial evidence" over the crash that Russia "needs to help account for."

And British Prime Minister David Cameron didn't mince words when he said who was to blame. In an op-ed in *The Sunday Times*, he called the plane crash and its aftermath "an outrage made in Moscow."

Russian President Vladimir Putin fired back with a video statement posted on the Kremlin's official website early Monday, arguing that his country has been pushing for peace in Ukraine.

"We have repeatedly called on all parties to immediately stop the bloodshed and to sit down at the negotiating table. We can confidently say that if June 28 fighting in eastern Ukraine did not resume, this tragedy most likely would not have happened," he said. "However, no one should have the right to use this tragedy to achieve selfish political objectives. Such events should not divide but unite people."

He stressed that safety must be guaranteed for international experts investigating the crash.

"We must do everything to ensure their work has full and absolute security (and) ensure necessary humanitarian corridors are provided," Putin said.

At the crash site, there were concerns the bodies had been picked over by thieves.

"The facts of looting, how the terrorists are dealing with the bodies, are beyond the moral boundaries," Ukrainian President Petro Poroshenko tweeted.

The local head of the rebels rejected accusations that his forces shot down the plane, denied accusations that they removed the bodies and denied responsibility when asked about people reportedly using stolen bank-issued cards taken from the victims' bodies.

"It is possible that some local residents could have searched the bodies of victims, found their cards and tried to use them. Unfortunately, I can't exclude the possibility of this," Alexander Borodai said Saturday.

Nearly 200 bodies kept in refrigerated train cars

The situation at the crash site showed some small signs of improvement on Sunday, with more control and more activity.

"Today was a better day for sure," said Michael Bociurkiw, a spokesman for the Organization for Security and Co-operation in Europe's monitoring team in Ukraine. "We were able to spend quite a bit of time out at the different crash sites."

But it was still far from a well-organized investigation scene, and the area remained under the control of pro-Russia rebels.

Government emergency workers prevented vehicles from driving up the road to the main crash site, but people could still roam the fields on foot.

Search teams have found 251 bodies at the crash site, the Ukrainian Cabinet said on its website.

Pro-Russian rebels are keeping the remains of nearly 200 MH17 victims in refrigerated train cars, Vice Prime Minister Volodymyr Groysman said Sunday, adding that talks were ongoing for their release.

OSCE observers went to a train station about 15 kilometers (9 miles) from the main crash site to see the bodies, Bociurkiw said.

"We were able to peer inside of the cars, and it definitely was refrigerated. There was no way we could verify the count of ... bodies, but there were dozens and dozens there," he told CNN. "We were told those railway cars will remain stationary until international experts arrive."

Earlier Sunday, Russian state news agency RIA Novosti reported that the train was headed to Donetsk.

Borodai [told ABC News on Sunday](#) that rebels want to release the remains.

"We can and we want to give bodies to the relatives, but experts have to examine the bodies here. That is international practice," Borodai told ABC.

If the remains are turned over to the Ukrainian government, Borodai said he feared that they would be used as evidence to blame his fighters for

shooting down the plane -- an accusation he has repeatedly denied.

He said he guaranteed the safety of international investigators "and their ability to work."

But Ukraine's State Emergency Service said the search in the remote area of eastern Ukraine, roughly 25 miles (40 kilometers) from the Russian border, was being "complicated by armed separatists at the site who hinder the work of SES units."

Hundreds of staffers from the agency are searching for the remains of the MH17 victims, covering an area stretching across 13 square miles (34 square kilometers).

Busloads of volunteers from nearby coal mines also fanned out across the wheat fields where the bodies and debris from the plane fell.

Malaysia is sending two large military cargo planes to bring back the remains, the country's official news agency Bernama reported.

Black boxes found?

Pro-Russia rebels may have recovered the plane's flight data and cockpit voice recorders, Borodai said on the website of the self-declared Donetsk

If experts determine the devices found are the so-called black boxes, they will be turned over to international investigators, Borodai said.

"These are some technical objects. We cannot say for sure these are black boxes," he said.

Borodai said the devices are under guard in the region. They will not be given to Ukrainian officials, he said.

Reuters distributed video on Sunday of what appeared to be an inflight recorder found by a worker in a field. The agency labeled the video, shot Friday, as showing one of the two flight data recorders from MH17.

Bociurkiw said the OSCE had not confirmed whether the black boxes had been found.

"We will declare the black boxes found or located when we actually see them," he said.

The observers intended to ask whether they'd been found at the crash site on Sunday, he said, but "there was no one produced who could answer the question in a credible way."

Some Malaysian investigators flew to Kiev, the Ukrainian capital, on Saturday. But Malaysia's official news agency said they were still negotiating with rebels over access for their team.

Law enforcement officials from the Netherlands, the United States and Australia will help with the investigation led by the Ukrainian government.

Two FBI agents arrived in Kiev, a senior U.S. law enforcement official said. An investigator from the National Transportation Safety Board was also there.

But three days after the deadly crash, it was unclear when an international investigation at the scene would be able to start.

Families' agonizing wait

Journalist Noah Sneider, who's been covering fighting in Ukraine for months and was one of the first to arrive at the crash site on Thursday, said confusion at the scene is no surprise.

"All of this is happening in an active war zone. There's been a separatist uprising that began in April and has burned slowly up until this point. And security concerns are real, and the ability of any of the authorities on the ground here to effectively secure the area (is) minimal," he told CNN on

Sunday. "The rebels are a patchwork group, and they seem to answer to different forces at different times."

For the families of the victims, the uncertainty only deepened their suffering.

Silene Fredriks said her son and his girlfriend had taken Flight MH17 for a planned vacation in Bali. At Amsterdam's Schiphol Airport on Sunday, she laid flowers and signed the condolence book.

She says she wants Russian President Vladimir Putin to ensure that the two young people's remains make it back to the Netherlands.

"I can do nothing but wait for their bodies," she said.

Pressure on Putin

Governments from around the world have expressed outrage at the disorderly situation at the crash site and called on Putin to use his influence on the rebels.

Cameron called Putin on Sunday to urge him to do what he can to ensure the victims "have proper funerals." His opinion piece urged Putin to find a way to make the crash site more accessible and calm the strife between Ukraine and the rebels.

"If President Putin does not change his approach to Ukraine, then Europe and the West must fundamentally change our approach to Russia," Cameron wrote.

Ten of the passengers on MH17, which was en route from Amsterdam to Kuala Lumpur, were British.

Australian Prime Minister Tony Abbott, whose country had 27 citizens on the plane, added to the pressure on Putin.

Describing the downing of the passenger jet as "a horrific crime," Abbott said he had summoned Russian Trade Minister Denis Manturov, who is visiting Australia, and "made crystal clear my concerns and dissatisfaction with the way this has been handled."

"Russian-controlled territory, Russian-backed rebels, quite likely a Russian-supplied weapon," Abbott said in a television interview Sunday. "Russia can't wash its hands of this."

Russia has denied any involvement, and Putin said Ukraine's military campaign against the rebels was to blame. He also has called for a "thorough and objective investigation" of the crash.

Finger-pointing

Since the crash, the Ukrainian government and the rebels have traded bitter accusations over who was responsible and what has been done since.

Ukrainian officials have said that a Russian-made Buk M1 missile system, brought into eastern Ukraine from Russia, had shot down the Malaysian airliner.

The Ukrainian government has accused the rebels of removing debris and 38 bodies from the scene as part of an attempt to cover up what happened.

Borodai has told reporters that the rebels lacked the firepower to hit an aircraft that high.

The United States has said evidence suggests a Russian-made surface-to-air missile fired from the rebel territory took down jet.

Kerry said a convoy of about 150 vehicles moved several weeks ago from Russia to eastern Ukraine. The military equipment included "multiple rocket launchers," he said.

"It's pretty clear that this is a system that was transferred from Russia in the hands of separatists," Kerry told CNN on Sunday.

A written statement from the U.S. Embassy in Kiev also included mention of Russia providing training to separatists at a facility in southwest Russia.

"This effort included training on air defense systems," the statement said.

U.S. officials believe the missile systems may have been moved back across the border into Russia.

Annex 199

DNA, *Ukrainian investigators found 196 bodies at #MH17 crash site* (20 July 2014)

Ukrainian investigators found 196 bodies at #MH17 crash site

DNA dnaindia.com/world/report-ukrainian-investigators-found-196-bodies-at-mh17-crash-site-2003686

July 20, 2014



Ukrainian investigators have found 196 bodies at the crash site where a Malaysian passenger plane carrying 298 people was brought down by a missile in pro-Russia rebels-held eastern part of the country.

The Ukrainian State Emergency Service (SES) today said 380 staff were taking part in the search that stretches across 34 sq km of eastern Ukraine.

But the search was being complicated by separatists at the site who were hindering the work of SES units, the CNN reported, citing SES officials.

The Boeing 777 was on a scheduled flight from Amsterdam to Kuala Lumpur and it had not made a distress call.

It is still not clear if the Malaysia Airlines Flight MH17 was shot down purposely or mistakenly on Thursday.

All 298 people on board were killed in the crash.

Latest figures released by Malaysia Airlines show the plane was carrying 192 Dutch nationals, 44 Malaysians (including 15 crew), 27 Australians, 12 Indonesians and 10 Britons, four Germans, four Belgians, three from the Philippines, and one each from Canada and New Zealand.

The Ukrainian government and the pro-Russian separatists in the east of the country have blamed each other for the alleged shooting down of the plane.

Earlier, the Organisation for Security and Co-operation in Europe (OSCE) said it had doubts over the number of bodies recovered from the downed MH17 or where they were taken or who moved them.

Michael Bociurkiw, a spokesman for observers from of the OSCE, told CNN the group saw men moving an unknown number of body bags yesterday, but that it wasn't clear who they were. It's hard to get reliable information because several groups of pro-Russian rebels, some of them masked, control the area, he said, adding "there doesn't seem to be one commander in charge."

Three air crash investigators from Ukraine accompanied the OSCE observers but they didn't have much time to do their work, he said. "They need a lot more time and a lot more freedom of access."

Annex 200

The Dutch National Police, Official Report Concerning Disclosed Intercepted Conversations,
16 December 2019

APPENDIX 8

OFFICIAL REPORT OF 16 DECEMBER 2019
CONCERNING DISCLOSED INTERCEPTED
CONVERSATIONS

OFFICIAL REPORT CONCERNING DISCLOSED INTERCEPTED CONVERSATIONS

My name is Gerardus Wilhelmus Christiaan THIRY, chief inspector with the National Crime Squad of the Dutch National Police. I have been working as coordinating team leader of the criminal investigation since the start of the investigation into the downing of MH17.

I have over 42 years' experience of combating organised crime, international crimes, gathering criminal intelligence, infiltration, and murder investigations. In addition I have been stationed abroad on several occasions as a liaison officer.

The investigation team I lead consists of investigators and experts with specific skills or knowledge, such as aviation experts, high-tech crime specialists and analysts. In addition, as and when necessary, use was made of experts sworn in by the examining magistrate.

This official report was drawn up by Primo-625, and I have read and approved its contents.

On the basis of the findings of the investigation and my knowledge of the facts, I declare as follows:

Table of Contents

1. Introduction

2. Identifying details

2.1 SBU

2.2 JIT

2.3 Coding

3. Published conversations

3.1 13 April 2014: direction from Russian territory

3.2 8 June 2014: request for anti-aircraft defence

3.3 11 and 12 July 2014: financial problems in the DPR

3.4 16 July 2014: obtaining a Buk

3.5 17 July 2014, morning: the arrival of the Buk-TELAR

3.6 17 July 2014, afternoon: the positioning of the Buk-TELAR

3.7 17 July 2014, afternoon: after the downing of MH17

3.8 17/18 July 2014, evening/night: the Buk-TELAR has to be driven away

3.9 18 July 2014, morning: confusion about the location of the Buk-TELAR

3.10 20-23 July 2014: support from Russia

3.11 2 June 2015: conversation about the launch location of the Buk missile

4. Conclusion

1. Introduction

The JIT investigation has made use of various types of information, including recorded telephone conversations. Some of these conversations have been made public by various parties at various times since the downing of flight MH17. Through its own website, the Ukrainian security service SBU has released a number of these recorded conversations, using the social media platform YouTube. In addition, several of these conversations informed the SBU's decision about whether to prosecute four separatists for involvement in terrorist activities. This decision was made public by means of a notice of suspicion. For its part, the JIT has released certain conversations in connection with its various appeals for witnesses. These conversations can be found on the JIT website and on YouTube.

In a few cases the conversations were released in full, including the names of the participating separatists, the time and date when the conversation took place and the names of any other separatists that were mentioned. In most cases, however, only parts of the conversations were released; the names of the separatists concerned were anonymised, and/or the exact time of the conversation was omitted.

This official report reproduces the content of these previously released, recorded telephone conversations. The recordings themselves were provided to the JIT by the Ukrainian authorities and then examined and translated by the JIT.

2. Identifying details

So as not to compromise the (Ukrainian and Dutch) criminal investigation and prosecution, it is in many cases not (yet) possible to share all details related to these conversations. The transcripts of the conversations therefore vary in terms of the extent to which certain identifying details are included, such as the exact time of the call or the identity of the separatists concerned. The two organisations in question – the SBU and the JIT – make different assessments in this regard, as explained below.

2.1 SBU

The conversations released by the SBU have all been anonymised in this report. The names of the separatists participating in the call and any other separatists mentioned in the course of the conversation (whether by name or by call sign) have been replaced by a code. The exact time when the conversation took place has been replaced by an indication of the time of day. In some cases more of the conversation has been included than in previously released versions, so the reader can better interpret

the context of the information that was shared previously. In a number of cases the reporting officer has omitted part of a conversation from this report as well.

2.2 JIT

In the case of conversations released by the JIT, whether or not identifying details and times are included depends on what has already been shared. When a conversation has been previously released by the JIT, this will be noted. In instances where names of the separatists concerned – or call signs or first names mentioned in the conversation – have already been released, they are not anonymised here. The same applies to the exact time: if it has previously been shared, it will also be included in this report. In all other cases this information will be anonymised or omitted. In some cases more of the conversation has been included than in previously released versions, so the reader can better interpret the context of the information that was shared previously. In a number of cases part of a conversation has been omitted from this report as well.

2.3 Coding

Each conversation is marked with a date. Although an exact time is often not given, the conversations have been arranged in chronological order. In cases where the exact time is not indicated, the time of day when the conversation took place is noted:

Night	(00:00-06:00)
Morning	(06:00-12:00)
Afternoon	(12:00-18:00)
Evening	(18:00-00:00)

All times given are local Ukrainian times.

In cases where the separatists' names have been anonymised, the report will indicate whether the separatist has been identified, the separatist group to which he belongs and whether he ranks high or low rank in the hierarchy. Separatists are deemed to be 'high ranking' if they have people under them or have some kind of leadership position. The exact number of subordinates a person has is not relevant for this classification system. 'Lower-ranking' separatists have no one under them. The coding system also

distinguishes between the tapped line (A) and the person on the other end of the line (B), and whether the call was incoming or outgoing.

On the basis of this classification system each separatist in a given conversation has been given an identifying code, which is composed of the following information:

Identified:	I
Unidentified:	U
Higher rank:	H
Lower rank:	L
Unknown rank:	U
DPR:	D
LPR:	L
Unknown:	U
Caller A:	A
Caller B:	B

So an identified DPR separatist with a leadership role would thus be given the code 'IHD'. If he is calling on the 'A' line, his code would be 'IHD-A'. An unidentified LPR separatist whose rank is unknown calling on the 'B' line would be given the code 'UUL-B'. These codes are applied separately to each individual conversation. The same code, e.g. IHD-B, may be found in multiple conversations, but that does not mean it refer to the same individual.

When an anonymised caller is addressed by their name or call sign, the latter will be replaced in the transcript by the relevant code, e.g. IHD-B. In cases where other separatists are discussed, they will be anonymised with the designation '[XX]'. Ranks such as 'Colonel' or 'Pervii' have not been anonymised because they are indicative of that individual's place in the hierarchy and cannot as such be traced back to a particular person.

3. Published conversations

3.1 13 April 2014: direction from Russian territory

In mid-April 2014 there was heavy fighting in Donetsk Oblast between separatists and the Ukrainian armed forces. On the afternoon of 13 April 2014 there were a number of conversations between an identified, high-ranking DPR separatist ('IHD-A') and another high-ranking DPR separatist ('IHD-B') who, according to what is said during the call, was in Russia at that time. Transcripts of three conversations are included in this report.

In the first conversation IHD-B asks IHD-A how the situation is. IHD-A says that 'they' have repelled an enemy attack. This was a serious unit with important people, and it suffered heavy losses. He did not suffer any casualties. IHD-B says that reinforcements are on their way from Luhansk: 'whatever "they" had managed to arrange'.

Below is a complete, anonymised transcript of the conversation.

1	
Date: 13 April 2014	C: <i>Hello.</i>
Time: Afternoon	B: <i>Hello.</i>
Participant A: IHD-A	C: <i>Yes, yes.</i>
Participant B: IHD-B	B: <i>Yes, put [IDH-A] on the phone.</i>
Incoming	C: <i>Err.. hold on a second... who is asking?</i>
Conversation	B: <i>[IHD-B]... he knows.</i>
Anonymised	C: <i>Hold on a second.</i>
Complete	<i>In de background:</i>
	C: <i>{inaudible} the phone. [IHD-B] from Russia is on the line.</i>
	Voice 1: <i>Where from?</i>
	C: <i>From Russia. {inaudible}.</i>
	<i>Back to the phone. A is putting C on the phone.</i>
	A: <i>Hi. Hello.</i>
	B: <i>Yes.</i>

	<p>A: <i>Hello. Yes.</i></p> <p>B: <i>What is the situation there?</i></p> <p>A: <i>Well, look... we defeated the first attack... so... err.. they bumped into our whatsit... screen...</i></p> <p>B: <i>Uh-huh.</i></p> <p>A: <i>...incurring big losses. Incurred big losses. We don't even know who... who we crushed, but they were serious. So...</i></p> <p>B: <i>I got it. Great. So, look, a company from Lugansk¹ will move out to you.</i></p> <p>A: <i>Uh-huh.</i></p> <p>B: <i>I fucking [...] them.</i></p> <p>A: <i>A company consisting of what?</i></p> <p>B: <i>Huh?</i></p> <p>A: <i>A company consisting of what?</i></p> <p>B: <i>Well, what we fucking managed to... those who have fighting experience, will move out.</i></p> <p>A: <i>Okay. Let them move out.</i></p> <p>B: <i>So,...</i></p> <p>A: <i>But keep in mind that all the roads are sealed. They will have to fight their way through or bypass them.</i></p> <p>B: <i>I know. They will at least hit their check points.</i></p> <p>A: <i>Uh-huh. Okay, okay.</i></p> <p>B: <i>Maybe they will not break through. They are terribly scared. Got it? As you can imagine. Maybe they will not break through.</i></p> <p>A: <i>[IHD-B], throw... throw... now [...][the informa...² we need the information regarding who we crushed. We crushed a very serious team. A very serious one. With some very serious and important people. So... err... they are keeping total silence... both on TV and the Internet. But we crushed them well. My guys did an excellent job.</i></p> <p>B: <i>I got it. How many?</i></p> <p>A: <i>I don't know.</i></p>
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¹ *Luhansk (Ukr.)*

² *Unfinished word.*

	<p>B: <i>Do you have any losses?</i></p> <p>A: <i>We don't have any losses. Not everyone has come back yet, but the main team incurred no losses. And you know that if we had losses, they would make much noise. So... err... and as the guys keep radio silence, it means... you understand that {inaudible}.</i></p> <p>B: <i>Okay. So I will break through to Lugansk and form there...</i></p> <p>A: <i>Okay.</i></p> <p>B: <i>... with Lugansk teams I will [...] to you.</i></p> <p>A: <i>Okay. Okay. Go ahead. Well, no... we... {inaudible} ... we will stick it out for several days. With fights of course. We will stick it out, you know. So... err... let them take more anti-tank weapons. Okay?</i></p> <p>B: <i>Good. Okay. Deal.</i></p> <p>A: <i>We need anti-tank weapons. If we had any, we would cause everybody run behind Mozhay.³ Bye. Good luck. Uh-huh.</i></p> <p>B: <i>I got it. Bye. Stay in touch.</i></p> <p>A: <i>Bye.</i></p>
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Later that same afternoon, half an hour after the previous conversation, the same identified, high-ranking DPR separatists again spoke by telephone. IHD-B wants to arrange an interview with the Russian news broadcaster Lifenews. IHD-A should have someone else give the interview. One of the subordinates of IHD-A – someone with a Ukrainian accent – should explain the outcome of the recent fighting in which IHD-A's troops were involved in the interview. Then he says that the demands of the Ukrainian separatists should be announced via the same medium.

Below is a complete, anonymised transcript of the conversation.

2

³ A word for word translation of an idiom which means: "... we would cause everybody run far away from here."

Date: 13 April 2014	A: <i>Hello. Hello.</i>
Time: Afternoon	B: <i>Hello. [IDH-A].</i>
Participant A: IHD-A	A: <i>Hi. Yes. Listening to you.</i>
Participant B: IHD-B	B: <i>Hi. So, look: Khokhly⁴are lying recklessly there. I want to arrange a LifeNews⁵ live stream for you. I will give this phone number. They will call, introduce themselves. LifeNews from Moscow.</i>
Incoming	A: <i>Listen up.</i>
Conversation	B: <i>Tell them a few words.</i>
Anonymised	A: <i>Are you sure that I... that I need this? In terms of...</i>
Complete	B: <i>Don't introduce yourself. Okay. Take your deputy...</i>
	A: <i>Uh-huh.</i>
	B: <i>... the one who speaks with the Ukrainian accent.</i>
	A: <i>Uh-huh.</i>
	B: <i>Okay? Well, [XX] ... or what is his name? Okay? Is his name [XX]? Well, it doesn't matter.</i>
	A: <i>Yes. Uh-huh.</i>
	B: <i>In short, take your deputy...</i>
	A: <i>Uh-huh.</i>
	B: <i>... and describe... let him describe absolutely clearly... introduce himself as a deputy commander...</i>
	A: <i>Uh-huh.</i>
	B: <i>... and describe absolutely clearly what is going on. I mean... err... that everything is fine, everything is okay. We won, so to speak. Those ones retreated with big losses. We have no losses. Hello.</i>
	A: <i>Okay. Give [...]. I will be waiting for the call then.</i>
	B: <i>And the demands...</i>
	A: <i>Yes.</i>
	B: <i>And the demands... that we are demanding the federalization of Ukraine, the elections of governors, the immediate elections of governors... okay? The</i>

⁴ *Khokhol* (pl. *Khokhly*) – (literally 'a forelock'). An old slur used by Russians to refer to Ukrainians.

⁵ *LifeNews* (*Life*) is a Russian news website and 24-hour television channel that is owned by the News Media holding company.

	<p><i>elections of governors not later than the twenty fifth day of the month. We are demanding the federalization of Ukraine, the elections of governors and err... the condition that Rada⁶ can't take foreign loans without the two thirds of vote of the regions. It is very important. It is a very essential demand. Because they will now give Ukraine as a pledge for money.</i></p> <p><i>A: I got it. Good. The person heard everything. He will say everything in the phone. Okay? Bye. Talk to you soon.</i></p> <p><i>B: Okay. Good. Deal.</i></p> <p><i>A: Yes. So, here... here...</i></p> <p><i>B: That we are demanding that, we will remain steadfast to the last.</i></p> <p><i>A: Yes, yes. So, look... here helicopters are flying around. We are looking at them with our hungry eyes. So... but...</i></p> <p><i>B: I fucking understand.</i></p> <p><i>A: Okay.</i></p> <p><i>Off to the side:</i></p> <p><i>A: Say what?</i></p> <p><i>Back to the phone</i></p> <p><i>B: I will try to make every effort to push this through.</i></p> <p><i>A: Okay. I {inaudible}. Bye. Uh-huh. Bye. Bye.</i></p> <p><i>In the background</i></p> <p><i>Voice 1: The first channel {inaudible}.</i></p> <p><i>Back to the phone</i></p> <p><i>B: Yes. I...</i></p>
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⁶ The Verkhovna Rada of Ukraine is the unicameral parliament of Ukraine.

That afternoon the same identified, high-ranking DPR separatists spoke on the telephone once again. IHD-B said that IHR-D, an identified Russian businessman with contacts in high political circles, is with him, and then he hands him the telephone. IHD-A gives an update of the situation to IHR-D. IHR-D asks IHD-A if he has already told this to AKSYONOV, the leader of Russian-occupied Crimea. In response to IHD-A's reply that he has not yet been able to get in touch with him, IHR-D said that he would be meeting with AKSYONOV the next day and that he would talk to him. In the meantime, he advised IHD-A to continue trying to contact AKSYONOV. IHR-D also said that IHD-A's ambush has succeeded in wounding the head of the Ukrainian Anti-Terrorism Centre.

Below is an anonymised transcript of the conversation. The reporting officer has omitted part of the conversation (indicated with '[...]').

3	
Date: 13 April 2014	C: <i>Hello.</i>
Time: Afternoon	B: <i>Hello. [IDH-A]?</i>
Participant A: IHD-A	C: <i>Yes, yes. This is not [IDH-A]..</i>
Participant B: IHD-B	B: <i>Hello, hello.</i>
Participant D: IHR-D	C: <i>This is not [IDH-A].</i>
Incoming	B: <i>Put [IDH-A] on the phone, please. Urgently.</i>
Conversation	C: {inaudible}.
Anonymised	B: [IDH-B].
Abbreviated	C: <i>Hold on.</i>
	B: <i>Uh-huh.</i>
	Off to the side:
	C: <i>I will call you back. I will call you back.</i>
	In the background:
	Voice 1: {inaudible}.
	B: <i>Listen, what's the difference? Do you think I have any phone that is not being listened in now?</i>
	Voice 2: {inaudible}
	A: {inaudible}

	<p>Back to the phone, C is putting A on the phone.</p> <p>A: <i>Yes, listening, [IHD-B]?</i></p> <p>B: <i>[IDH-A].</i></p> <p>A: <i>Yes. Listening to you. Yes.</i></p> <p>B: <i>Yes. Hi. What is the situation like? [IHR-D] is here. I will put him on the phone now.</i></p> <p><i>B is putting D on the phone.</i></p> <p>A: <i>Yes.</i></p> <p>D: <i>Hello. Hello.</i></p> <p>A: <i>I wish you good health, [IHR-D].</i></p> <p>D: <i>Yes. Good morning. So, what's up?</i></p> <p>A: <i>So, we have defeated the attack. The enemy has retreated in all directions with big losses. So, err... from our side...</i></p> <p>D: <i>What does "big losses" mean?</i></p> <p>A: <i>Don't know, but according to our estimates they have from fifteen to twenty killed or wounded, including several senior special ops officers.</i></p> <p>D: <i>Uh-huh.</i></p> <p>A: <i>They got in our ambush.</i></p> <p>D: <i>Uh-huh.</i></p> <p>A: <i>We... so, our... our team shot at three VIP class vehicles...</i></p> <p>D: <i>Uh-huh.</i></p> <p>A: <i>Which they drove... destroyed both security and those who were there... almost everybody. So, from fifteen to twenty.</i></p> <p>D: <i>And from our side? (...)</i></p> <p>A: <i>We have no wounded or killed from our side. The guys did a great job.</i></p> <p>D: <i>Have you reported to Aksionov?</i></p> <p>A: <i>No, I haven't reported yet. I didn't manage to establish communication with him. So, if it is possible to call him...</i></p> <p>D: <i>Okay, okay. Then call him. I am meeting with him tomorrow here.</i></p> <p>A: <i>Uh-huh. Uh-huh.</i></p>
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<p>D: <i>He is flying in this evening. We will have a talk with him, but try to get through to him yourself. With the report.</i></p> <p>A: <i>Copied. Copied. Of course.</i></p> <p>D: <i>Okay?</i></p> <p>A: <i>Copied. Copied.</i></p> <p>D: <i>Well. The further commander's personal reconnaissance... I need hardly say, the whole world is now looking at this geographical point... so... now we shouldn't be too clever-clever.</i></p> <p>A: <i>I got it. So, from our side... we haven't relinquished a single position. I mean they are lying about everything. We maintained all the positions in Kramatorsk and we will {inaudible}...</i></p> <p>[...]</p> <p>A: <i>'[IHR-D], from my side, I am asking to clarify... I mean... who did we beat after all? We've got completely different information... from Alfa⁷ to GRU⁸ special ops forces of whatsit... of Ukraine.</i></p> <p>D: <i>Well, I can only give official information. That it was the head of the Anti-Terrorism Center of Ukraine.</i></p> <p>A: <i>Killed?</i></p> <p>D: <i>Well, they said wounded. [XX] said he is wounded.</i></p> <p>A: <i>I got it. I got it.</i></p> <p>D: <i>Well, it's according to their TSN.⁹ So, you hit the right person.</i></p> <p>A: <i>Well, I got it. Yes. Great. I mean... Thank you. Thank you. Uh-huh.</i></p> <p>D: <i>Good luck.</i></p> <p>A: <i>Yes. Thank you. Good bye. Uh-huh.</i></p> <p>D: <i>Ok. Stay safe. And I also want to say that you celebrated the holiday very well.</i></p> <p>A: <i>I did my best. {laughing}. Thank you.</i></p> <p>D: <i>{laughing}. Bye.</i></p>
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⁷ Alfa is an elite, stand-alone sub-unit of country's special forces.

⁸ Military Intelligence Agency.

⁹ Television News Service.

	<i>A: thank you. Uh-huh.</i>
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3.2 8 June 2014: request for anti-aircraft defence

In June 2014 the rebels are in trouble. The Ukrainian armed forces have launched a counteroffensive and are advancing towards the Russian border. In this call GIRKIN – the Minister of Defence of the DPR – speaks with SHEREMET – AKSYONOV’s assistant – and tells him that the ‘enemy’ outnumbers them and that the separatists need heavier equipment. GIRKIN asks, among other things, for anti-aircraft artillery with trained crews because MANPADs – shoulder-launched anti-aircraft missiles – are no longer adequate. He asks SHEREMET to pass on this message to ‘Pervyi’, i.e. the assistant’s superior, AKSYONOV himself.

On 19 June 2019 the JIT gave a press conference. At this press conference portions of this telephone conversation were made public, including GIRKIN’s identity. The exact time of the call was also released.

Below is a complete transcript of the conversation.

4	
4	B: <i>Hello?</i>
Date: 8 June 2014	A: <i>Hello. Hold on a minute please.</i>
Time: 11:30:47	B: <i>Ok.</i>
Participant B: SHEREMET, Mikhail	<Party C is heard speaking on the phone in the background>
Participant C: GIRKIN, Igor Vsevolodovich	A: <i>Hello? Speak.</i>
	B: <i>Hello? Good morning, Igor.</i>
	A: <i>Hold on, I’ll hand over the phone.</i>
Outgoing	B: <i>Ok.</i>
	C: <i>Yes, I’m listening.</i>
Conversation	B: <i>Good morning, Igor. This is Mikhail. You must remember me, I’m the</i>
Not anonymised	<i>assistant of, uh, err, Pervyi¹⁰.</i>
Complete	C: <i>Yes, go ahead, Mikhail.</i>

¹⁰ In fact, Pervyi (which translates as “First Man”, or “Number One”) can be any person who is the first in the line of command within a given agency (most likely military or paramilitary) of which the speaker is a member.

	<p>B: [Inaudible] <i>Sergey brought me [...], told me you wanted to get hold of me to share some information.</i></p> <p>C: <i>Now I wouldn't call that "sharing information" ... In fact, this information is widely-known, and it reads that, err... that if no large-scale support arrives in the nearest time, the, err... they will smother/strangle (...). What we need is truly large-scale support, what [...] is already not sufficient. Giving [...] by dribs and drabs – as they do it now – can't make a difference anymore. We are outnumbered by the enemy. Me, I've been around long enough and I can still hold ground here some time, but if they keep it at this pace and launch an offensive against other towns and cities where people are unprepared and have no combat experience, they're going to crush them flat in no time. And then they will crush flat me, of course. If the issue of Russian support – air cover, or at least artillery support – is not dealt with, then we will not be able to hold ground here in the East, no way. ... first, back when this support was needed in large numbers, as much as possible, they didn't provide it; and what they are giving now is what we needed a month back.</i></p> <p>B: <i>Uh-huh.</i></p> <p>C: <i>Now all we get is only enough to barely get by, nothing more. We will not be able to turn the tide in any significant way, and they will be squeezing us on all fronts.</i></p> <p>B: <i>I see.</i></p> <p>C: <i>Hello?</i></p> <p>B: <i>Yes, yes, I'm following you, I'm following.</i></p> <p>C: <i>We need anti-tank artillery, we need tanks, we need decent anti-aircraft defense. Because we can't last on MANPADS alone any more - all manned with trained personnel, of course, seeing as we have, and will have, no time to train them. That's it... For example, four tanks are simply sitting on positions short of Semionovka¹¹ and firing on (...) positions from a distance safe near the rear. They've kept it this way for three days now. But I have no single anti-tank canon to counter them. Just now they were pounding the</i></p>
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¹¹ *Ukrainian Semenivka.*

	<p><i>center of the city/town with howitzers, fired 30 rounds, some exploded nearby, just 150 meters short of my headquarters. But I cannot reach them because they are too far, in terms of range. That's it. And that's the case everywhere. The entire Ukrainian army ... [...].</i></p> <p><i>B: yes, yes, I get that. Yes, yes.</i></p> <p><i>C: Now that's the message to get across. Sooner or later they will have to make a decision anyway, but by then a considerable part of the militia will be destroyed and the front line will be pushed away to somewhere behind Donetsk, to the east.</i></p> <p><i>B: Uh-huh.</i></p> <p><i>C: Now that's the story.</i></p> <p><i>B: Ok...</i></p> <p><i>C: I'd ask you to get this across to Pervyi.</i></p> <p><i>B: Yes, I het that. OK. Will do.</i></p> <p><i>C: Uh-huh. OK then, talk to you later, thank you.</i></p> <p><i>B: Later on.</i></p>
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A few minutes after the previous conversation GIRKIN spoke to AKSYONOV himself. Certain parts of this conversation, including telephone numbers, were shown by the JIT at its press conference of 19 June 2019. AKSYONOV says, using veiled language, that he is aware of the situation and has told others. He is awaiting an answer, and that evening he has another meeting to discuss the necessary support. After the meeting he will contact GIRKIN again. He also says that a 'joint coordination centre' has been set up and that the necessary documents for the support are already being prepared.

Below is a complete, partly anonymised transcript of the conversation.

5	
Date: 8 June 2014	A: <i>Hello?</i>
Time: 11:46:33	B: <i>Hello. I need to speak to Igor.</i>
	A: <i>Hold on. [Off to the side:] May I come in? It's him, once again.</i>
Participant C: GIRKIN	C: <i>Yes, [XX]? I'm listening.</i>

Participant D: AKSYONOV	B: <i>I'll hand over the phone to Pervyi</i> ¹² . C: <i>Uh-huh.</i> D: <i>Hello?</i>
Incoming	C: <i>Hello?</i> D: <i>Hey there, Igor.</i>
Conversation	C: <i>Greetings. I wish you good health.</i> ¹³
Partly anonymised	D: <i>Het there, Igorigoga</i> ¹⁴ . <i>Good job, you're in your usual self, as I see. Now, in a nutshell, here's the story: on Tuesday I went to, err... to where I was supposed to go in the light of this situation... If it weren't for all those visits yesterday and today which, err, prevented [...] from coordinating action / briefing in relation to the picture</i> ¹⁵ ... <i>At 22 or so tonight I'll get in touch with... well, with those who are, err... who have already made this decision. Just now...</i>
Complete	C: <i>Uh-huh.</i> D: <i>...just now I got a visit from those who had worked here – you surely know all of them in the line of this situation.</i> C: <i>Well, yes, yes.</i> D: <i>Now all of them have already received the entire picture. I mean, all who sort of been to both buildings back then, err... Well you remember...</i> C: <i>I see what you mean.</i> D: <i>Yes, everyone has received the picture. I mean, we... I will need you to [...] over the same channel/line at 22-22:30 today, me and you will need to talk over the same channel/line. I will then coordinate/brief you openly, and... There's already a person and a joint coordination center in place that are dealing with this situation... I mean those who are/have been coordinating this picture – I just don't want to give surnames openly over the phone.</i> C: <i>I understand. OK, I'll be available at that time. But, in general, do you understand what the situation is like and that [... inaudible]?</i>

¹² In fact, *Pervyi* (which translates as “First Man”, or “Number One”) can be any person who is the first in the line of command within a given agency (most likely military or paramilitary) of which the speaker is a member.

¹³ “I wish you good health” is a traditional military greeting.

¹⁴ A very friendly short form of Russian and Ukrainian male name Igor.

¹⁵ Russian criminal jargon (the expression used was “*stykovat po kartine*”).

	<p>D: <i>I do understand what the situation is like, Igor. Listen up, that's right what I told them on Tuesday, that if we don't take certain steps... I mean, I was, err, where I was sort of supposed to be in light of this situation, and the message I brought along was that if no concrete steps are taken, then we're going to sort of lose all these commodity markets which we're sort of speaking about in terms of this picture.</i></p> <p>C: <i>OK then, they just [...inaudible]...</i></p> <p>D: <i>That's what I was saying: we're about to lose these commodity markets. Well, me and you, we understand what that means.</i></p> <p>C: <i>Yes, yes.</i></p> <p>D: <i>And I sort of made it clear for [...], and right in my presence the guy rang up another pal who is responsible for the conduct of [...], then I had a talk with him about it once again on Wednesday, and then with [XX] on Thursday, and today I'm still waiting – it's just because all of them are gone for two days, were in different places, and that's why, err, that's why they asked to sort of [...] for these two days because of this picture. Anyway, the documents necessary for the support are already being prepared... I will also be [...] about all this stuff tonight, I will be coordinating/briefing [XX], err, [XX]'s man, err, in relation to all this cookery¹⁶. And at 22-22:30 today I will coordinate/brief you on all points of contact necessary for the entry.</i></p> <p>C: <i>OK, I'll be waiting for you call.</i></p> <p>D: <i>Now Igor, I sort of, err... [...inaudible] that's what I told them, "If we don't know each other, if we didn't keep in touch, I wouldn't care that much", I said. "It would be easier for me", I told my boss, "it would be easier for me to withdraw someone and just say that, err... that it didn't make sense. But", I said, "I've sort of seen this picture and I can't just abandon them guys in this situation". So all necessary orders have been sort of given right in my presence, and... Now, Igor, let's get in [...] at 22:30, over the same channel/line.</i></p> <p>C: <i>OK then, I'll be waiting.</i></p>
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¹⁶ *Interpreter clarification: Refers to the person having various things to deal with which are not visible to everyone or behind the scenes.*

	<p>D: <i>Be sure to [...] exactly [...], yes. [XX] will be next to me by that time, and we'll have a coordination/briefing...</i></p> <p>C: <i>OK then, got it, deal. Uh-huh.</i></p> <p>D: <i>Got it. Deal. Thank you, thank you.</i></p> <p>C: <i>[...inaudible]</i></p> <p>D: <i>Yes, thank you.</i></p>
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3.3 11 and 12 July 2014: financial problems in the DPR

On 11 July 2014 at 20:10:09, SURKOV, a staff member of the Presidential Administration of Russia, called BORODAI, who was then prime minister of the DPR. SURKOV says that he has had contact with ‘the ones who are in charge of this whole military story’, and that they have assured him that they are preparing something that will turn the tide. SURKOV then says that he wants BORODAI to take care of a number of matters in the DPR, including drawing up a list of what is needed (such as money or medicine), paying certain benefits or allowances and making a broadcast telling the population to ready themselves for the winter.

On 19 June 2019 the JIT gave a press conference where the entire telephone conversation was made public, including both identities. Other names were made unrecognisable. The exact time was also made public.

Below is a complete transcript of the conversation.

6	
Date: 11 July 2014	B: <i>Hello?</i>
Time: 20:10:09	A: <i>Yes, Vladislav Yuryevich^{phonetically17}, go ahead.</i>
	B: <i>Hello?</i>
	A: <i>Hello, hello, hello? Go ahead.</i>
Participant A:	B: <i>Oh, hello, it's me.</i>
BORODAI, Alexander	A: <i>Yes, I knew you.</i>
Yurevich	B: <i>So, I had a conversation with, err, fellows back home, so to speak – the most senior folks who, um ... well, you know, the ones who are in charge of this whole military story.</i>
	A: <i>Uh-huh?</i>

¹⁷ Consider: http://en.wikipedia.org/wiki/Vladislav_Surkov

<p>Participant B: SURKOV, Vladislav Yurievich Incoming Conversation Partly anonymised Complete</p>	<p>B: <i>So I told them. [And they] went like, “Yes, we’re up to speed on everything, don’t worry, we’re aware, but {part of the phrase is unintelligible} steps that can/will turn the tide” – I already talked everyone’s ears off about it back there. “Yes, we understand, we’re preparing...” But honestly, Sasha¹⁸, I can’t really vouch that those answers can be relied upon, because, you know, although I know all of them very well, but there’s no {unintelligible} to trust [them] to whether or not they’re preparing something-</i></p> <p>A: <i>Yes, I completely understand that, {unintelligible}</i></p> <p>B: <i>{unintelligible}</i></p> <p>A: <i>We’ve managed to hold out for a week already – it’s hard, but we can hold out some more.</i></p> <p>B: <i>Well, yes, kind of, Sasha, but frankly, by the sound of it, that’s about what you’ll have to try to do. That’s why I tried to focus as much as I could – let’s see what comes out of it. Right now, you... Now, I’ve spoken to the guest – [XX], [you know who I’m talking about,] right? – and he told me pretty much the same as what I already know from you, but for right now I (unintelligible). It’s good he’s in a good, reasonable mood – which in itself is a big get for these times. But, of course, his assessment [of] what’s happening there at the moment and our capabilities there is also very, um, critical, to say the least. Well, we-</i></p> <p>A: <i>Yes, I got it. Yes, yes, yes, yes, yes, yes, yes. I see/ We’re still-</i></p> <p>B: <i>Now, why I called: because those territories come with population already, and because you and I still have to keep the folks back [home] in the loop about welfare matters ... The man we wanted to send over ... I’ve got a certain guy named [XX] here – [you know who I’m talking about,] right? - and it looks like he’s going to come back to you in the end –</i></p> <p>A: <i>Well, he [already] called me up, asked me to help out a man whose SUV has been commandeered, which I just did. That’s about it –</i></p> <p>B: <i><chuckles> I see.</i></p> <p>A: <i>Business as usual/ your own-</i></p> <p>B: <i>The life takes its course, yes.</i></p> <p>A: <i>Yes, the life takes its course.</i></p> <p>B: <i>That’s why he’s likely to come back to you, but for now, erm, I’m asking you to – if you’ve got time and people to delegate it to – to at least scout the situation in the city, in some of the neighbourhoods, and, um, place an order with us {unintelligible} what you need to, say, prepare for winter, or, like, some sort of social or statutory payments, or {unintelligible} maybe there’s something new that the population needs, given the changing situation – anyway, I need you to provide an order for what you need – money, and if necessary, medicaments and whatnot {unintelligible}, if you require it – I mean, as part of this civilian story.</i></p>
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¹⁸ Pet form of Russian masculine name Aleksandr

<p>A: {unintelligible} <i>civilian story</i> {unintelligible} <i>come up with something, yes. The money that has been [previously] allocate, this money, it's already running short. And will run out completely as soon as {unintelligible}.</i></p> <p>B: {unintelligible}</p> <p>A: <i>... it will run out in one day by the looks of it.</i></p> <p>B: <i>You already told me that. Now that's why I'm asking you myself – get someone who knows at least a thing or two about this, sit together with them and come up with, um, a more or less adequate order for what is needed, [and] we'll deliver quickly.</i></p> <p>A: <i>All right, all right, I get that.</i></p> <p>B: <i>Will you do it?</i></p> <p>A: <i>Yes, {unintelligible}</i></p> <p>B: {unintelligible} <i>for the population, Sasha, because you folks are under siege now, and it's important as ever that you if not win their love then at least, you know, [make them feel that you] look after them and all that – because the last thing you need is them starting to shoot you in the back.'</i></p> <p>A: <i>Yes, I agree, because this situation {unintelligible}</i></p> <p>B: {unintelligible}, <i>but I'll fix it for you no later than Monday or Tuesday – you know, back at our [...] it's really no big deal, we'll do it quickly.</i></p> <p>A: <i>All right, all right, I get it, I see.</i></p> <p>B: <i>The only thing I'm asking is an adequate order, alright? [One thing to consider is) preparations for the coming school year – see if you can make a gesture of some sort, for there is bound to be at least a small percentage of children who will stay there – I don't know how many, though, if they don't all scatter away. Number two is preparation for the winter, but it's not just about money, it's also about technical matters that might come up – like fuel, gas supply, water supply and so on. And of course it's money – maybe you need to payout some benefits or allowances, or, say, some pensions or pension supplements. Or maybe you'll find a new niche that you can explore to make people understand that they're being looked after. That's what I wanted to ask you to do.</i></p> <p>A: <i>I get that, I get that, sure thing.</i></p> <p>B: <i>About winterization – you know what I'm thinking, Sasha? What you need to do is to hold a publicly-broadcasted briefing, like governors elsewhere always do. And don't take too long with it, now is the time. Yes, you should definitely hold a winterization briefing. Let everybody know that we're there for long</i></p> <p><laughs></p> <p>A: <i>All right, all right, consider it done/</i></p> <p>B: <i>... [and that) we're preparing for the winter, <chuckles> all as one. OK then, Sasha, I will be contactable, (unintelligible)</i></p> <p>A: (unintelligible)</p> <p>B: <i>... I'll be out and about the whole day tomorrow, and I won't be available all the time, but I'll try to, um, keep you posted should anything pop up, alright?</i></p> <p>A: <i>All right, all right, thank you. Good luck there! Goodbye!</i></p>
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	B: <i>Uh-huh.</i>
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3.4 16 July 2014: obtaining a Buk

In the morning of 16 July 2014, in a conversation between two high-ranking LPR separatists ('IHL-A' and 'UHL-B') preparations were announced to load 'something' onto a low-loader, camouflage it and drive it away. It was important that this 'something' not be discovered.

On 28 September 2016 the JIT issued a call for witnesses, in which part of this recorded telephone conversation was released. In this conversation the names of separatists can be heard. The identity of the separatists in question has not been released.

Below is a transcript of this telephone conversation. The reporting officer has omitted part of the conversation (indicated with '[...]').

7	
Date: 16 July 2014	A: <i>Hello?</i>
Time: Morning	B: <i>Hello?</i>
Participant A: IHL-A	A: <i>Yes, Fiodorovich! I'm listening.</i>
Participant B: UHL-B	B: <i>Have you already got up?</i>
Incoming	A: <i>Yes, I have. ...[inaudible]</i>
Conversation	B: <i>What... what... what is the situation like?</i>
Partly anonymised	A: <i>Err... I'm just being reported.</i>
Abbreviated	B: <i>Oh, you're just being reported. As soon as the reports are made give me a call.</i>
	A: <i>Uh-huh...</i>
	B: <i>And then whatsit... tell me... have you found this one? ...err...</i>
	A: <i>I have arranged everything on the lowboy and a crane.</i>
	B: <i>On, it'll be today, yes?</i>
	A: <i>Yes-yes-yes. What time is it needed at?</i>
	B: <i>Well, the sooner the better. It has to be loaded, camouflaged and driven away.</i>
	A: <i>Got it. Well, I have arranged it for the evening. ...[inaudible] it... [inaudible] at/for around 5-6 o'clock/hours.</i>

	<p>B: <i>Well, for the evening. It's ok.</i></p> <p>A: <i>Well, not to be spotted and ...[inaudible] quickly.</i></p> <p>[...]</p>
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On 16 July 2014 at 19:09:20 two identified, high-ranking DPR separatists ('IHD-A' and 'IHD-B') spoke on the telephone. IHD-B says that heavy Ukrainian equipment is reportedly underway. IHD-A thinks that it is intended for the town of Grigorovka. The Ukrainian troops are surrounded, and this is the only place where they can fight their way out. He says that there are two batteries in Grigorovka that are firing on his men. They must be silenced. IHD-A says that he does not know if his troops can maintain the encirclement, especially if the Ukrainian armed forces deploy 'Sushkas'. He is hoping a Buk will arrive in the morning. He sees no other option.

At a presentation on 28 September 2016 the JIT issued a call for witnesses on the basis of part of this telephone conversation. In the part of the conversation that was made public, the participants address each other by name. The identity of the separatists was not released.

Below is a complete, anonymised transcript of the conversation.

8	
Date: 16 July 2014	A: <i>Yes, Sanych¹⁹, I'm all ears.</i>
Time: 19:09:20	B: <i>Are you OK to talk, ...[inaudible] Nikolayevich?</i>
Participant A: IHD-A	A: <i>Yes, go ahead.</i>
Participant B: IHD-B	B: <i>I have two questions. We got a word that there's some heavy equipment of the Ukry²⁰ moving in from the direction of Alekseyevka²¹ and, reportedly, they have Grads,²² too...</i>
Incoming	A: <i>Alekseyevka, where's that? Hold on a second.</i>
Conversation	B: <i>It's down there, Alekseyevka, look it up. There's heavy equipment and Grads moving, so [XX] kind of said that... He recommended that they dig in...</i>

¹⁹ A short and friendly-sounding form of Russian male patronymic, Aleksandrovich

²⁰ i.e., Ukrainians

²¹ Ukrainian Oleksiivka

²² BM-21 Grad ("hail") is a Soviet-design truck-mounted 122 mm multiple rocket launcher

Partly anonymised Complete	<i>And look here, we can send over to you, to that area, our two mobile intensive care ambulances...</i>
	<p>A: Got it.</p> <p>B: ... manned with doctors, so if there's a need, we can send them as reinforcement over to that area, at least to the area of Snegnoye²³ {phonetically}...</p> <p>A: Wait, form the direction of Alekseyevskoye²⁴ or Alekseyevka?</p> <p>B: Alekseyevskoye, Alekseyevskoye, oops, Alekseyev..</p> <p>A: Aah... They're moving to, whatsit, Grigorovka²⁵. They are gathering a force, because, you see, we've blocked their only way out of that pocket²⁶. That's it.</p> <p>B: I see, yes. But just in case, just for them to dig in, because they're, err, they're moving...</p> <p>A: They're already digging in. I have my reconnaissance battalion there... well, of course that's not our objective. We took over Marinovka²⁷ and, err, the hills/Gorki today, alright? Now the infantry's getting seated in there. The most important thing now is that we... [...] to Moscow - ... that we shut up those two batteries in Grigorovka, you understand?</p> <p>B: Uh-huh.</p> <p>A: Otherwise they'll [...] us... For it's their only way out of the pocket, you understand? I mean... they've become fucking impudent. Whoops! – and there we were, surrounding them, see? How come that and where they were supposed to break out to. And those who are there now, they have no ammo left. There in Grigorovka, they have less than one load of ammo left – for the self-propelled howitzers, I mean.</p> <p>B: Uh-huh.</p>

²³ Probably Snezhnoye was meant. (Ukrainian: Snizhne).

²⁴ Ukrainian Oleksiivske

²⁵ Ukrainian Hryhorivka

²⁶ (literally "cauldron") Russian military term for an encirclement where a strategic-level concentration of enemy forces is trapped (other than a siege)

²⁷ Ukrainian Marynivka

	<p>A: <i>Screw it, Sanych, I don't even know if my men will be able to hold there today or not. They start coming down on them with Grads, I'll be left without my reconnaissance battalion and the spetsnaz company. This shit is fucked up. Oh crap...</i></p> <p>B: <i>And...</i></p> <p>A: <i>And there's nothing we can do about it... Now, Grads are something we can fucking bear with, but if Sushkas²⁸ strike in the morning... If I can receive a Buk in the morning and send it over there, that'd be good. If not, things will go totally fucked up. I'm going there myself at night, so...</i></p> <p>B: <i>Yourself, eh? So you're here for now, right?</i></p> <p>A: <i>Well, I, err... When you left, I had a two-hour nap and then I went there, we took over the hills there and Marinovka itself.</i></p> <p>B: <i>Uh-huh.</i></p> <p>A: <i>Then I left. And after that the planes – the Sushkas – came back (phonetically). They were attacking from 5 or 6 kilometers, because they couldn't even hear them...</i></p> <p>B: <i>Dead right. I saw them flying in that direction all night long and {inaudible}...</i></p> <p>A: <i>That's it... They came down on them real hard.</i></p> <p>B: <i>Real hard...</i></p> <p>A: <i>Yes. Yes, yes, yes.</i></p> <p>B: <i>Well, look here, Nikolayevich²⁹, if you need [...], we'll send over to your area...</i></p> <p>A: <i>{off to the side:} If that's what I think, I'll shoot you down, [...]. If this is one of those thirty sets, I'll shoot you down, I'm serious. {back to phone:} Sanych, I need to deal with {distorted}...</i></p> <p>B: <i>Uh-huh...</i></p> <p>A: <i>I'll call you back.</i></p>
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²⁸ Sushka (a "cracknel") is Russian military slang for Sukhoi jet

²⁹ A patronymic (Ukrainian counterpart is Mykolayovych)

3.5 17 July 2014, morning: the arrival of the Buk-TELAR

The next morning (17 July 2019) a Buk-TELAR was present in the DPR. Various DPR separatists, of both higher and lower rank, were involved in transporting and positioning the weapon in the vicinity of Snizhne and Pervomais'ke.

At 09:08:26 that morning a conversation between an identified, lower-ranking DPR separatist ('ILD-B') and Sergey Nikolayevich DUBINSKIY, Igor GIRKIN's deputy commander, that the Buk had arrived. In the conversation ILD-B asks DUBINSKIY where he should unload and hide the 'beauty'. It is clear from the conversation that he is referring (in veiled language) to a Buk-M, or a Buk-TELAR. DUBINSKIY says that the Buk-TELAR does not have to be hidden but should be taken immediately to a place known to ILD-B. It emerges in the conversation that the Buk-TELAR is accompanied by a crew.

The JIT released this conversation in its entirety on its website in June 2019 in connection with a call for witnesses. This conversation had previously been shown on 30 March 2015, but in 2019 the name of one of the participants was released, namely DUBINSKIY. The identity of ILD-B was not released. The names mentioned in the conversation have also been made public.

Below is a complete transcript of the conversation.

9	
Date: 17 July 2014	B: [Speaking to the side] <i>Guys, we need to stop, we need to stop.</i>
Time: 09:08:26	[Voice in the background] C: ... <i>[inaudible]</i>
Participant A:	B: [Speaking to the side] <i>We need to stop. Let's stand in the left lane...</i>
DUBINSKIY, Sergey	<i>[inaudible], occupy his lane. ... [inaudible].</i>
Nikolayevich	[Voice in the background] C: <i>to the right, in the right one.</i>
Participant B: ILD-B	B: [Speaking to the side] <i>Stand in the left one, in the left one, there. Why the fuck is he [...] to the right one?</i>
Incoming	[Voice in the background] C: <i>Because I showed [...] to the right.</i>
	A: [Speaking to the phone] <i>Yes, I'm listening, Buriatik³⁰!</i>

³⁰ A nickname.

<p>Conversation</p> <p>Partly anonymised</p> <p>Complete</p>	<p>B: [Speaking to the phone] Hello, Nikolayevich.</p> <p>A: Yes.</p> <p>B: <i>And where should we unload this beauty, Nikolayevich?</i></p>
	<p>A: <i>Which one? This one?</i></p> <p>B: <i>Yes, yes, the one I brought with me. I'm already in Donetsk.</i></p> <p>[Voice in the background] D: <i>Let's ... [inaudible]</i></p> <p>A: <i>The one I'm thinking about, yes? The one that is M?</i></p> <p>B: <i>Yes, yes, yes, yes. Buk.</i></p> <p>A: <i>Oops, BM. Yes, yes, yes. I got it.</i></p> <p>B: <i>Buk. Buk, buk.</i></p> <p>A: <i>So, so, so... And is it on whatsit... a tractor unit?</i></p> <p>B: <i>Yes, it's on whatsit... it needs to be unloaded somewhere in order to hide it.</i></p> <p>A: <i>Is it with a crew?</i></p> <p>B: <i>Yes, it's with a crew.</i></p> <p>A: <i>You don't need to hide it anywhere. It will go over there now. Did you understand where I mean?</i></p> <p>B: <i>I understood. But they need at least [...] time so that they have a look at it.</i></p> <p>A: [Speaking off to the side] <i>A certain Dimitriyevich³¹ ...</i></p> <p>[Voice in the background] E: <i>...give some weapons...</i></p> <p>A: [Speaking off to the side] <i>From whom?</i></p> <p>[Voice in the background] E: <i>...[inaudible]</i></p> <p>B: [Speaking on the phone] <i>Hello-hello!</i></p> <p>A: [Speaking off to the side]: <i>And there?</i></p> <p>[Voice in the background] E: <i>We can... [inaudible] this.</i></p> <p>A: [Speaking off to the side] <i>Cripes!</i> [To the phone] <i>Wait, wait Bibliothekar.³²</i></p> <p>[Voice in the background] E: <i>You are being asked to the phone.</i></p> <p>B: <i>Aha.</i></p>

³¹ A male patronymic. Derives from Dmitry (Rus)/Dmytro (Ukr).

³² A call sign/nickname. Literally means: "a librarian".

Later in the morning of 17 July 2014 another conversation took place about the TELAR, in which an identified, higher-ranking DPR separatist ('IHD-A') asks an identified, lower-ranking DPR separatist ('ILD-B') if he brought 'one' or 'two'. ILD-B replies that he only brought 'one', that the vehicle crossed the 'line' in self-propelled mode and has now been placed on a low-loader. The JIT investigation assumes that, in veiled language, this conversation is also about the expected Buk-TELAR, which has crossed the border (the line) with the Russian Federation. IHD-A gives the order to bring the Buk-TELAR to the Vostok tanks.

On 28 September 2016 the JIT issued a call for witnesses in which part of this intercepted telephone conversation was released. In the telephone conversation the names used by the participants to address each other can be heard. The names of the separatists have not been released.

Below is a complete transcript of the conversation.

10	
Date: 17 July 2014	B: <i>Hello?</i>
Time: Morning	A: <i>Hello? Where are you now? Have you brought one...</i>
	B: <i>Hello, Nikolayevich? Now I'm...</i>
Participant A: IHD-A	A: <i>...or two? Tell me.</i>
Participant B: ILD-B	B: <i>No. One, one. Because they had an unclear situation there. They haven't brought our lowboy over here.</i>
Outgoing	A: <i>I got it.</i>
	B: <i>They got it unloaded and brought it over here in self-propelled mode.</i>
Conversation	A: <i>Look, you don't whatsit... it. Did it come in self-propelled mode? Or on a lowboy?</i>
Partly anonymised	B: <i>It crossed, crossed the line³³.</i>
Complete	A: <i>Aaaah, and now you brought it in on a lowboy, yes?</i>
	B: <i>Yes, yes, yes.</i>
	A: <i>So, look. You don't whatsit... it anywhere. I'll say now where it should go. It will go together with the Vostok tanks. Is it clear? Yes? Hello?</i>
	B: <i>Aha. Hello. I got it. I got it.</i>

³³ This word is a figurative meaning.

	<p>A: <i>Just a mment. Keep, keep in touch. Uh-huh.</i></p> <p>B: <i>Ok. That's it. Aha.</i></p>
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After this call two identified, high-ranking DPR separatists ('IHD-A' and 'IHD-B') speak with each other on the telephone. IHD-A tells IHD-B in veiled language that there is something behind 'Motel' and that IHD-B should call another separatist there. After that, IHD-B is asked to assemble a number of people and escort the 'thing' – the Buk-TELAR – to a location in the vicinity of Pervomaiske ('Pervomayskoye'). IHD-B is told to guard the Buk-TELAR in that region. The village of Pervomaiske ('Pervomayskoye') is around two kilometres from the eventual launch location Pervomaiskyi. Both villages are to the south of the village of Snizhne in Donetsk Oblast.

Below is a complete, anonymised transcript of the conversation.

11	
Date: 17 July 2014	B: [IDH-A].
Time: Morning	A: <i>Hello.</i>
Participant A: IHD-A	B: <i>Yes.</i>
Participant B: IHD-B	A: [IHD-B]. <i>Just listen to me attentively. So, now, behind the Motel rind road, call [XX], there will stay you know what? Yes?</i>
Outgoing	B: <i>Yes.</i>
Conversation	A: <i>Hello.</i>
Anonymised	B: <i>Yes, yes, yes, yes, yes.</i>
Complete	A: <i>You take there only from those who returned as many as you need for escort. One. You got it, yes?</i>
	B: <i>Aha.</i>
	A: <i>You leave the rest here. One.</i>
	B: <i>Clear.</i>
	A: <i>You go there, there is Pervomayskoye³⁴ nearby, check on the map. Hello.</i>
	B: <i>I got it.</i>

³⁴ Ukrainian: Pervomaiske.

	<p>A: <i>You station yourself somewhere in that region, take yours there, take the ones who are left. And your task is – reserve plus security guarding of this thing which you'll drive. Did you get it?</i></p> <p>B: <i>I got it.</i></p> <p>A: <i>[XX] well get there. Go on, anything happens – call me.</i></p> <p>B: <i>I got it.</i></p> <p>A: <i>Did you get it?</i></p> <p>B: <i>Aha. That's it. Good. That's it.</i></p> <p>A: <i>Yes, yes, yes, yes.</i></p>
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A short time later two identified, high-ranking DPR separatists ('IHD-A' and 'IHD-B') speak with each other on the telephone. IHD-A says that the three 'rhinos' from Vostok are meant for another (identified) separatist. From the context of all the conversations it appears that 'rhinos' probably refers to tanks. He also says that there is a BM – a BUK-M, i.e. the Buk-TELAR – on the way. IHD-B is told to escort and guard this BM, together with another separatist, on its way towards Pervomaiskyi and Pervomaiske.

Below is a complete, anonymised transcript of the conversation.

12	
Date: 17 July 2014	B: <i>Yes.</i>
Time: Morning	A: <i>Hello.</i>
Participant A: IHD-A	B: <i>Yes.</i>
Participant B: IHD-B	A: <i>So, look. Pass on... what's it... to [XX] etc... to them...</i>
Outgoing	B: <i>[XX], etc are all near.</i>
Conversation	A: <i>I got it. So there {inaudible} from Vostok went to them.</i>
Anonymised	B: <i>I didn't get it.</i>
Complete	A: <i>Three rhinos from Vostok went to them. Hello.</i>
	B: <i>Yes. Yes, yes.</i>
	A: <i>Nosed. Three units. Yes.</i>
	B: <i>I got it. I've just talked to the first.</i>
	A: <i>I got it. Now listen. Errr. You take whatsit. Wait for [XX]. [XX] is now driving this ... BM. Did you get it? Yes?</i>

	<p>B: Yes.</p> <p>A: Buk. Buk. Hello.</p> <p>B: Yes. Yes. Yes. I got it. I know wooden ones. Yes.</p> <p>A: I got it. So, you, [XX] and all ours find Pervomayka³⁵, near Pervomayskogo³⁶ in reserve you task is guarding of this Buk and organization of whatsit... Is it clear? Yes?’</p> <p>B: Yes.</p> <p>A: So. Vostok Rhinos go to [XX]. Let them take a decision. Well, let..</p> <p>B: Rhinos are for [XX], and I’ll leave the previous ones for [XX].</p> <p>A: Yes, yes. So.</p> <p>B: Yes. That’s how I decided.</p> <p>A: And you, together with ours and [XX]. But send somebody to meet the rhinos.. did you get it, hello, [IHD-B]?</p> <p>B: Yes, yes. I’ll organize everything now. I will first take my whatsit spitters to their position. There...</p> <p>A: I got it. I got it. Then you take ours you know where to and your task is reserve and guarding of this B. You got it, yes?</p> <p>B: Yes, yes, yes. Plus, I also keep a corridor so that we could have unhindered delivery of ...</p> <p>A: I got it. That’s it.</p> <p>B: To [XX].</p> <p>A: Go on. Bye.</p> <p>B: Yes, yes yes.</p>
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In the morning of 17 July 2014 an identified, high-ranking DPR separatist (‘IHD-A’) called an unidentified DPR separatist of unknown rank (‘UUD-B’). According to this conversation they are in contact with the highest levels in Moscow.

Below is an anonymised transcript of the conversation. The reporting officer has omitted part of the conversation (indicated with ‘[...]’).

³⁵ A slang term which refers to either Pervomaisk, Pervomaiske or Pervomaiskyi.

³⁶ A term that refers to either Pervomaiske or Pervomaiskyi.

13	
Date: 17 July 2014	B: [IDH-A], <i>good morning.</i>
Time: Morning	A: <i>Good morning.</i> B: <i>Good day already.</i>
Participant A: IHD-A	A: <i>Did they stop ringing you?</i>
Participant B: NOD-B	B: [IDH-A], (inaudible) <i>listen, the situation is like that. They called me.</i> A: <i>Okay.</i>
Outgoing	B: <i>And this is what they said. I've seen [XX] yesterday. Are you aware of the decision he's made?</i>
Conversation	A: <i>Yes, I am.</i>
Anonymised	B: <i>Well, today I've had a call from a man from Moscow who has told me: "If you solve a problem with [XX] (inaudible) you go and talk, we're leaving you here with all the instruments and we'll send to him another men". Plus also (inaudible) to you (inaudible) to help and send you some humanitarian aid and so on.</i>
Abbreviated	A: <i>No, no, no, I already know that you don't need to go to [XX]. I already know all this system and situation. We need nothing from them. All the same, no one will send us anything. I already know this. I had a talk with Moscow yesterday. [XX] had a talk with Moscow too.</i> B: <i>Uh-huh.</i> A: <i>We've reached the top level.</i> B: <i>Uh-huh.</i> A: <i>The instruction is as follows. Well, so... "Berkut³⁷" group ostensibly exists no longer. It exists, but we call it, for example, "Golub³⁸" group. You got it, yes?</i> B: <i>Uh-huh.</i> A: <i>And they all should go to hell. So I told Muscovites, if they keep calling and pestering you, I will gripe their balls, that's all.</i> [...].

³⁷ The name of special Ukrainian police force. English – Eagle.

³⁸ English – Pigeon

3.6 17 July 2014, afternoon: the positioning of the Buk-TELAR

In the afternoon of 17 July 2014 at 13:09:27, a lower-ranking, identified DPR separatist and a higher-ranking, identified DPR separatist ('IHD-A' and 'ILD-B') speak with each other on the telephone about a checkpoint which is apparently beyond Snizhne and before Stepanivka. IHD-A tells ILD-B to go to Snizhne. From the JIT investigation it is clear that, that morning, the two separatists were involved in transporting the Buk-TELAR which was then near Snizhne.

On 28 September 2016 the JIT issued a call for witnesses in which part of this recorded telephone conversation was released. In the conversation the names used by the participants to address each other can be heard, but the identity of the separatists has not been released. The transcript does contain the exact time, however.

Below is a complete transcript of the conversation.

14	
Date: 17 July 2014	A: <i>Yes, Oleg.</i>
Time: 13:09:27	B: <i>Yes, Lonia. Listen... whatsit... it turns to be the last checkpoint leaving Snizhne before Stepanivka... to the left... Is my sense of direction correct?</i>
Participant A: IHD-A	A: <i>You have to go rightwards in Stepanivka and across the field to this fucking</i>
Participant B: ILD-B	<i>whatsit... this fucking Snizhne?</i>
Incoming	B: <i>Yes.</i>
Conversation	A: <i>So, go to Snizhne. I'll give you further directions there.</i>
	B: <i>Got it. Ok. Pervomaiske turns to be at the first checkpoint if the explanations I had received were correct.</i>
Partly anonymised	A: <i>So, that's it. We will meet there somewhere within these limits.</i>
Complete	B: <i>Ah. See you then.</i>
	A: <i>See you.</i>

3.7 17 July 2014, afternoon: after the downing of flight MH17

In the afternoon of 17 July 2014, at 16:20, flight MH17 was downed. After the downing of the flight there was confusion about what type of aircraft was hit and crashed. Initially, various separatists and groups of separatists assumed that it had to be a Ukrainian fighter aircraft – a Sushka – and that a crew member had parachuted from the aircraft.

That afternoon two identified, higher-ranking DPR separatists ('IHD-A' and 'IHD-B') spoke to each other on the telephone. IHD-B says that people from the Chernukhino checkpoint have downed an aircraft. Various teams are searching for, or are going to start searching for, a parachutist. IHD-B is going to the checkpoint himself to assess the situation.

Below is a complete, anonymised transcript of the conversation.

15	
Date: 17 July 2014	A: Yes, [IHD-B]
Time: Afternoon	B: <i>So, Chernukhino people shot down a plane. Pilots...</i>
Participant A: IHD-A	A: <i>Who, who downed it?</i>
Participant B: IHD-B	B: <i>From the Chernukhino checkpoint, the Cossacks that are stationed in Chernukhino.</i>
Incoming	A: <i>Aha.</i>
Conversation	B: <i>Will look for the parachutist somewhere around Rozsypnoye. Teams from Ulegorsk, Debaltsevo went there and my team from my Mogila will also go there. To search the fields.</i>
Anonymised	A: <i>Go on, look for him wherever you want. Find whatsit... this parachutist.</i>
Complete	B: <i>I got it, of course. We'll look for him.</i>
	A: <i>Did he deplane?</i>
	B: <i>I don't know for sure. I'll get to the Chernukhino checkpoint and find this out and call you back, [IDH-A].</i>
	A: <i>Ok, bye.</i>
	B: <i>Bye.</i>

That same afternoon an identified, high-ranking DPR separatist ('IHD-A') was called by another identified, high-ranking DPR separatist ('IHD-B'). IHD-A says that 'they' have shot down an aircraft. It is not clear from the context who 'they' are. Another separatist's group has gone to the crash area to take photos. He says that it is a fighter aircraft, a Sushka.

Below is an anonymised transcript of this telephone conversation. The reporting officer has omitted part of the conversation (indicated with '[...]').

16	
Date: 17 July 2014	A: <i>Hello, [IHD-B]!</i>
Time: Afternoon	B: <i>[IDH-A], tell me what: is there any progress with that two-hundreth³⁹? What's going on?</i>
Participant A: IHD-A	A: <i>Yes, they're already taking him to Crimea. Don't worry.</i>
Participant B: IHD-B	B: <i>Aah, then it's OK, 'cos I've fucking set people on alert...</i>
Incoming	A: <i>Just now they shot down a plane... The group of [XX], err... It⁴⁰crashed outside of Yenakiyevo⁴¹... They've gone to⁴²-</i>
Conversation	B: <i>Pilots, where are the pilots?</i>
Anonymised	A: <i>... gone to search for the downed plane and to take pictures. There's smoke</i>
Abbreviated	-
	B: <i>How many minutes ago?</i>
	A: <i>About thirty minutes ago.</i>
	B: <i>About half an hour, right? And what was it, another sushka⁴³?</i>
	A: <i>Yes, a goddamn sushka.</i>
	[...]

Later in the afternoon the separatists begin to realise that the downed aircraft is not a Ukrainian Sushka. In the afternoon of 17 July 2014 an identified, high-ranking DPR separatist ('IHD-A') was called by an unidentified, lower-ranking DPR separatist ('ULD-B'). As the conversation proceeds, it would seem that the two separatists are misunderstanding each other. ULD-B says that an aircraft was shot down near his position, and that he is going to look for the black boxes to hand them over to IHD-A. IHD-A asks what was shot down, and says 'we' have shot down an aircraft too, a Sushka with a Buk-M.

³⁹ Short from "Cargo 200", a military jargon for "killed in action/casualty". Here and elsewhere in this conversation, italicized words are used figuratively. If followed by remark "phonetically", italicized text represents what the translator reasonably believes was said.

⁴⁰ i.e., the plane

⁴¹ Ukrainian Yenakiieve or Yenakiyeve (different romanizations exist)

⁴² It does not necessarily follow from this phrase that it was the group of [XX] who downed the plane. More likely, they were the people who went to the crash site.

⁴³ Sushka (literally a "cracknel") is a slang term for a Sukhoi jet (Su)

It also emerges from the conversation that on the 17th, after the disaster, the fighting is still heavy. The Ukrainian armed forces are trying to fight their way out of the encirclement in which they find themselves, and the separatists are waiting for artillery fire from Russian territory.

Below is an anonymised transcript of part of this telephone conversation. The reporting officer has omitted part of the conversation (indicated with '[...]').

17	
Date: 17 July 2014	A: Yes, [ULD-B]. <i>It's not very convenient now.</i>
Time: Afternoon	B: <i>Hello.</i>
Participant A: IHD-A	A: <i>Hello. Yes, [ULD-B]. I'm listening to you.</i>
Participant B: ULD-B	B: <i>Hello, big brother, how are you?</i>
Incoming	A: <i>I salute you. Not very good. We are in Marinovka now. So. Not very good, what can I say. Holding the ground, damn.</i>
Conversation	B: <i>Why is that?</i>
Anonymised	A: <i>And why do you think? They keep firing Grads at us. It's only now that we can have a little break. Damn.</i>
Abbreviated	B: <i>I got it. And a plane was shot down here, I'm going to get the boxes,</i>
	A: <i>Err. Whatsit. Well,...</i>
	B: <i>If need be, I'll hand them over to you, so that you handed them over further, what about that?</i>
	A: <i>What was shot down?</i>
	B: <i>What are you saying?</i>
	A: <i>I'll be back in town as early as in two hours, damn. I'm telling you I'm in Marinovka.</i>
	B: <i>I got it. I got it.</i>
	A: <i>We shot down a plane, a plane, too, fucking Sushka⁴⁴. Right above Saur Mogila. We got Buk-M, you know. Well, in about two hours I... when are you... how long will you stay in town, tell me?</i>

⁴⁴ Translator's remark: Sushka is a military slang for Sukhoi plane.

<p>B: Now I am... I'll be in Gorlovka some, I don't know... I'll be searching for {inaudible} now, searching for the boxes. And then, after I'm finished I think I'll be heading home at once.</p> <p>A: Aha, boxes... boxes for what? Ah, the boxes...</p> <p>B: Yeah, the black boxes.</p> <p>A: I got it, I got it. Well, my people are also searching, although we're under fire, have just fucking stopped firing Grads at us...</p> <p>B: Did they blanket you with Grad badly?</p> <p>A: Yes, of course. We're holding ground in Marinovka and they... here... it's the only way out of Lugansk region for them, fuck. You can imagine.</p> <p>B: Are many of your men down?</p> <p>A: Too many, errr.</p> <p>B: Cripes.</p> <p>A: We gained... Yesterday my reconnaissance battalion gained Marinovka. Special forces company fucking gained Tri Gorki. We sat infantry there. We were holding on together with them. Then more infantry came. It's only in the morning when we left, the infantry was striken with Grads at all. We had to send reconnaissance battalion to Marinovka. And now they are fucking firing Grads at us again.</p> <p>B: I was in Lugansk tonight. I was in Lugansk tonight.</p> <p>A: They are trying to shoot a way out of Zelenopolye and the only way out is through me, do you understand me? So, fucking... Yesterday we downed two Sushkas, today the second one, fuck. Thanks God Buk-M came today in the morning, so it got a little easier, but of course it's difficult. They plainly don't send in tanks or anything, they plainly have 5 Grad batteries firing and 3 batteries of self-propelled artillery weapon, fuck. In a brief, we're having fun here.</p> <p>B: Hold on. What can I tell you? If you need anything from me – call, I'll come to you.</p> <p>A: No, no, thank you brother. In about two hours I'm going... it looks as if we have a period of inactivity here now. In about two hours I'm going to Donetsk</p>
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	<p><i>because I need... three Gvozdikas arrived... I will take the Gvozdikas here, because it's fucking very difficult here now.</i></p> <p><i>B: Listen, may be we should blanket them with Grad?</i></p> <p><i>A: Well, the thing is that we have a Grad but we don't have an adjuster, fuck. It's the first reason. And the second is...</i></p> <p><i>B: Adjusters are our sore subject.</i></p> <p><i>A: And the second thing is, we're waiting for Russia to fucking strike their positions from that side. They stood near the border and fucking strike our positions near Grigoryevka. That's how it goes. Well, when I'm in the city, I'll call you, ok?</i></p> <p><i>B: Go on, go on, I'll be waiting.</i></p> <p>[...]</p>
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3.8 17/18 July 2014, evening/night: the Buk-TELAR has to be driven away

That evening, at 21:32:39, it emerged in a conversation between the high-ranking DPR separatist KHARCHENKO and an identified, high-ranking DPR separatist that a one of the Buk-TELAR's crew members has become separated from the rest of the crew. At this point he is at a checkpoint. IHD-B says that KHARCHENKO must pick up the 'fighter' and take him to Snizhne.

On 19 June 2019 the JIT held a press conference. At the press conference the telephone conversation below was shown, and the name KHARCHENKO was released. In this conversation the call sign of the other separatist can be heard, and the exact time is indicated.

Below is a complete transcript of this conversation.

18	
Date: 17 July 2014	A: <i>Yes, Ryazan.</i>
Time: 21:32:39	B: <i>Hello, commander. Have you already left, yes?</i>
	A: <i>Me? Yes. I have left for my task, you – for yours.</i>
	B: <i>I got it. Within that very region or not?</i>
Participant A:	A: <i>No. I'm not within that region. I'm to the other direction.</i>
KHARCHENKO, Leonid	B: <i>...{inaudible} a fighter has got lost there from this one ... {inaudible}</i>
Volodomyrovych	<i>launcher. He has fucking lost his crew, fuck!</i>
Participant B: IHD-B	A: <i>What a launcher?</i>
	B: <i>From a Buk.</i>
	A: <i>From a Buk?</i>

<p>Incoming</p> <p>Conversation</p> <p>Partly anonymised</p> <p>Complete</p>	<p>B: Yes.</p> <p>A: <i>And where is he, fuck?</i></p> <p>B: <i>Here he is standing at the checkpoint.</i></p> <p>A: <i>Take him and bring in here, fuck, I'll be waiting for him in Snizhne near ...</i> <i>{inaudible}.</i></p> <p>B: <i>Ok.</i></p>
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In the night of 17-18 July 2014 two identified, high-ranking LPR separatists ('IHL-A' and 'IHL-B') spoke to each other on the telephone about a party that did not wait for an escort and left in the direction of Snizhne. The JIT investigation revealed that this probably refers to the DPR escort that left the Buk-TELAR on the border of Luhansk without waiting for the escort from the LPR. The DPR escort then went back to Snizhne. IHL-A is asked to inform a separatist about the location of the Buk-TELAR. However, he is told not to do this over the telephone.

On 28 September 2016 the JIT issued a call for witnesses in which this intercepted telephone conversation was released. In this telephone conversation the names of the separatists can be heard. The identity of the separatists has not been made public.

Below is a complete transcript of this telephone conversation.

19	
<p>Date: 18 July 2014</p> <p>Time: Night</p> <p>Participant A: IHL-A</p> <p>Participant B: IHL-B</p> <p>Incoming</p> <p>Conversation</p> <p>Partly anonymised</p>	<p>A: <i>Yes, Andrey Ivanovich!</i></p> <p>B: <i>They are figuring it out among themselves now. I don't know all the "whats" and "hows". But I hope the fact that the vehicle's make has been changed on move/ in the process couldn't cause such...</i></p> <p>A: <i>No-no. They said directly they hadn't waited for any escort.</i></p> <p>B: <i>They hadn't, yes?</i></p> <p>A: <i>Yes. "We weren't waiting for the escort. We are heading to Snezhnoye"⁴⁵. Stand off for today" It's the way it was said.</i></p> <p>B: <i>Hell! I can't... I can't do anything. Let's wait for 10 minutes more?!</i></p>

⁴⁵ *Snizhne (Ukr).*

Complete	<p>A: <i>No-no. Don't mind. It's just.... It wasn't caused by the vehicle's make. It's for sure.</i></p> <p>B: <i>And... everything is ok with our convoy, isn't it?</i></p> <p>A: <i>Well, we... Here I'm driving. The only thing is... err... the location: is our comrade aware of it or not? Or should I inform him?</i></p> <p>B: <i>Give him a hint what settlement... Because... The only thing – do not do it over the phone.</i></p> <p>A: <i>No, I'm not going to ... [inaudible]</i></p> <p>B: <i>It's... It's not far from the place we usually go to, but not exactly this place. It's better for you to stop and clarify where you are going to... [inaudible]</i></p> <p>A: <i>Yes. No. He has a map there... the map dd. 1983,</i></p> <p>B: <i>Well, he'll mention you the settlement area where it has to ...</i></p> <p>A: <i>Aha. Well, good.</i></p> <p>B: <i>Make a stop and clarify.</i></p> <p>A: <i>Yes-yes. He hasn't mentioned it yet. I got it. Good.</i></p>
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3.9 18 July 2014, morning: confusion about the location of the Buk-TELAR

In the morning of 18 July 2014 there was confusion among a number of high-ranking DPR separatists about what had happened with the Buk-TELAR, and where it was now. A number of conversations then ensued between separatists who were involved with the transport. Eventually, it emerged that the Buk-TELAR had been taken across the border into Russia during the night.

Two identified, high-ranking DPR separatists ('IHD-A' and 'IHD-B') spoke with each other on the telephone on the morning of 18 July 2014. The JIT investigation has revealed that during the night IHD-B was involved in transporting the Buk-TELAR to the border between the DPR and the LPR. IHD-A asks why IHD-B returned that night. IHD-B says that the vehicle – the Buk-TELAR – was left at the crossroads, after which 'the lads' went on themselves. The vehicle went in the correct direction and arrived successfully. IHD-B says that an identified separatist who was involved with the transport was being called constantly and for that reason had turned off his phone. In response to IHD-A's remark that they do not know where the vehicle is now, IHD-B replies that it is in Russia.

On 30 March 2015 the JIT issued a call for witnesses in which part of this conversation was made public. Another part of the conversation was shown at the JIT press conference of 28 September 2016. The names of the participants could be heard in this telephone conversation. The identity of the separatists concerned has not been released.

Below is a complete transcript of the conversation. The name of another separatist has been anonymised.

20	
Date: 18 July 2014	<i>B: Good morning, Nikolaevich!</i>
Time: Morning	<i>A: Good morning, Lionia⁴⁶. Yesterday it was just fucking hell, I have nothing to say,</i>
Participant A: IHD-A	<i>B: What's up?</i>
Participant B: IHD-B	<i>A: Where is whatsit... err... Why did your fucking comrade [XX] return yesterday, fuck, such incomprehensible movements... I don't know... what was going on yesterday? Tell me.</i>
Outgoing	<i>B: They brought the vehicle up to the crossroad, left it there, the lads went on themselves.</i>
Conversation	<i>A: Well.</i>
Partly anonymised	<i>B: So, the vehicle has left in the correct direction and arrived successfully. That's it.</i>
Complete	<i>A: I see...</i>
	<i>B: There was strange incoming calls which began suddenly, from 10 persons...</i>
	<i>A: Who were those 10?</i>
	<i>B: Err.. There were different incoming calls to his phone from people who begun to introduce themselves... err... one and then the second, then the third, then the fourth... he told that he was pissed off... Later, Strelkov began to phone up...</i>
	<i>A: So?</i>
	<i>B: He introduced himself.</i>

⁴⁶ A shortened form of a male name Leonid (Rus/Ukr).

	<p>A: <i>And he turned off his fucking telephone. Fucking shit... err... and we don't know at all where the vehicle is.</i></p> <p>B: <i>The vehicle is in Russia.</i></p>
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A short time later, at 07:44:57, two identified, high-ranking DPR separatists spoke to each other on the telephone about the events of the night before. The vehicle – the Buk-TELAR – was already in Russia, according to IHD-A. IHD-C says that ‘those ones’ are certain that they did not encounter the separatists with the Buk-TELAR. He is probably referring to LPR separatists. There is confusion about what has happened with the TELAR. IHD-C says that they are going to sort it out right now.

On 28 September 2016 the JIT released part of this recorded telephone conversation in connection with a call for witnesses. No names of separatists can be heard in this conversation. The identity of the separatists concerned has not been made public. The transcript does contain the date and time of the call, however.

21	
Date: 18 July 2014	A: <i>Hullo?</i>
Time: 07:44:57	B: <i>Hullo, I'm handing over the receiver.</i>
	C: <i>My greetings, [IHD-A]!</i>
Participant A: IHD-A	A: <i>My greetings, Comrade Colonel!</i>
Participant C: IHD-C	C: <i>As far as I know, you have been out...?</i>
Incoming	A: <i>I have just returned in whatsit... everything was going well, there... eight different persons have called him, fuck! He handed over the vehicle, fucking shit! Different eight people are calling him, fuck! Because of that he switched off the fucking phone! And he wasn't taking it back, fucking shit!</i>
Conversation	C: <i>Err... so, why didn't you report me about that?</i>
Anonymised	A: <i>What did I have to report, fuck!?! I just...</i>
Complete	C: <i>Where...? Where is the vehicle now?</i>
	A: <i>The vehicle is in Russia for a long time! He has handed it over at once, fucking shit, to those people who were meeting...</i>
	C: <i>To whom? To whom?</i>
	A: <i>He handed over the vehicle...</i>
	C: <i>To whom?</i>

	<p><i>A: ... to the people who were meeting, fuck... Then, the phone calls began! One and then the second, then the third, then the fourth, the fifth, the eighth, fuck! That is why the person switched off the fucking phone. He wasn't taking it/her back anywhere at all! There, on the crossroad, where it must happened, he handed over the vehicle to the people who were supposed to meet it.</i></p> <p><i>C: The point is that those ones... they are asserting that the vehicle... that they haven't met the, That they were not the ones...</i></p> <p><i>A: What do you mean?! He handed over the vehicle to people... to our people on the crossroad, and it was led further on, fuck...</i></p> <p><i>C: To our people?</i></p> <p><i>A: Yes, he handed it over to our men.</i></p> <p><i>C: We'll sort it out right now. Keep in touch!</i></p> <p><i>A: The vehicle is there, a long time ago!</i></p> <p><i>C: If it is... err, if it is that one, if it is... all right... take a rest, I'm at the same condition as you are.</i></p>
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That same morning, two identified, high-ranking DPR separatists ('IHD-A' and 'IHD-B') spoke on the telephone about the situation. IHD-A asks IHD-B to come, together with another separatist, to where he is to explain what happened that night. IHD-A says that no one knows where the vehicle – the Buk-TELAR – is and that it has not been seen anywhere. The person they were supposed to meet has returned without the Buk-TELAR. IHD-B responds by saying that he has just been in contact with a separatist with the call sign 'Bibliothekar', who took the vehicle to Russia and is already on his way back with a new vehicle from Russia.

On 30 March 2015 the JIT issued a call for witnesses in which the conversation below was made public. In the call for witnesses the names of the separatists concerned were made unrecognisable. A call sign can be heard, however.

Below is a complete, anonymised transcript of the conversation.

22	
Date: 18 July 2014	B: Yes, [IDH-A]?

Time: Morning	A: [IHD-B], <i>you should take [XX], and come over to my place, fuck! There is no fucking vehicle, no one saw it, fuck! That one, which was supposed to meet</i>
Participant A: IHD-A	<i>[...], returned back without the vehicle, fuck. You know what I mean? Crap.</i>
Participant B: IHD-B	<i>Where? To whom? Which way did he bring [...]? Fucking disaster, you know...</i>
Incoming	B: <i>Bibliotekar... This is the group of people, that brought it/her in...</i>
Conversation	A: <i>Right.</i>
Partly anonymised	B: <i>... on the lowboy... I have just made a contact with them, they are already in Russia, they carry a new vehicle from Russia.</i>
Complete	A: <i>Uh-huh... but that... err... He gave it to Bibliotekar, didn't he?</i>
	B: <i>Sure.</i>
	A: <i>Now I got it.</i>

3.10 20-23 July 2014: support from Russia

In the days after the downing of flight MH17 a number of calls were intercepted that show that Russia was supporting the separatists in gaining an overview of the warzone and with artillery fire.

On 20 July 2014 two high-ranking LPR separatists – one identified, the other unidentified – ('IHL-A' and 'UHL-B') spoke to each other on the telephone. UHL-B says that Moscow has confirmed a moving convoy and that 'they' see 'it'. He asks IHL-A if it is a Ukrainian convoy.

On 28 September 2016 the JIT issued a call for witness in which part of this recorded telephone conversation was released. In the conversation the names of separatists can be heard. The identity of the separatists has not been released.

Below is a complete transcript of this conversation.

23	
Date: 20 July 2014	A: <i>Yes, Nikolay Fiodorovich.</i>
Time: Afternoon	B: <i>Well, has Moscow/Moskva⁴⁷ confirmed the moving convoy?</i>
Participant A: IHL-A	A: <i>Don't hear, don't hear.</i>

⁴⁷ Either a call sign or Moscow.

Participant B: UHL-B	B: <i>I am saying about the confirmation of the convoy that is going in the direction of the airport... Moscow/Moskva has confirmed... they see it. Is it err... whatsit... Ukrops⁴⁸ convoy?</i>
Incoming	A: <i>The convoy that is going in the direction of the airport? Yes.</i>
Conversation	B: <i>And how did it go through?</i>
Partly anonymised	A: <i>Most likely through Sabovka⁴⁹. I'll give the phone now... one moment, one second and I'll call you back.</i>
Complete	

A short time later two high-ranking LPR separatists – one identified and the other unidentified – ('IHL-A' and 'UHL-B') spoke with each other on the telephone. They were probably discussing the convoy mentioned in the previous conversation. They say that when the convoy reaches the airfield there will be fighting there.

On 28 September 2016 the JIT issued a call for witness in which part of this intercepted telephone conversation was released. In the conversation the names of separatists can be heard. The identity of the separatists has not been released.

Below is a complete transcript of the conversation.

24	
Date: 20 July 2014	In the background:
Time: Afternoon	C: <i>I am saying that we arranged the power.</i>
Participant A: IHL-A	C: <i>Andrey Ivanovich</i>
Participant B: UHL-B	B: <i>Hello.</i>
Incoming	C: <i>Nikolay Fiodorovich, I am giving the handset to Andrey Ivanovich. Because it's impossible to catch signal here. I am giving, giving [...] now, one second.</i>
Conversation	B: <i>Ok.</i>
Partly anonymised	C: <i>Ok. Am giving [...].</i>

⁴⁸ A scornful short nickname given to Ukrainian Army soldiers by CNR/LNR and their supporters. Literally means 'dill'.

⁴⁹ Sabivka (Ukr.)

Complete	<p>C is putting A on the phone:</p> <p>A: <i>Yes, Nikolay Fiodorovich.</i></p> <p>B: <i>So, the convoy is confirmed. Where the convoy can be from?</i></p> <p>A: <i>I don't know where it is going from. It's from west, isn't it?</i></p> <p>B: <i>It's somehow going from west. From west. Fucking one and a half kilometres from the airdrome.</i></p> <p>A: <i>From the airdrome?</i></p> <p>B: <i>Yes.</i></p> <p>A: <i>It can't be one and a half kilometres from the airdrome because there is a populated locality there, there are positions there. Probably... I don't know. Will now try to do something. Unfortunately, we still don't have any signal. Hello.</i></p> <p>B: <i>Uh-huh. Yes, yes, yes.</i></p> <p>A: <i>We are sitting with no signal. We've just had the power back on. My telephone is not working at all. Neither the first one, nor the second one. Now what... We'll try to clarify... the deputy will go now... I think we will be receiving information soon... our groups have left.</i></p> <p>B: <i>Uh-huh.</i></p> <p>A: <i>Ok. Well, if they come in the airport, we will fight at the airport. What else can we do?</i></p> <p>B: <i>Ok. I got you.</i></p> <p>A: <i>Yes. Well, we have no other options.</i></p> <p>B: <i>Uh-huh.</i></p> <p>A: <i>That's it. I am passing the handset. Thank you.</i></p> <p>B: <i>Bye.</i></p> <p>A is putting C on the phone:</p> <p>C: <i>Yes, Nikolay {inaudible}. Is that it?</i></p> <p>B: <i>Yes, yes. We've had a talk.</i></p> <p>C: <i>Yes. I got it.</i></p>
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	B: <i>Thank you for the connection,</i>
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A few days later, in the morning of 23 July 2014, two identified, high-ranking DPR separatists ('IHD-B' and 'IHD-C') spoke to each other. IHD-B says that he is reporting to IHD-C by telephone because the secure line is currently not working. IHD-C asks if the artillery is working. IHD-B responds that he only has 60 shells left for the artillery. IHD-C replies that he was referring to the Russian artillery, to which IHD-B responds in the negative. This is why IHD-B is requesting support.

25	
Date: 23 July 2014	A: <i>Speaking.</i>
Time: Morning	B: <i>Have you just called, [XX]? This is [IHD-B].</i>
Participant B: IHD-B	A: <i>Hullo</i>
Participant C: IHD-C	B: <i>Hullo, this is [IHD-B].</i>
Incoming	A: <i>Yes, I see.</i>
Conversation	B: <i>Receive the information, because the secure line is always busy for some reason.</i>
Anonymised	A: <i>So, maybe if the secure line is needed I'll come in and tell him. [IHD-C] has just been speaking on the phone.</i>
Complete	B: <i>Well, Ok, I'll call once again.</i>
	A: <i>Wait, don't hang up the phone, I'm not far away from him.</i>
	In the background:
	A: <i>[IHD-B says he can't get through to you via the secure line.</i>
	Back to the telephone:
	C: <i>Speaking. Hullo.</i>
	B: <i>Hello, Comrade colonel, can I call you via the secure line.</i>
	C: <i>No, it's out of service.</i>
	B: <i>Roger.</i>
	C: <i>Describe the general situation with the consideration of this [...].</i>

	<p>B: <i>Errr, the exit from Hryhorivka, the last house on the right. There is bush there and a lot of personnel, Grads and other stuff is consolidated there. Err, they came here... they were here as long ago as yesterday and the reinforcement came only one hour ago.</i></p> <p>C: <i>Uh-huh.</i></p> <p>B: <i>...they are the ones that will be thrown to a gulley... Where we now want to occupy the terminal... We are going into the assault from Marynivka.</i></p> <p>C: <i>Uh-huh.</i></p> <p>B: <i>That's how it is.</i></p> <p>C: <i>I got you.</i></p> <p>B: <i>They also have equipment on the hill again. We burned a lot of equipment yesterday.</i></p> <p>C: <i>Uh-huh.</i></p> <p>B: <i>And today they again have 3 tanks. 4 BMP's...</i></p> <p>C: <i>Is the artillery active there now or not?</i></p> <p>B: <i>The artillery... we only have 60 last shells and that's it.</i></p> <p>C: <i>I mean the Russian artillery.</i></p> <p>B: <i>No, no. That's why I'm asking to request support.</i></p> <p>C: <i>I got you. Talk soon. Uh-huh.</i></p>
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On the same day, in the afternoon of 23 July 2014, two identified, high-ranking DPR separatists ('IHD-A' and 'IHD-C') spoke to each other. IHD-A reports on the fighting and asks IHD-C to ask 'them' to provide artillery support on certain targets. IHD-C says that one of the targets is already being shelled, but IHD-A replies that 'they' missed. The JIT investigation revealed that 'them' and 'they' probably refer to the Russian artillery support. IHD-C says that he will try.

Below is a complete, anonymised transcript of the conversation.

26	
Date: 23 July 2014	Voices in the background:
Time: Afternoon	Voice 1: <i>There's only one bottle left to go!</i>
Participant A: IHD-A	Voice 2: <i>Silence, crap.</i>
	A: <i>{to the side, yelling} I said fucking silence! Shut the fuck up!</i>

Participant C: IHD-C	
Outgoing	{B picks up}
Outgoing	B: <i>Yes, go ahead.</i>
Outgoing	A: <i>[XX], this is [IHD-A]. I need to talk to Pervyi⁵⁰.</i> B: <i>Now... {inaudible} That's urgent, right?</i>
Conversation	A: <i>Yes, it's urgent.</i>
Anonymised	B: <i>Uh-huh.</i>
Complete	{There goes a knock on the door} B: <i>{to the side} [IHD-A] there {inaudible}</i> C: <i>Go ahead.</i> A: <i>Good afternoon, [IHD-C]!</i> C: <i>Yes, greetings.</i> A: <i>I need (them to) cover (with fire) high grounds 198.3 and 185, uh, err... (the area) between the summer camp and high ground 185. They have trenches there, and these motherfuckers are dug in pretty well. They got mortar batteries, and tanks, and Grads dug in there. Looks like they're running short of rounds...</i> C: <i>Uh-huh.</i> A: <i>...but still I can't get closer to them. I now have the entire village of Dubrovka⁵¹...</i> C: <i>Uh-huh.</i> A: <i>...so now I need them to shell high ground 198.3. That done, I'll go on and take it over.</i> C: <i>Uh-huh. 198.3, you think you can take it over?</i> A: <i>Well, we'll see... if they shell it well, I'll go at it.</i> C: <i>Now, look here, I'll now try, err, to request a strike, err, and... – Look here, if... - I'll now make a condition: if they don't level 198.3 (to the ground) now, if they don't level to the ground everything around it... What (...) will you need? 200 by 200? Or more?</i>

⁵⁰ A nickname.call sign. Literay "Number One" - TN

⁵¹ Actually Dibrovka (Rus.) / Dibrivka (Ukr.) - TN

	<p>A: More. Some 500 by 500.</p> <p>C: 500 by 500, got it. Now, if they don't level it to the ground, if they don't simply level the place to the ground, then there's no sense in, err... then we'll fall back at night, because there will be no sense. You got me? I'll be badgering them now. But on the other hand, you must understand that...</p> <p>A: And 18[x]... [IHD-C], I also need (them to) cover the area between 185 and the summer camp.</p> <p>C: I've already submitted this one, I've already submitted this one, I mean...</p> <p>A: They missed! They aimed, err... they stroke a little bit closer.</p> <p>C: I got it... I got it, I'll make a try now. OK then, I'll speak to you later.</p> <p>A: I'll speak to you later, [IHD-C].</p> <p>C: Uh-huh, later on.</p>
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3.11 2 June 2015: conversation about the launch location of the Buk missile

On 2 June 2015 the Russian manufacturer of the Buk system, Almaz-Antey, held a press conference in which it was said that flight MH17 had been shot down by a Buk system of the Ukrainian armed forces, from Zaroshchenske.⁵²

Following by this public announcement of an alternative launch location, an identified, high-ranking DPR separatist called an unknown separatist and asked him if the area around Zaroshchenske was in the hands of the Ukrainian armed forces ('them') or the separatists ('us') in the month of July, around the time of the downing of flight MH17. The unknown separatist says that he is 100% certain that it was under their (i.e. the separatists') control. When the aircraft crashed, they were on duty there. He says that it (the suggestion that the missile was launched from Zaroshchenske) is a lie.

On 28 September 2016 the JIT released part of the intercepted phone conversation. In this conversation, which took place at 14:02:13, on the afternoon of 2 June 2015, no names of separatists can be heard. The transcript does however contain the date and time of the conversation.

Below is a complete, anonymised transcript of the telephone conversation.

27

⁵² See <https://www.youtube.com/watch?v=GsohFzBJ-vs>

Date: 2 June 2015	[Voice in the background] C: <i>What?! ...</i> [inaudible]
Time: 14:02:13	B: [Speaking to the phone] <i>Hello?</i>
Participant A: IHD-A	A: [Speaking to the phone] <i>Hello?! Hi!...</i> [inaudible]
Participant B: UUU	B: <i>Hi, bro!</i>
Outgoing	A: <i>Listen! Your help is needed!</i>
Conversation	B: <i>Go ahead!</i>
Anonymised	A: <i>Err... Please, refresh your memory... The month – July, the Boeing’s downing... do you remember?</i>
Complete	B: <i>Yes-yes, I do!</i>
Conversation	A: <i>Err... there is some information appearing that the launch had been performed with an anti-aircraft defence system from the locality of Roshchino... Zaroshchino... being situated somewhere not far from Shakhtiorsk⁵³.</i>
Anonymised	B: <i>Uh-huh.</i>
Complete	A: <i>Was the territory mentioned under⁵⁴ them or under us?</i>
Conversation	B: <i>Err...</i>
Anonymised	A: <i>Zaroshchenskoye⁵⁵...</i>
Complete	B: <i>Oh, Zaroshchenskoye?!</i>
Conversation	A: <i>Yes.</i>
Anonymised	B: <i>Zaroshchenskoye- Zaroshchenskoye- Zaroshchenskoye... It was our territory... No! It was the territory of ours!</i>
Complete	A: <i>Was it our one for sure?!</i>
Conversation	B: <i>It was our territory for sure! Well, in case the Ukrops⁵⁶ happened to enter, they were never standing/deployed there densely/permanently... Zaroshchenskoye is just right over here, just close to us. Well, from the place I’m sitting at, it makes three kilometres.</i>
Anonymised	A: <i>So, that’s why it was a surprise for me!..</i>
Complete	B: <i>...well, from the centre... ...No! I’m giving you hundred percent⁵⁷ it had not been downed from over there! As when it had been downed, we were at the place⁵⁸/on duty! It’s not...</i>

⁵³ *Shakhtarsk (Ukr.)*

⁵⁴ *Here: was the territory under our control or under their control?*

⁵⁵ *Zaroshchenske (Ukr.)*

⁵⁶ *A derogatory way to address the Ukrainians.*

⁵⁷ *Here: the person is expressing his/her utmost level of certainty and confidence on the matter discussed.*

⁵⁸ *Here: could be referred to a workplace, on-duty service, etc.*

	<p>A: <i>I do remember this! [UUU], this is what I do remember! If this barrage had taken place there, everyone would have heard it, right?</i></p> <p>B: <i>Well, of course! A hundred percent it's not... [inaudible]</i></p> <p>A: <i>Uh-huh... Ok!</i></p> <p>B: <i>Even from the direction where it was falling down... where it was flying/falling past – it wasn't the direction the launch had taken place from! It's a lie!</i></p> <p>A: <i>Uh-huh... Ok! Thank you!</i></p> <p>B: <i>Uh-huh. Bye!</i></p>
--	--

4. CONCLUSION

Done as an official report, drawn up under oath of office and concluded and signed by me, Gerardus Wilhelmus Christiaan THIRY, chief inspector with the National Crime Squad of the Dutch National Police, in Driebergen on Monday 16 December 2019.

[signature]

Annex 201

Financial Express, *What are they trying to hide, cries Barack Obama even as Malaysia Airlines MH17 bodies, black boxes handed over* (22 July 2014)

What are they trying to hide, cries Barack Obama even as Malaysia Airlines MH17 bodies, black boxes handed over

FE financialexpress.com/archive/what-are-they-trying-to-hide-cries-barack-obama-even-as-malaysia-airlines-mh17-bodies-black-boxes-handed-over/1272346/

Written by [Reuters](#) | Donetsk | Updated: Jul 22 2014, 14:48pm hrs

The remains of some of the nearly 300 victims of the Malaysia Airlines MH17 plane downed over Ukraine were making their way to the Netherlands on Tuesday as a senior Ukrainian separatist leader handed over the plane's black boxes to Malaysian experts. Dutch Prime Minister Mark Rutte told a news conference on Monday that a train carrying around 200 body bags was on its way to rebel-held Donetsk and then to Kharkiv, which is in Ukrainian government hands, from where the bodies would be taken back to the Netherlands to be identified.

The train left the crash site after the Malaysian prime minister reached agreement with the separatists for recovered bodies to be handed over to authorities in the Netherlands, where the largest number of victims came from.

Early on Tuesday, senior separatist leader Aleksander Borodai handed over the black boxes in the city of Donetsk.

"Here they are, the black boxes," Borodai told a room packed with journalists at the headquarters of his self-proclaimed Donetsk People's Republic as an armed rebel placed the boxes on a desk.

Colonel Mohamed Sakri of the Malaysian National Security Council told the meeting the two black boxes were "in good condition".

The handover of the bodies and black boxes, and reports by international investigators of improved access to the wreckage of the airliner four days after it was shot down, occurred against calls for broader sanctions against Russia for its support for the rebellion, although Western leaders are struggling to agree on a united response.

Shaken by the deaths of 298 people from across the world, Western governments have threatened Russia with stiffer penalties for what they say is its backing of pro-Russian militia who, their evidence suggests, shot the plane down.

At the United Nations, the Security Council unanimously adopted a resolution demanding those responsible "be held to account and that all states cooperate fully with efforts to establish accountability".

It also demanded that armed groups allow "safe, secure, full and unrestricted access" to the crash site.

"We owe it to the victims and their families to determine what happened and who was responsible," said Australian Foreign Minister Julie Bishop, who traveled to New York to negotiate the U.N. resolution. Australia lost 28 citizens in the crash.

The Kremlin said in a statement late on Monday that Vladimir Putin spoke to Dutch Prime Minister Mark Rutte on the phone, with both giving a "high assessment of the resolution passed by the U.N. Security Council on the investigation into the catastrophe."

Meanwhile, European Union foreign ministers were scheduled on Tuesday to discuss further penalties against Russia, but the most they are expected to do is to speed up implementation of sanctions against individuals, and possibly companies, agreed in principle last week before the plane was brought down.

But Western leaders struggled to come to a united response against Moscow. France came under pressure on Monday from Washington and London over plans to deliver a second helicopter carrier to Russia.

Diplomats say more serious sanctions against whole sectors of the Russian economy will depend largely on the line taken by the Dutch, because of the high number of Dutch victims.

"It is clear that Russia must use her influence on the separatists to improve the situation on the ground," the Dutch prime minister said.

"If in the coming days access to the disaster area remains inadequate, then all political, economic and financial options are on the table against those who are directly or indirectly responsible for that," said Rutte.

'WHAT ARE THEY TRYING TO HIDE'

U.S. President Barack Obama said it was time for Russian President Vladimir Putin and Russia "to pivot away from the strategy that they've been taking and get serious about trying to resolve hostilities within Ukraine."

He said Putin and Russia had a direct responsibility to compel separatists to cooperate with the investigation, and that the burden was on Moscow to insist that separatists stop tampering with the probe, he said.

"What are they trying to hide" Obama said at the White House.

U.S. Secretary of State John Kerry laid out on Sunday what he called overwhelming evidence of Russian complicity in the shooting down of the Malaysia Airlines plane, and expressed disgust at how the bodies of the victims had been treated at the crash site.

But Russia's Defence Ministry challenged accusations that pro-Russian separatists were responsible for shooting down the airliner and said Ukrainian warplanes had flown close to it.

The ministry also rejected accusations that Russia had supplied the rebels with SA-11 Buk anti-aircraft missile systems - the weapon said by Kiev and the West to have downed the airliner - "or any other weapons".

Putin said in a televised address that the downing of the airliner must not be used for political ends and urged separatists to allow international experts access to the crash site.

RECOVERY EFFORTS

European security monitors said gunmen stopped them inspecting the site when they arrived on Friday, and Ukrainian officials said separatists had tampered with vital evidence, allegations echoed by Obama.

But the spokesman for the European security monitors said they had unfettered access on Monday, and three members of a Dutch disaster victims identification team arrived at a railway station near the crash site and inspected the storage of the bodies in refrigerated rail cars.

Peter van Vliet, whose team went through the wagons dressed in surgical masks and rubber gloves, said he was impressed by the work the recovery crews had done, given the heat and the scale of the crash site. "I think they did a hell of a job in a hell of a place," he said.

As they went about their work, fighting flared in Donetsk, some 60 km (40 miles) from the site, in a reminder of the dangers the experts face operating in a war zone.

The government in Kiev denied sending the regular army into the centre of Donetsk, which pro-Russian separatists captured in April, but said small "self-organised" pro-Ukrainian groups were fighting the rebels in the city.

Four people were killed in clashes, health officials said.

The rebels' military commander Igor Strelkov said on his Facebook page up to 12 of his men died in Monday's fighting.

Donetsk is at the heart of a rebel uprising against rule by Kiev, and Ukrainian President Petro Poroshenko has vowed to retake the city as part of what Kiev calls its "anti-terrorist operation" against the separatists.

Television images of the rebel-controlled crash site, where the remains of victims had lain decomposing in fields among their personal belongings, have turned initial shock and sorrow after Thursday's disaster into anger.

Australian Prime Minister Tony Abbott said an Australian investigation team was in Kiev but had been unable to travel to the site. He said there had been some improvement with the Ukrainian government offering access.

"But there's still a hell of a long way to go before anyone could be satisfied with the way that site is being treated," Abbott said. "It's more like a garden cleanup than a forensic investigation. This is completely unacceptable."

Annex 202

Stuff, *MH17 wreckage 'cut into pieces'* (23 July 2014)

MH17 wreckage 'cut into pieces'

Nick Miller · 10:26, Jul 23 2014



1 OF 25

REUTERS

A guard stands on the train carrying the remains of MH17's victims as it arrives in the city of Kharkiv after days of delays.

world

International observers say it appears part of the MH17 wreckage has been cut into, in what Australian Prime Minister Tony Abbott calls "evidence-tampering on an industrial scale".

"Major pieces, I'm looking at the tailfin ... they do look different than when we first saw them, in that they have been cut into," Organisation for Security and Co-operation spokesman Michael Bociurkiw told the BBC world service.

"One main cone section has been almost split in half."



1 OF 45

REUTERS

A man blocks access to the scene of the crash of Malaysia Airlines flight MH17 as emergency personnel remove the bodies of passengers.

The OSCE has visited the crash site each day since Friday, though their access to the site was initially very limited.

Two days ago they observed that the cockpit section and part of first class were being cut into with a diesel power saw by uniformed men.

He could not identify who was doing that work.

world



REUTERS

TAMPERED WITH?: A Malaysian air crash investigator inspects the wreckage of Malaysia Airlines Flight MH17.

"The time has come for professionals to be here and do the analysis," Bociurkiw said.

Abbott called it a "cover-up".

"After the crime comes the cover-up," the Australian prime minister was quoted by the Guardian as saying.

"What we have seen is evidence-tampering on an industrial scale, and obviously that has to stop," Abbott said.

He noted not only were "random individuals" seen picking over the site, but heavy equipment had been seen in footage.

The OSCE has facilitated three different groups of experts getting access to the site: first a Ukrainian group, then a Dutch forensic group on Monday, then three Malaysian experts on Tuesday.

Ukraine army spokesman Colonel Andriy Lysenko claimed that Russian military experts, disguised as citizens, had been interfering with evidence at the scene since the crash.

The site is still under separatist control. On Tuesday morning a team of international observers and a crash investigation group including some Malaysian members arrived to continue inspection of the wreckage under the watching eye of armed militiamen.

world

More than 140 square kilometres have now been examined by Ukraine emergency services since their arrival on Saturday, however professional crash investigators have only recently arrived at the scene.

Meanwhile, Ukraine continues to attack separatist forces in the country's east, even while investigations at the crash site continue, Colonel Lysenko told journalists.

He said the army had committed to a "non-combat" area around the crash site with a "radius of 20 kilometres, a diameter of 40 kilometres".

Annex 203

New Straits Times, *MH17: Captain Eugene Choo Jin Leong at his final resting place*
(4 September 2014)

MH17: Captain Eugene Choo Jin Leong at his final resting place



By [HARIZ MOHD](#) - September 4, 2014 @ 10:14am



The urn containing Captiaion Eugene Choo Jin Leong's ashes, draped in Jalur Gemilang, was put inside his plot together with a golf tournament trophy

NILAI: The ashes of MH17 pilot Captain Eugene Choo Jin Leong was put to rest at his nal resting place in Xiao En Memorial, Nilai here about 1.15pm today.

The urn containing his ashes, draped in Jalur Gemilang, was put inside his plot together with a golf tournament trophy by his wife Ivy Loi Kwui Ting.

Earlier, over 200 people including 100 superbikers escorted Eugene's urn in a funeral procession from his house in Sri Carcosa, Seremban 2.

Annex 204

Dutch Safety Board, Draft Final Report. Crash of Malaysia Airlines Flight MH17, May/June
2015

(excerpts)

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DRAFT FINAL REPORT

Crash of Malaysia Airlines Boeing 777-200, 9M-MRD, flight MH17

Hrabove, Ukraine, 17 July 2014

DRAFT - NOT FOR PUBLICATION

RELEASE

The Hague, 2 June May 2015

The reports issued by the Dutch Safety Board are open to the public.

All reports are also available on the Safety Board's website www.safetyboard.nl

Dutch Safety Board

The aim in the Netherlands is to reduce the risk of accidents and incidents as much as possible. If accidents or near-accidents nevertheless occur, a thorough investigation into the causes of the problem, irrespective of who is to blame for it, may help to prevent similar problems from occurring in the future. It is important to ensure that the investigation is carried out independently from the parties involved. This is why the Dutch Safety Board itself selects the issues it wishes to investigate, mindful of citizens' position of dependence with respect to public authorities and businesses. In some cases, the Dutch Safety Board is required by law to conduct an investigation.

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DRAFT - NOT FOR PUBLIC RELEASE

1	Contents	
2		Summary..... 7
3		Abbreviations & Definitions 9
4	1	Introduction 16
5	1.1	The investigation 16
6	1.2	Other, related, investigations..... 17
7	1.3	Purpose and scope of the investigation..... 18
8	1.4	Investigation approach and parties concerned 18
9	1.5	Preliminary Report published on 9 September 2014 20
10	1.6	Wreckage recovery 22
11	1.7	Reading guide 23
12	2	Factual information..... 25
13	2.1	History of the flight..... 25
14	2.2	Injuries to persons 29
15	2.3	Damage to the aircraft..... 29
16	2.4	Other damage 30
17	2.5	Personnel information 30
18	2.6	Aircraft information 32
19	2.7	Meteorological information 34
20	2.8	Aids to navigation 38
21	2.9	Air Navigation Service Provider information 39
22	2.10	Aerodrome information 49
23	2.11	Flight recorders, satellite and other data 50
24	2.12	Wreckage and impact information 60
25	2.13	Medical and pathological information 73
26	2.14	Fire 74
27	2.15	Survival Aspects..... 75
28	2.16	Tests and research..... 75
29	2.17	Organisational and management information..... 78
30	2.18	Additional information 78
31	2.19	Useful or effective investigation techniques 84
32	3	Analysis 89
33	3.1	Introduction..... 89
34	3.2	Before the moment of high-energy object impact..... 89
35	3.3	The moment of high-energy object penetration 95
36	3.4	Sources of in-flight aeroplane structural failure 104
37	3.5	Multiple weapon impacts 116

This is a copy of the draft Final Report of this investigation intended solely for consultation as per ICAO Annex 13, paragraph 6.3. It shall not be released to or communicated with parties other than those to whom the report is addressed.

1	3.6	External damage exacerbated by airworthiness factors	117
2	3.7	Source of the high-energy objects.....	118
3	3.8	Launch area	131
4	3.9	Second progress meeting.....	133
5	3.10	Blast damage	133
6	3.11	After the high-energy object penetration	136
7	3.12	Summary and possible impact on flight crew	156
8	3.13	Recording of surveillance radar data.....	156
9	4	Conclusions	159
10	4.1	Cause.....	159
11	4.2	Supporting conclusions	159
12	4.3	Excluding other causes	162
13	4.4	Other findings	164
14	5	Recommendations.....	165
15			

DRAFT - NOT FOR PUBLIC RELEASE

1	Appendices	
2	Appendix A: Explanation of the Investigation	167
3	Appendix B: Responses received following review of the draft report	179
4	Appendix C: Memorandum of Understanding	181
5	Appendix D: Agreement between NBAAI and DSB	183
6	Appendix E: Reference information	187
7	Appendix F: Air Traffic Control flight plan	191
8	Appendix G: NOTAM information	193
9	Appendix H: Load information	203
10	Appendix I: Weather charts and images	205
11	Appendix J: Transcripts	207
12	Appendix K: Recorder group work	219
13	Appendix L: Radar screen images.....	227
14	Appendix M: Aeroplane systems and engines information.....	233
15	Appendix N: Typical fracture modes	247
16	Appendix O: Wreckage location and distribution	251
17	Appendix P: NLR report into the source of high-energy objects.....	275
18	Appendix Q: Presentation by Almaz-Antey.....	337
19	Appendix R: TNO report on the Numerical simulation of blast loading	353
20		
21		

1 **2.11 Flight recorders, satellite and other data**

2 2.11.1 Recovery of Cockpit Voice Recorder and Flight Data Recorder

3 The Cockpit Voice Recorder and Flight Data Recorder were not recovered from the
4 wreckage site by investigators of the Annex 13 investigation team, but individuals
5 unknown to the team removed the two recorders from the accident site. On 21 July
6 2014, the recorders were handed over to a Malaysian official in Donetsk by
7 representatives of the armed group controlling the area. No evidence or indications
8 of manipulation of the recorders were found. On 22 July 2014, the recorders were
9 handed over to the Dutch Safety Board in Kiev. Appendix K contains further
10 information on the Cockpit Voice Recorder and Flight Data Recorder.

11
12 It should be noted that the images for both recorders show two sets of texts, one in
13 Cyrillic text and one in French. The label in French, repeated in English on the other
14 side of the unit, is placed there by the manufacturer, Honeywell. The Cyrillic text on
15 the sticker on the unit states “*The Prosecutor General’s Office of the Donetsk*
16 *People’s Republic*” This was not added by the Dutch Safety Board but was on both
17 data recorders when they were handed over to the Safety Board.

18 2.11.2 Cockpit Voice Recorder

19 The housing of the Cockpit Voice Recorder (Figure 8) was damaged and, although
20 the model and serial numbers are unreadable on the datum plate, the serial number
21 1366, matching the one provided by Malaysia Airlines, is stamped on the underside
22 of the chassis. The external damage on the Cockpit Voice Recorder is consistent
23 with impact damage; the internal memory module was intact. The Cockpit Voice
24 Recorder was successfully downloaded and contained valid data from the flight.

25



26

27 *Figure 8 – Cockpit Voice Recorder (Source: DSB)*

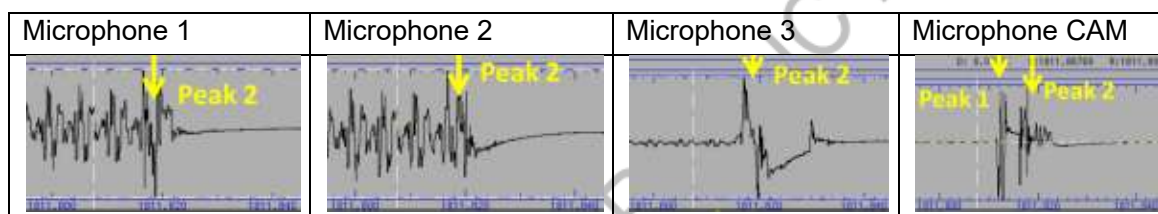
28

1 The replay of the Cockpit Voice Recorder matched Air Traffic Control
 2 communications with flight MH17 (see Air Traffic Control transcript). The recording
 3 also included crew communication which gave no indication that there was anything
 4 abnormal with the flight. The Cockpit Voice Recorder audio recording ended
 5 abruptly at 13.20:03 (15.20:03 CET). A replay of the Cockpit Voice Recorder did not
 6 identify any aeroplane aural warnings or alerts of system malfunctions. It was noted
 7 that on one of the four channels of audio, the cockpit area microphone, the sound
 8 quality was poor. The relevant parts of the Cockpit Voice Recorder recording are
 9 integrated with the Air Traffic Control transcript in Appendix K of this report.

10

11 Crew communication gave no indication that there was anything abnormal with the
 12 flight. At the very end of the recording, two peaks of sound were identified on the
 13 last 20 milliseconds of the recording. A graphic representation of the two peaks of
 14 sound for the four Cockpit Voice Recorder microphones are shown here.

15



16 *Figure 9 – Sound peaks recorded at the end of the CVR recording (Source: DSB)*

17

18 The time period shown on each image is four hundredths of a second. It is noted
 19 that peak of sound 'peak 1' is only recorded on the CAM.

20 2.11.3 Flight Data Recorder

21 The housing of the Flight Data Recorder (Figure 10) Allied Signal Model Number
 22 980-4700-003, has Serial Number 2196. The details match the details provided by
 23 Malaysia Airlines. The recorder that was given to the Dutch Safety Board had no
 24 Underwater Locator Beacon attached. As this beacon is activated by submersion in
 25 water, its activation is not expected.

26

27 The recorder is damaged but the internal memory module is intact. The external
 28 damage on the Flight Data Recorder is consistent with impact damage. The Flight
 29 Data Recorder, which can record 25 hours of operational data, was successfully
 30 downloaded and contained valid data from the occurrence flight.

31

1 **2.12 Wreckage and impact information**

2

3 The following paragraphs describe the geographic area of the accident and
4 wreckage as it was found. Details are provided on the location, identification and
5 observed damage of the wreckage pieces.

6 **2.12.1 Accident site access**

7 Due to the security situation within the geographic area of the crash, the Dutch
8 Safety Board was unable to start the collection and preservation of the wreckage
9 directly after the crash.

10

11 Under escort of the OCSE, air accident investigators from Australia, Ukraine and
12 Malaysia, the Australian Federal Police and journalists had access to the crash area
13 in the days following the accident. During these visits, the wreckage was
14 photographed extensively and showed the locations mostly undisturbed.

15

16 It was not until 4 November 2014 that the Dutch Safety Board was able to visit the
17 various locations where the wreckage was located, under the protection of the
18 Dutch Ministry of Defence's Recovery Mission. On 15 November, after receiving
19 permission from local authorities, wreckage parts were collected during 6 days and
20 transported to the Netherlands for the investigation and partial reconstruction of the
21 fuselage. It was necessary to cut some parts into smaller pieces for transport.

22

23 It was not until 20 March 2015 that it was possible to gain access to the area
24 northwest of the village of Petropavlivka for the first time. From 19 April until 2 May
25 more pieces of wreckage were recovered with the assistance of the local residents.

26

27 It should be noted that many parts of the wreckage were not physically examined by
28 the Dutch Safety Board until four months after the accident. During this period parts
29 were also removed, taken away or collected. Wherever possible, the photographs
30 taken immediately after the accident were used in conjunction with the wreckage
31 found.

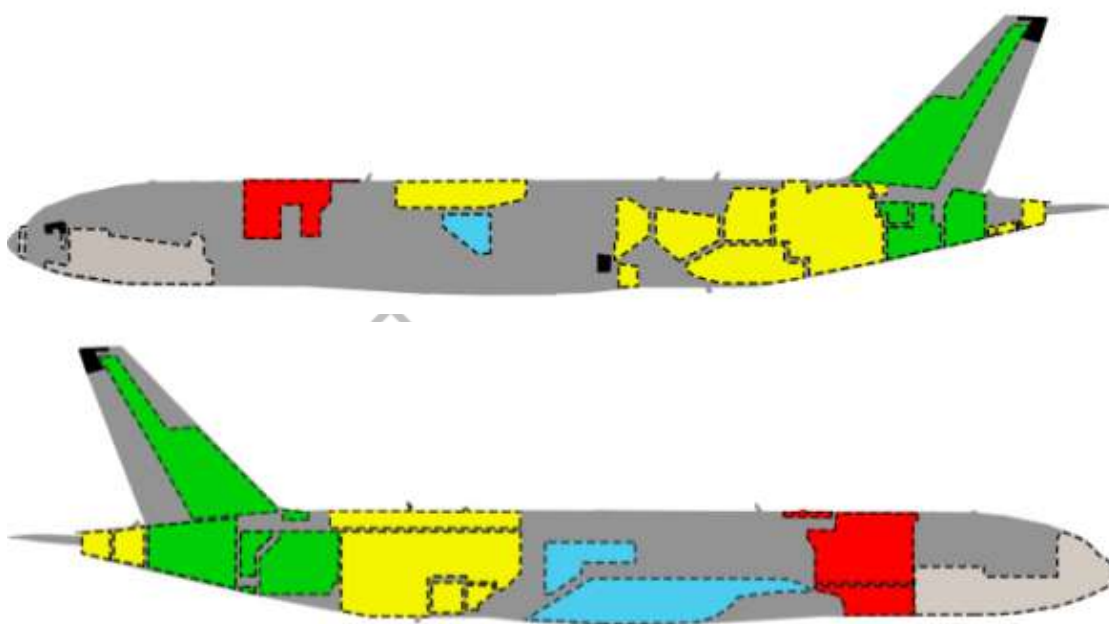
32 **2.12.2 General distribution of wreckage and distribution diagrams**

33 The wreckage parts of the aeroplane were identified in six concentrated areas to the
34 west and south-west of the village of Hrabove, within an area of approximately 50
35 km². Figure 12 shows the geographic location of the six wreckage areas. Each
36 wreckage area has an associated colour, depicted in figures 13 and 14.

37



1

2 *Figure 12 – Overview wreckage areas with wreckage parts*

3

4

5 *Figure 13 – Side view left and right. Identification of wreckage retrieved from the*
6 *wreckage areas (Source: DSB)*

7

8 The following table gives an overview of the wreckage areas that are described in
9 this paragraph. A detailed description of the primary wreckage parts and their
10 location is presented in Appendix O.

11

12

Wreckage site no.	Colour code	Notes	Paragraph	Appendix O
1	Orange	An open area of farming land	2.12.2.1	Fig. O.1
2	Red	Residential area of Petropavlivka	2.12.2.2	Fig. O.1
3	Light grey	An area of farming land south of the village of Rozsypne	2.12.2.3	Fig. O.1
4	Yellow	A built-up area partially surrounded by a forest in a gully	2.12.2.4	Fig. O.2
5	Green	An area of farming land separated by an elevated road	2.12.2.5	Fig. O.3
6	Blue	An area of farming land separated by an elevated road southwest of the village of Hrabove	2.12.2.6	Fig. O.4
0	Black	Parts of wreckage of which the initial location could not be verified	2.12.2.7	-

1 *Table 12 – Overview description of wreckage sites in this report*

2

3 It was noted that no parts of wreckage were identified between the areas 3 and 4.

4

5 For each wreckage area, a description of the wreckage parts relevant for the
6 analysis is given. A more detailed description of the wreckage pieces of interest can
7 be found in Appendix O.

8

9 In the description of the damage to the aeroplane Boeing references such as
10 sections and stations (STA) are used. Information on these two means of reference
11 is provided under Abbreviations & Definitions.

12 2.12.2.1 – Wreckage area 1 (orange)

13 Parts of the fuselage originating from section 41, including parts of the cockpit
14 fuselage, the fuselage above the business class, cockpit and cabin furnishing, and
15 fragments of two cargo containers, were located in area 1. This area of
16 approximately 3 km², is located 8.8 km west of the village of Hrabove. Parts of
17 wreckage were distributed over three agricultural fields which were separated by
18 roads and vegetation. No fire nor infrastructure damage was observed in this area.
19 Due to shelling, the Dutch Safety Board was unable to access area 1 during the
20 recovery mission in November 2014.

1 2.12.2.2 Wreckage area 2 (red)

2 The pieces of wreckage of the forward section of the aeroplane, including the
3 doorframe and surrounding fuselage of doors 1L, 2L, 1R and 2R and the cargo
4 floor, originating from section 43 of the aeroplane, were located in area 2. This area
5 of approximately 2.5 km², covers a large part of the village of Petropavlivka and is
6 located 8 km west of Hrabove. As a result of fallen debris, several structures within
7 the village of Petropavlivka had sustained damage. Due to shelling access to area 2
8 was restricted. The Dutch Safety Board was unable to retrieve all parts identified in
9 area 2 during the recovery mission in November 2014.

10

11 *Fuselage with negative pressure relief valves*

12 The fuselage containing door 2R was identified in the south-eastern region of area
13 2. The passenger door was positioned in its doorframe and the fuselage had
14 sheared below the frame of the left negative pressure relieve valve. The left
15 negative pressure relief valve was attached to the upper portion of the frame and
16 the door was pinned in its open position between the casing and the ground.
17 Neither the frame nor the valve of the right negative pressure relieve valve were
18 found in area 2.

19

20 *Engine Inlet ring*

21 The leading edge of the left engine casing was found in the south-eastern region of
22 area 2. The ring showed penetration damage on approximately the 40, 50, 60, 135,
23 180, 200, 290 and 300 degree positions, looking forward.

24



25 *Figure 14 – Damaged left engine nacelle leading edge (left) and impact marks at*
26 *the 200 degree position shown from the rear side (right) (Source: DSB)*

1 2.12.2.3 Wreckage area 3 (light grey)

2 The cockpit and surrounding fuselage of section 41 was found in area 3, 6.2 km
3 south-west of Hrabove. The area, approximately 67 x 37 m, was located in a
4 sunflower field situated on the southern corner of the village of Rozsypne. Within a
5 relatively concentrated area, cockpit instruments, avionics equipment and fragments
6 of cabin- and cargo furnishing were found. Aside from flattened vegetation, shallow
7 impact marks were observed on the ground

8

9 Photographic- and video evidence from the days after the crash indicated that area
10 3 had been disturbed and aeroplane parts and cargo had been removed from the
11 site. A number of avionics units, photographed by third parties following the days of
12 the accident, were no longer present during the recovery mission of the Dutch
13 Safety Board in November 2014.

14

15 *General description cockpit and surrounding fuselage.*

16 The forward portion of the aeroplane, part of the cockpit including the forward
17 bulkhead, was found in a tilted nose down position facing in easterly direction. The
18 cockpit and surrounding fuselage had separated in longitudinal direction of the
19 aeroplane revealing cockpit and cabin furnishing.

20

21 Within the relatively concentrated area, a number of wreckage pieces, varying in
22 size, lay in a heap. The nose landing gear wheel bay and the avionics compartment
23 had penetrated the cockpit and cabin floor pushing it in an upward direction. The
24 adjacent cabin floor had separated in the longitudinal direction of the aeroplane
25 after which two portions of the floor existed. The left portion of the cabin floor was
26 still attached to the fuselage and fragments of the left galley were observed. Other
27 than the severe structural damage of the fuselage, the bottom portion of the
28 fuselage was found as a whole. The fuselage on the right side of the aeroplane had
29 sheared behind the large cargo door and the adjacent cargo floor was visible.

30

31 On the left side of the cockpit, between STA132.5 and STA220.5 of the aeroplane,
32 no pieces of fuselage were observed. The left Angle of Attack sensor, still attached
33 to a portion of the fuselage, was located in the vicinity of the wreckage.

34

35 Aside from damage, the right side of the cockpit remained fairly intact. In contrast to
36 the left side of the cockpit, the lower right side showed little signs of penetration
37 from the outside as shown in Figure 15. It was noted that the upper portion of the
38 right side of the fuselage was penetrated and the windshield of the right cockpit
39 windows was still in place.

40

1



2

3 *Figure 15 – Upper right hand side of the cockpit as found on the crash site (Source:*
 4 *DSB)*

5

6 Within close proximity of the wreckage, cockpit furnishing, including pilot seats and
 7 cockpit instruments were identified. Together with the parts of the cockpit floor, the
 8 throttle quadrant and pedestal had been pushed in an upward direction. The
 9 remainder of the cockpit instruments such as the Mode Control panel and a number
 10 of cockpit display units were found in a heap.

11



12

13 *Figure 16 - Cockpit floor with floor parts showing penetration holes (red circles)*
 14 *coming from above the floor, penetrating downwards (source: NBAAI)*

15

16 A large part of the cockpit floor was recovered, Figure 16, broken up in several
 17 parts, and stripped from most of its contents. Seats, centre console, wall structure
 18 and most of the control mechanics were separated from the floor structure; only part

1 of the co-pilot control mechanism remained attached. Figure 17 shows an overview
2 of the recovered floor parts.

3



4

5 *Figure 17 - Cockpit floor overview partially reconstructed in Gilze-Rijen (Source:*
6 *DSB)*

7

8 The outer left side, effectively left of the captain's seat, is covered in soot and has a
9 large number of holes of different sizes are noted. The curved metal parts on the
10 floor are the forward and aft tracks of the captain's seat. Smaller numbers of impact
11 holes were present in other locations, including just left of the first observer seat and
12 below the second observer seat.

13 2.12.2.4 Wreckage area 4 (yellow)

14 The fuselage of the aeroplane between the wing- and the tail section was primarily
15 located in Area 4, approximately 2 km south-southwest of Hrabove. Parts of
16 wreckage, including both stabilizers and both wingtips were distributed over an area
17 of approximately 540 x 650 m. The area contains a number of buildings surrounded
18 by a fence. The area was partially surrounded by a forest which was located in a
19 gully. The right stabilizer was found in a pond in the south-easterly part of the area.

20

21 *Right wing tip*

22 The right wingtip was located near the buildings in the south westerly region of area
23 4. The wing tip was facing in a south easterly direction and was lying upside down.
24 The wing tip had sheared from the wing at the fourth fuel tank vent hatch, counting
25 from the tip towards the root. The Safety Line Attach Points were visible on the top
26 side of the wing tip. The aileron was missing.

27

28

29

1 *Left wing tip*

2 The left wing tip was located near the pond in the south easterly region of area 4,
3 with its top side facing upwards and the tip in a north westerly region. The Safety
4 Line Attach Points were visible on the top side of the wing tip. The tip showed signs
5 of impact damage on the top side and the leading edge. The wing tip broke off from
6 the wing at the fourth fuel tank vent hatch, counting from the tip towards the root.
7



8

9 *Figure 18 – Left wing tip with impact damage (Source: ATSB)*

10 *Rear pressure bulkhead*

11 The rear pressure bulkhead was separated into four pieces. A small portion of the
12 rear pressure bulkhead was still attached to the fuselage surrounding door 4L. The
13 largest piece was found in the forest in the gully in the northern region of area 4.
14 The remaining part of the rear pressure bulkhead is missing.

15 2.12.2.5 Wreckage area 5 (green)

16 The aft section of the aeroplane including the vertical tail and the surrounding
17 fuselage was primarily located in area 5, situated approximately 730 meters south
18 of Hrabove. Within the area, pieces of wreckage were distributed over
19 approximately 600 x 800 metres. On the western side of the elevated road a
20 concentrated debris area was identified. Within this area cabin items and cargo
21 were found. These parts were consumed by fire. Parallel to the elevated road on the
22 west side, there were power lines. It was noted that one of the power lines on the
23 west side of the elevated road had been clipped.

1 Photographic evidence and satellite imagery showed that the wreckage site was
2 disturbed on 17 July 2014 and pieces of wreckage were repositioned.

3

4 *Horizontal stabilizer - front spar*

5 The horizontal stabilizer front spar was detached from its housing and was situated
6 on the elevated road besides the aft portion of the tail. Fragments of the right
7 horizontal stabilizer were still attached to the front and rear spar of the horizontal
8 stabilizer. The front part of the stabilizer box showed impact marks in a lateral
9 direction. The left bushing of the horizontal stabilizer jackscrew fitting was missing.

10

11 *Vertical stabilizer*

12 The vertical stabilizer was located on the east side of the elevated road with the top
13 part of the stabilizer facing in the south-south-westerly direction. The left side of the
14 vertical stabilizer was facing upwards. The upper part of the leading edge including
15 the horn balance and rudder control surface were missing. A small portion of the
16 fuselage of the left hand side of the aeroplane was still attached to the vertical
17 stabilizer.

18 2.12.2.6 Wreckage area 6 (blue)

19 Wreckage area 6 is situated in the south-westerly corner of the village of Hrabove
20 and measures approximately 240 x 290 metres. Within this area, a smaller region
21 with a higher intensity fire was observed, measuring approximately 40 x 60 metres.
22 This smaller region contained all large pieces of wreckage except the forward keel
23 chord. Pieces of wreckage were distributed over two sub-areas, a northern and
24 southern area, separated by an elevated road. Photographic evidence and satellite
25 imagery showed that the wreckage site was disturbed on 18 July 2014 and pieces
26 of wreckage were repositioned. The centre section of the aeroplane, including parts
27 of the wings and both engines were located in area 6.

28

29 A fire occurred on the corner of the residential area on the east side of area 6. Both
30 sub-areas included vegetation, infrastructure and pieces of wreckage that showed
31 signs of fire damage. A wooden fence and a haystack were damaged by fire.

32

33 Fragments of the wings were primarily located on the southern region of area 6. The
34 remains of the wings showed extensive fire damage. The wings were found upside
35 down with the tank hatches, including the screws holes and placards and markings,
36 showing on the upward facing side of the wings.

37

38

39

1 The left wing was situated parallel to the elevated road in the western corner of area
2 6. The remains of the wing contained partial markings of the aeroplane's
3 registration; "9" and "M". The tank hatches as well as the screw holes were visible.
4 The left wing near the partial registration was relatively intact. Further along the
5 wing, towards the root, melted aluminium was observed. Based on the partial
6 registration, the presence of the tank hatches and the screw holes, it was
7 determined that the left wing was situated in the south side of area 6 with its wing tip
8 facing in south westerly direction.

9

10 The right wing was situated perpendicular to and across the road. The wing
11 contained placards and markings stating "Fuel Tank Vent Right Wing" indicating the
12 right wing. The portion of the wing, below the tip, was relatively intact and no fire
13 damage was visible. Further along the wing, towards the root, the tank hatches
14 were no longer visible. Pieces of melted aluminium suggest that parts of the wing
15 were consumed by fire. Based on the sequence of the tank hatches, the presence
16 of placards and markings and the visibility of the tank hatch screws, it was
17 determined that the right wing was situated across the elevated road with its tip
18 facing north.

19

20 Both the left and right engines were separated from the wing and had impacted the
21 ground in a slightly inverted attitude. Both fans were found detached and the fan
22 blades of both engines remained in place in their discs. The engines were located in
23 the southern region of area 6.

24

25 The left engine was located near the left wing. The main core of the left engine had
26 split into two sections. The front part of the engine was facing north and the aft part
27 of the engine was facing west. As the fan blades and the intermediate compressor
28 blades of the left engine showed little evidence of any rotation at impact.

29

30 The right engine was located on the south side of area 6, parallel to the elevated
31 road. The main core of the right engine was relatively intact with its forward side
32 facing west. The right engine was located near the right wing and was separated
33 from the wing. Both main landing gear legs were located on the side of the elevated
34 road. With the landing gear bogies still attached. All the tyres on the main landing
35 gear were consumed by fire and the wheel rims were visible.

36

37

38

1 2.12.2.7 Wreckage area 0 (black)

2 Pieces of wreckage of which the initial location of impact on the ground could not be
3 verified due to insufficient photographic and video evidence are listed in area 0.
4 These wreckage pieces may have been moved or photographed at a different
5 location within the geographic area. The wreckage pieces of which the initial
6 location is uncertain are listed below.

7

8 *Fuselage with a partial window frame*

9 The fuselage, originating from the left hand side of the cockpit, was located at the
10 side of the road, in the central region of area 2, the village of Petropavlivka.
11 Residents of the village reported that the wreckage piece had been moved to
12 expedite the search and recovery mission (Figure 19). The fuselage contained
13 numerous puncture holes and pitting and showed traces of soot. Frames on the
14 inner side of the fuselage had been sheared.

15



16

17 *Figure 19 – Handover of the left cockpit window to the DSB by members of the*
18 *SES. (Source: DSB)*

19 *Fuselage cockpit*

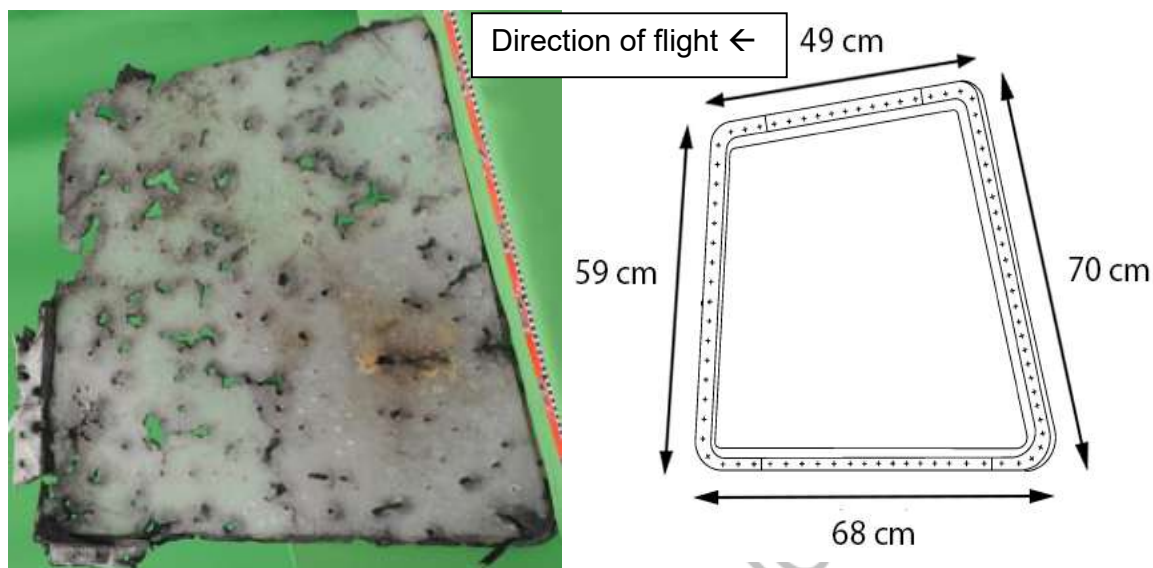
20 A portion of the fuselage, originating from the left hand side of the cockpit, was
21 identified in a field in the central region of area 2 (the village of Petropavlivka).

22

23 *Centre cockpit window left hand side*

24 One of the layers of the centre window (window number 2) on the left hand side of
25 the cockpit was collected by local residents. The cockpit windows are made of
26 multiple layers of glass and plastic. The window had a total of 102 puncture holes

- 1 and marks, varying in size and shape, as seen in Figure 20. Parts of the window
 2 frame were still attached to the window.
 3



4 *Figure 20 – Centre cockpit window left hand side (Source: DSB)*

5

6 *The left nose landing gear door*

- 7 Photographic evidence indicated that the left landing gear door had been placed in
 8 front of the village hall in Petropavlivka, area 2. Nose landing gear related
 9 components were all identified within or in close proximity of area 3. This included
 10 the nose landing gear itself and the right nose landing gear door.

11

12 *The rudder horn balance*

- 13 The rudder horn balance was photographed for the first time in area 4 during the
 14 recovery mission of the Dutch Safety Board in November 2014. Prior to this
 15 mission, no photographs of this part were available.

16 2.12.2.8 Wreckage not recovered

- 17 As a result of shelling within the geographic area of the accident, the Dutch Safety
 18 Board was not able to retrieve all identified wreckage pieces during the recovery
 19 mission in November 2014. The area in which these wreckage pieces were located
 20 was either not accessible to the Dutch Safety Board or the pieces were no longer
 21 present at their impact location. Table 13 indicates the wreckage pieces not
 22 recovered by the Dutch Safety Board.

23

24

25

26

Wreckage piece	Section	Location
Cockpit fuselage top section	Section 41	Area 1
Fuselage top near business class (2 pieces)	Section 41	Area 1
Fuselage left hand side with positive pressure relief valves	Section 43	Area 1
Fuselage with windows and door frame of door 1L	Section 41	Area 2
Fuselage with door frame of door 1R and surrounding fuselage	Section 41	Area 2

1 *Table 13: Wreckage parts not recovered*

2

3 **Summary of the wreckage information**

4 Within the geographic area, approximately 50 km², six concentrated areas with
5 wreckage were identified. The areas were located west and south-west of the
6 village of Hrabove.

7

8 Area 1 is north of the village of Petropavlivka which is situated 8.8 km west of
9 Hrabove. Area 2 is the residential area of Petropavlivka and area 3 is southern
10 corner of the village of Rozsypne, 6.2 km of Hrabove.

11

12 Pieces of wreckage originating from section 41 and 43 of the aeroplane were found
13 in area 1, 2, and 3. Top portions of the fuselage of section 41 mostly located in area
14 1. Parts of the fuselage originating from section 43 were mainly found in area 2. The
15 fuselage of the cockpit and cockpit interior were primarily located in area 3.

16

17 The damage observed in the forward area of the aeroplane indicated that the
18 aircraft was penetrated by a large number of high energy objects from outside the
19 aeroplane.

20

21 Area 4, located southwest of Hrabove was adjacent to area 5, located 730 m south
22 of Hrabove. Area 6 was located in the south-westerly corner of Hrabove.

23

24 The mid and aft sections of the aeroplane were distributed over area 4, 5 and 6.
25 Area 4 contained mostly pieces of wreckage originating from section 44, 46 and 47.
26 Both wingtips and both stabilizers were also found in this area. In area 5, pieces of
27 section 48 were found, including the vertical stabilizer. This area was partially

1 subjected to fire. Both the wings and engines were found in area 6. Parts of the
2 aeroplane in this area were damaged or consumed by fire.

3 **2.13 Medical and pathological information**

4 2.13.1 Flight crew autopsy

5 Identification of the flight crew members was based on clothing and general
6 appearance during the recovery process. Post-mortem examination was performed
7 on four possible flight crew members. Given the injury pattern, a full examination
8 including a body scan and toxicological examination was performed on two flight
9 crew members designated as body 1 and body 2. The post-mortem examination
10 revealed that both of the crew members sustained multiple fractures of the skull,
11 spine, pelvis, ribs, arms and legs. The injury pattern on torso, hands and feet was
12 consistent with flight crew seating and aeroplane control related injuries at impact
13 with the ground. In body 2 an aeroplane part, which was identified as belonging to
14 the right hand side of the aircraft, was found during the post-mortem examination.
15 The other two possible flight crew members (body 3 and body 4) showed dissimilar
16 injury patterns and are therefore considered not to have been seated in the front
17 two flight deck seats.

18

19 A body scan detected approximately 200 fragments in body 1 and approximately
20 120 fragments in body 2. In both cases the majority of the fragments were found in
21 the upper torso and very few fragments were found in the legs and lower torso. A
22 majority of the fragments were found on the left hand side of body 2. The fragment
23 scatter for body 1 was more uniform. A number of fragments were sent to the
24 Netherlands Forensic Institute (NFI) for further examination (See 2.16 Test and
25 Research) and this examination indicated that all but one of the fragments
26 examined corresponded to high-energy objects.

27

28 **Summary of injury of the operating flight crew**

29 Both operating pilots sustained multiple injuries associated with high-energy
30 objects.

31

32 2.13.2 Toxicological examination of flight crew

33 Material was collected for toxicological research from the bodies of the two flight
34 crew members that were, in all probability, operating the aeroplane at the time of
35 the accident. The toxicological examination was performed by the NFI.

1 It should be noted that the period of time between the accident and the toxicological
2 examination being conducted greatly affected the results of that examination.

3

4 For body 1 and body 2 there were no indications of the presence of medicines
5 (including sedatives), drugs or pesticides in the body. The results also show no
6 indication of Gamma-Hydroxybutyric acid or a substance from which this acid can
7 be formed. In both body 1 and body 2 traces of ethanol and metabolites of ethanol
8 (Ethyl Glucuronide and Ethyl Sulphate) were found in liver and muscle tissue.
9 These may have been formed, in whole or in part, post-mortem. There is insufficient
10 research data available on these metabolites in liver and muscle tissue. No blood
11 was available for toxicological analysis as a result of change post-mortem.

12 On the basis of the results of the toxicological it is not possible to determine when or
13 how the ethanol was formed.

14

15 **Summary of the toxicological examination**

16 A large number of high-energy objects were found in the operating flight crew's
17 bodies.

18

19 Traces of medicines, drugs or pesticides were not found either body 1 or body 2.

20

21 Traces of ethanol and its metabolites were found in liver and muscle tissue which
22 may be formed, in whole or in part, post-mortem. No blood was available for
23 toxicological analysis as a result of change post-mortem. It is not possible to
24 determine when or how the ethanol was formed.

25

26 **2.14 Fire**

27 2.14.1 Pre-accident fire

28 No evidence was found in the wreckage or the recorded data for the ignition or
29 proliferation of an on-board fire prior to the aeroplane breaking up in flight.

30 2.14.2 Post-accident fire

31 Wreckage site number 6 contained evidence of a large fire that consumed much of
32 the fuselage in the centre section of the aeroplane. The two main landing gear legs
33 and wing centre box show evidence of fire damage. In addition, the engines show
34 signs of having been partially exposed to a fire.

35

1 A second, smaller, fire was found to have burned at the location of the Auxiliary
2 Power Unit at wreckage site 5.

3

4 **Summary**

5 Fires erupted at two locations.

6 **2.15 Survival Aspects**

7 2.15.1 First responders

8 The human remains and corpses were initially recovered by the local State
9 Emergency Service (SES). The organisation received assistance in this from local
10 fire departments, emergency services, police and local inhabitants.

11 2.15.2 Survivability

12 The accident was not survivable.

13

14 **2.16 Tests and research**

15

16 During the investigation, forensic examinations of a large number of foreign objects
17 were undertaken by the Netherlands Forensic Institute (NFI). This work is described
18 in the following paragraphs.

19 2.16.1 Forensic examination

20 In the course of the investigation over 500 foreign objects were recovered. In the
21 wreckage of the aeroplane and in the bodies of the flight crew members a number
22 of non-aircraft fragments were found that were suspected to be high-energy objects,
23 or parts of them. A number of these fragments had a distinct butterfly or bow-tie
24 shape, such as the one shown in the images below, and were magnetic.

25



26 *Figure 21 – Fragments found with butterfly or bow-tie shape. The right hand*
27 *fragment was found in the body of a flight crew member (Source: NFI)*

1 Forensic examinations were executed on a number of the selected objects as well
2 as on numerous objects that were taken as reference from the wreckage. The
3 selection was based on size, shape, mass and ferrous properties. In total 72
4 selected objects were further examined; 16 foreign objects found in the bodies of
5 the flight crew members and one passenger, together with 56 foreign objects
6 recovered from the wreckage.

7 2.16.2 Examinations of the selected objects

8 The origin and the qualitative elemental composition of 72 of the selected objects,
9 together with 21 reference objects (e.g. aeroplane metal structure, cockpit glass)
10 were examined by the NFI using a scanning electron microscope and an associated
11 energy dispersive X-ray analysis system.

12

13 The elemental composition of these objects was determined qualitatively and it was
14 found that 43 of the recovered objects consisted of unalloyed steel. Other fragments
15 were found to be non-metallic (coal-slag) or made of stainless steel. On 8 selected
16 objects of unalloyed steel a glass deposit (consisting of sodium, aluminium, silicon,
17 oxygen, and zirconium) was found. On other unalloyed steel objects deposits in the
18 form of molten and re-solidified aluminium were found. Both aluminium and glass
19 deposits were found in the form of thin layers having a thickness from a few
20 micrometers to tens of micrometers. On a small number of objects thin layers
21 containing traces of copper and plastic were found.

22

23 The elemental composition of the aluminium traces found was consistent with the
24 elemental composition of the aluminium obtained from the aeroplane as reference
25 material. The investigation did not analyse each trace of aluminium to identify which
26 aluminium alloys were present.

27

28 The glass deposits present on the surface of the 8 selected objects had an
29 elemental composition of sodium, aluminium, silicon, oxygen and zirconium. This is
30 similar to that of cockpit window glass from a reference piece held by the NFI and
31 with the cockpit glass obtained from the wreckage. The other pieces of glass that
32 were secured from the wreckage contained no zirconium. It is noted that common
33 types of glass, such as window glass, car windshields and glass on mobile
34 telephones do not contain zirconium.

35

36 The chemical composition of 22 selected objects from the bodies of the flight crew
37 members and one passenger as well as from the wreckage was determined by
38 means of laser-ablation inductively coupled plasma mass spectrometry. These

1 objects had either a very distinctive shape (e.g. butterfly or bow-tie) or a layer of
2 deposits was present.

3
4 A comparison between the objects and their composition was made using a
5 statistical analysis method; Principal Component Analysis. The analysis showed
6 that the 22 selected objects from the wreckage and the bodies can be divided in two
7 distinctive groups. Within such a group, no statistical difference could be determined
8 between the objects, indicating that the objects originated from the same source. In
9 other words the objects within a group were made from the same low alloy steel
10 plate. Two of the analysed objects could not be linked to a distinctive group.

11
12 The result of the examination was that from the 22 selected objects, 20 objects
13 were assessed to be high-energy objects; 8 originated from the flight crew and 12
14 from the wreckage. The other 2 objects of which one was found in a passenger
15 were not high-energy objects.

16 2.16.3 Explosive residue analysis

17 In addition to these examinations, the NFI took over 500 swab samples on various
18 locations of the wreckage of the aeroplane and analysed these for explosive
19 residues.

20
21 The investigation into the origin of the objects was made more difficult by the
22 amount of time that the objects had been outside. The possibility of contamination
23 during transport and by the fact that the wreckage lay in an area of armed conflict
24 was a concern for the explosive residue analysis.

25
26 Approximately 30 of the more than 500 swab samples showed traces of two
27 different explosives; nitro amine (RDX) and tri-nitro toluene (TNT).

28 2.16.4 Results of the NFI's examinations

29 The following results are obtained from the forensic examinations:

- 30 • Some of the over 500 objects recovered had distinctive shapes; cubic and in the
31 form of a butterfly or bow-tie, and were made of ferrous metal;
- 32 • Of the 22 selected objects found in the bodies of the operating flight crew
33 members, one passenger and the cockpit area, 20 objects could be divided in
34 two distinct groups of low alloy steel. Within each group, the objects originate
35 from the same source. Two objects could not be linked to either group, one
36 originated from the passenger;
- 37 • The 20 objects that originate from the flight crew members and the cockpit had
38 aluminium and glass deposits indicating that these fragments originated from
39 outside the aeroplane and penetrated the cockpit with high energy, and

- 1 • Some of the fragments recovered showed traces of explosive residues.

2

3 **Summary of forensic investigation: high-energy objects**

4 Some of the objects recovered have distinctive shapes; cubic and in the form of a
5 butterfly or bow-tie and were made of ferrous metal.

6

7 Traces of aluminium and glass were found on 20 objects, both in the bodies of the
8 flight crew and in the cockpit area of the wreckage. No such objects were found in
9 the bodies of the passengers.

10

11 The aluminium and glass deposits found indicate that the objects originated from
12 outside the aeroplane and penetrated the aeroplane with high energy leaving traces
13 of both aircraft aluminium and cockpit glass.

14

15 Some of the fragments recovered showed traces of explosive residues.

16

17 **2.17 Organisational and management information**

18

19 Factual information and its analysis relating to the decision making processes
20 around the flight routes is contained in the separate Dutch Safety Board report
21 entitled "*Flight MH17 and flying over conflict zones*".

22

23 In that report, the following subjects relevant to this accident were investigated:

- 24 • the selection of flight routes by Malaysia Airlines, with particular attention to the
25 route across Ukraine;
- 26 • the oversight by the Malaysian authorities, and
- 27 • the management of airspace in Ukraine, with particular attention to the restriction
28 of airspace made by the Ukrainian authorities.

29 **2.18 Additional information**

30

31 This paragraph contains a number of relevant subjects that have not been
32 addressed elsewhere in Section 2. These relate to:

- 33 • a description to two different aeroplane systems; cabin pressurisation and cabin
34 emergency oxygen system;
- 35 • background information on possible external sources of damage, and
- 36 • the preventative actions taken following the accident.

1
2 The weather is consistent with storms around which it is reasonably expected that a
3 flight crew would request to circumnavigate.

4
5 With the exception of a deviation requested by the flight crew to avoid bad weather,
6 the aeroplane followed the planned route, airway L980 across Ukraine, not leaving
7 the width of the airway by more than approximately 1.5 NM.

8 **3.3 The moment of high-energy object penetration**

9

10 3.3.1 Aeroplane data recorders

11 According to the information in Section 2.11, the following Flight Data Recorder
12 parameters as recorded 13.20:03 (15.20:03 CET) were:

- 13 • Aeroplane position
 - 14 ○ Latitude: 48.12715 N
 - 15 ○ Longitude: 38.52630538 E
 - 16 ○ Pressure¹⁰ altitude: 32,998 feet
 - 17 ○ Indicated airspeed: 293 knots
 - 18 ○ Magnetic Heading: 115 °
 - 19 ○ Drift angle: -4 degrees
- 20 • Weather
 - 21 ○ Wind direction: 219 °
 - 22 ○ Wind speed: 36 knots
 - 23 ○ Static temperature: -44 °C
 - 24 ○ Air temperature: -12/-13 °C

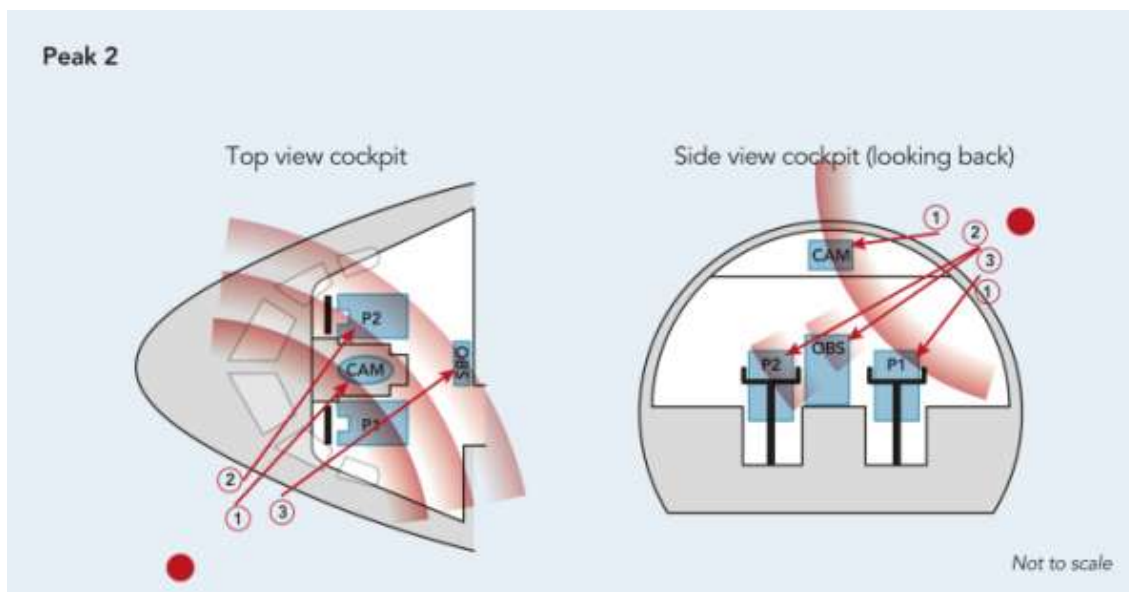
25 Small variations in the data are possible due to differences in resolution from the
26 various data sources.

27
28 Detailed analysis of the Cockpit Voice Recorder for the last 20 milliseconds of the
29 recording at 13.20:03 (15.20:03 CET) as described in paragraph 2.11.2 showed that
30 two peaks of sound were identified in this timeframe. Using specialised audio
31 recording analyses software a graphical representation of the sound over time, its
32 waveform, could be established. The wave form analysis will assist in determining
33 the signal's characteristics; for example, time duration and energy.

34
35 The first sound peak had a duration of 2.1 milliseconds and the signal was recorded
36 on the CAM channel only. As no other channels recorded this signal the direction of
37 the signal could not be established. Wave spectrum analysis suggests that the

¹⁰ Altimeter set to the standard pressure of 1013.25 hPa

1 sound peak is representative for an 'electrical spike' as it shows the form of an
2 electro-magnetic pulse that could have been caused by static discharge, or similar.
3
4 The time difference between the first and second sound peak was determined to be
5 2.3 milliseconds. The second peak had a duration of 2.3 milliseconds and was
6 recorded by all 4 channels, but not all at the same time as some recordings had a
7 different timestamp. The phase difference between the channels shows that the
8 sound was recorded by the CAM and P1 microphones first, then the P2 one before,
9 lastly, the Observer microphone. The wave spectrum is representative for a sound
10 wave. This difference in time shows that the sound wave originated outside the
11 aeroplane starting from a position above the left hand side of the cockpit,
12 propagating from front to aft.
13
14 It is concluded that the event was highly energetic in nature based on the short time
15 duration of the event.
16
17 Signal triangulation was used to determine the origin of the second sound peak
18 recorded on the Cockpit Voice Recorder. It was determined that the sound
19 originated outside the aeroplane on the left hand side. The fact that the microphone
20 cap of the CAM channel was missing did not influence the calculation. However,
21 during the investigation, the Safety Board noted that the sound peaks are of such
22 short time duration that any minor differences in recording will cause the signal
23 triangulation to be erroneous. For example, signal latency (refers to a short period
24 of delay between when an audio signal enters and when it emerges from a system)
25 can be influenced by the Cockpit Voice Recorder microphone wiring. When one
26 microphone wire is 'longer' compared to others this may affect the time for the
27 signal to reach the Cockpit Voice Recorder. Nonetheless, the signal triangulation is
28 consistent with the impact damage on the left side of the cockpit. Therefore it is
29 likely that the origin of the sound peak recorded on the Cockpit Voice Recorder is a
30 recording of the detonation of the warhead outside the cockpit.
31
32 The point of detonation, the impact damage and the type of warhead are analysed
33 elsewhere in Section 3 of this report.
34



1
2 *Figure 24 – second sound peak – graphic representation*

3
4
5 The poor sound quality on the CAM channel noted during the investigation was
6 probably due to the missing microphone cap from the CAM. The fact that the
7 microphone cap was missing was noted on the deferred defects list for the subject
8 aeroplane.

9
10 The Flight Data Recorder data as described in paragraph 2.11.3 and Appendix K
11 was examined to try and identify any acceleration associated with the sound wave
12 that had been recorded on the Cockpit Voice Recorder. The following three axes of
13 acceleration with their sampling rate are recorded on the Flight Data Recorder:

- 14
- 15 • Longitudinal acceleration: 4 times a second (4 Hz)
 - 16 • Vertical acceleration: 8 times a second (8 Hz)
 - 17 • Lateral acceleration: 4 times a second (4 Hz)
- 18
19
20
21
22
23
24
25
26

1 The damaged area of the forward pressure bulkhead has very limited apparent
2 evidence of high-energy object damage on the bulkhead.

3

4 It is noted that the damage to the cockpit appears to be centred on the left hand
5 forward side, near the left hand seat position, where there is evidence of blast
6 deposit, direct pressure damage, and extensive fragmentation damage. The
7 apparent fragment damage pattern extends from the captain's seat from the left
8 forward to the right hand aft side of the cockpit, and appears to be sharply bounded.
9 This matches the damage found on the outside parts of the nose of the aeroplane.

10

11 A number of parts are covered in soot, an indication of explosive residue on the
12 aeroplane. 'Sooting' is noted on the inside of the right hand cockpit windows 2 and 3
13 and on parts of the outside left hand cockpit fuselage.

14

15 The panel, a part of the fuselage to the right of the nose landing gear, between
16 STA250 and STA330, that shows damage considered to be 'dishing'; a form of
17 damage associated with the effects of blast. Figure 23 shows that the panels' skin
18 between the structural elements is deformed. The reason that an adjacent part of
19 the nose gear door (STA184) had no detectable blast damage is that this part is
20 made of a honeycomb construction that is highly resistant to the effects of excess
21 pressure.

22 3.11.3 Failure analysis

23 Paragraphs 3.11.3.1 to 3.11.3.7 contain an analysis of the way the aeroplane's
24 structure failed after the impact of the high-energy objects. A number of definitions
25 of the types of failure displayed on the wreckage parts; essential to a better
26 understanding of the analysis, have been included in Appendix N.

27 3.11.3.1 General

28 Analysis indicates that, following the separation of the cockpit from the fuselage, the
29 cockpit descended with a steep angle. The distance between the last known
30 position of the aeroplane, recorded on the Flight Data Recorder, and the location of
31 the cockpit, including the nose wheel bay is about 2.3 km. There is general
32 evidence of overload break up, deformation by aerodynamic forces, impact damage
33 such as crushing, folding and bending, and in some cases burning.

34

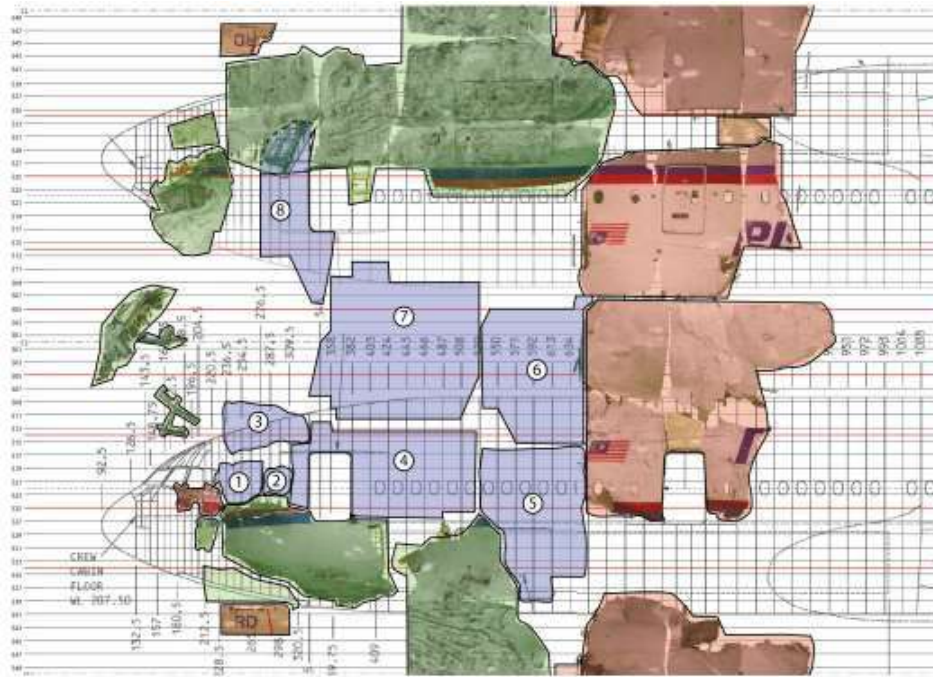
35 Based on paragraph 2.12.2, examination of the wreckage parts of the fuselage
36 stiffened skin structures and their fracture surfaces has revealed the following
37 observations (see Figure 41):

- 1 • The upper left cockpit structure is missing, but the available pieces indicate
2 penetration holes. Starting from the cockpit window a rupture runs downward
3 toward to the passenger floor (stringer L27) at STA236.5.1.
- 4 • The upper right cockpit section appears intact and exhibits a primary fracture
5 approximately along STA236.52. This fracture runs towards the passenger floor
6 (stringer 27R). This fracture seems to align with fractures observed with
7 photographic evidence obtained from Ukraine where panels contain failures
8 along STA236.50. These fractures develop approximately at the level of the
9 passenger floor backward parallel to the stringers 273L and 274R.
- 10 • Another rupture has been observed at the circumferential joint at STA655.50
11 which seems to run almost entirely in the circumference of the fuselage with
12 intersections with the horizontal fractures along the passenger floors at STA655.
- 13 • This circumferential fracture follows STA655 straight to the passenger floor in a
14 predominantly tensile mode. Below the passenger floor the direction of the
15 fracture at the left hand side initially continues towards the longitudinal joint at
16 stringer 34L6 after which its path is unclear. The fracture at the right hand side
17 seems to deviate from its path, heading slightly backward until it reaches the
18 longitudinal joint at stringer 34R after which it turns forward towards the bottom
19 of the fuselage panel 7.
- 20 • Although certain pieces of the lower left structure were missing, the two lower
21 fuselage panels before and aft of STA613 indicate that this general rupture at
22 the location of the circumferential joint has continued entirely along the full
23 circumference of the fuselage. This rupture has led to separation of the forward
24 fuselage from the remainder of the fuselage. The outward bending of the lower
25 fuselage panel aft of STA613.80 indicates that final separation of the forward
26 fuselage section occurred at the bottom of the fuselage.

27

28 For the forward fuselage section up to about STA1032 a digital two-dimensional
29 reconstruction was made. The approach was to first generate a grid consisting of all
30 fuselage frames and stiffeners positions. Subsequently, the green-screen photos
31 that were made of structural parts were positioned onto the grid at the right scale
32 and orientation. The resulting final image is shown in Figure 52.

33



1
 2 *Figure 52 – Grid reconstruction of the outside skin of the forward fuselage. Overlaid*
 3 *outline indicates approximate boundary of the piece prior to dismantling for transport*
 4 *to the Netherlands. Colour indicates wreckage site.*

5
 6 *Note:*
 7 *Unrecovered pieces are highlighted in blue and were reconstructed based on*
 8 *accident scene photos. Piece A indicates a piece of skin attached to the nose*
 9 *landing gear bay for which photographs are not available. All show tearing and*
 10 *peeling damage. Close examination of the wreckage parts available revealed no*
 11 *evidence of pre-existing structural faults (such as fatigue, corrosion or mechanical*
 12 *damage) that could have contributed to the in-flight break-up.*

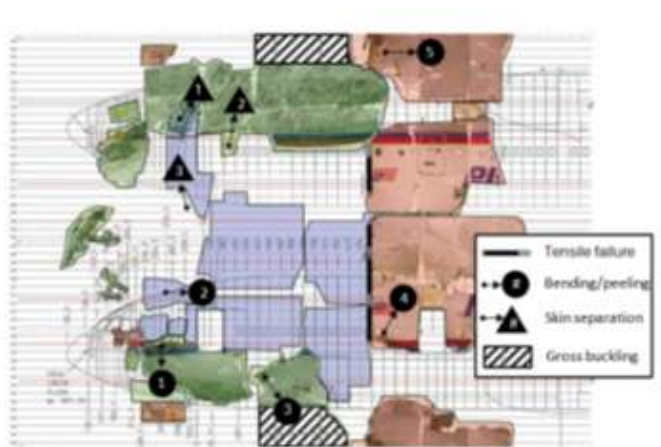
13
 14 For the forward fuselage section it was verified that the forward cargo door was still
 15 closed.

16
 17 Examination of the available wreckage pieces forward of STA888 revealed several
 18 features that manifested during break-up of this section. These features include:

- 19
- 20 • Tensile overload failure;
 - 21 • Isolated bending/peeling of wreckage pieces;
 - 22 • Regions of skin/sub-structure separation, and
 - 23 • Gross buckling damage.

24 The overall distribution of these observed features is illustrated on the
 25 reconstruction grid in Figure 53. It is noted that some of these features are indicated

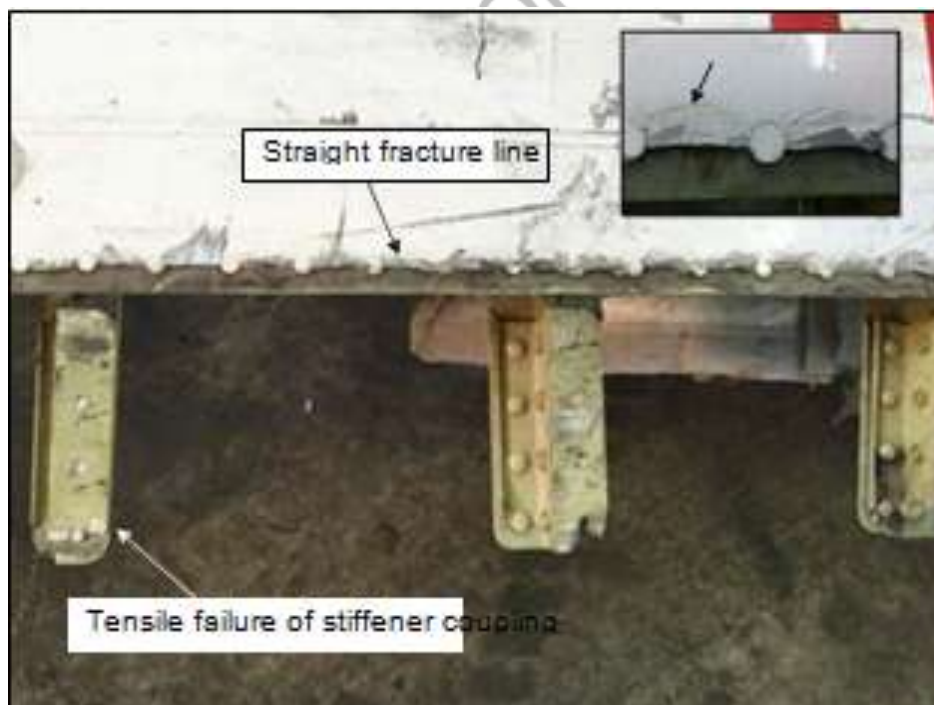
- 1 for wreckage pieces not available to the investigation team for direct inspection.
 2 Only features that were clearly visible in wreckage site photographs have been
 3 included for those unavailable parts.



4
 5 *Figure 53 – Overview of the forward fuselage wreckage parts indicating major*
 6 *break-up features*

- 7
 8 Each of these features will be briefly described and illustrated with representative
 9 photographic evidence.

- 10
 11 An example of tensile overload failure this type of fracture is given in Figure 54.
 12



13
 14 *Figure 54 – Typical case of pure tensile overload failure; straight cracks in net-*
 15 *section, paint cracks aligned with skin crack, stiffener coupling failure at the first*
 16 *fastener*

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A representative example of isolated bending/peeling is given in Figure 55. Note, the arrow in the figure indicates the direction of peeling.



Figure 55 – Example of bending/peeling at a fracture line located along STA655 associated with the final separation between two pieces of wreckage.

A representative example of skin/sub-structure separation is given in Figure 56.

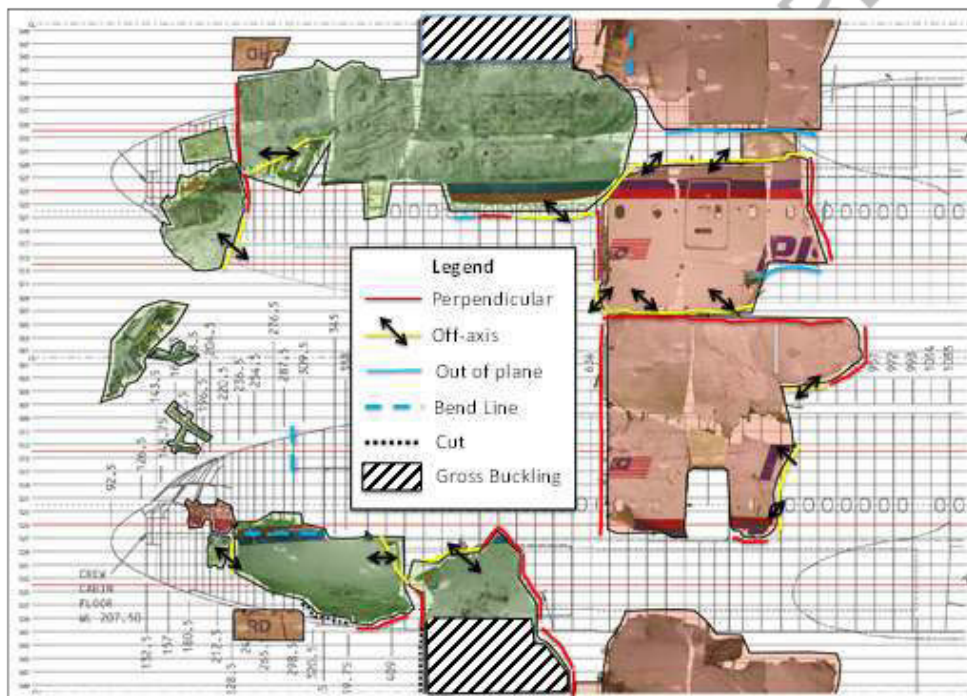


Figure 56 – Example of skin/sub-structure separation in the nose section immediately forward of the door 1R.

A representative example of gross buckling is given in Figure 57.



1
2
3
4
Figure 57 – Example of gross buckling of the lower fuselage skin panel near STA487.



5
6
7
8
9
Figure 58 – Overview of forward fuselage wreckage parts indicating the modes of fracture in detail

10 Based on the different locations of wreckage parts found, it was concluded that the
11 separation between the centre part and the rear part of the fuselage occurred at
12 approximately fuselage station STA1546.5. This location coincides with the aft door
13 frame of passenger doors 3L and 3R.

14
15 A study of the fuselage parts, available in the data base, showed that a large skin
16 panel on the left upper side of the fuselage, extending from half way the main

1 landing gear wheel bay in front of doors 3L & 3R to about 1.5 meters aft of door 3L
2 & 3R, was found at the same location as the parts of the rear fuselage (in wreckage
3 area number 4). This part probably separated just before the fuselage rear part
4 broke away. As this part separated, the section at the doors was weakened. The
5 weakened fuselage section then broke and the rear part separated. Top and bottom
6 panels were missing on the left hand side.

7

8 On the right hand side a larger severe deformed panel was available, running from
9 the top, about stiffener 11R, to about stiffener 40R at the bottom.

10

11 The fracture surfaces that were deemed to interface with the panels in the main
12 wreckage site were examined.

13 3.11.3.2 Fuselage left hand side

14 Only a panel of the side shell has been found and was examined. For the left panel,
15 this concerns fractures from the upper right door corner of passenger door 3L
16 upward, and fracture from the lower right corner downward. Both fractures together
17 align into a vertical fracture. Both fracture surfaces exhibit fractures consistent with
18 tensile overstress fracture.

19



20

21

22

23

Figure 59 – Tensile overstress fracture at the upper right door corner of passenger door 3L



1
2 *Figure 60 – Tensile overstress fracture at the lower right door corner of passenger*
3 *door 3L*

4 3.11.3.3 Fuselage right hand side

5 At the right hand side, a single fracture starting at the lower left corner of the
6 passenger door 3R was present and has been examined. In figure 61, the lower
7 corner shows an overstress fracture mainly tensile (about 45 degrees with the
8 horizontal combined with some outward bending).
9



10
11 *Figure 61 – Overstress fracture at the inside of the lower left door corner of*
12 *passenger door 3R (Source: DSB)*

13
14 *Upper door corner 3R*

15 Figure 62 shows the structure aft of door 3R. The skin plus stiffeners far above the
16 door level show a tensile fracture. The fracture near the top of the door is more
17 complicated. It shows peeling of the skin combined with a complicated fracture of
18 the door frame adjacent to the door just above the door.



1
2 *Figure 62 – Tensile overstress fracture at the outside of the lower left door corner of*
3 *door 3R (source: DSB)*
4

5 *Lower door corner 3R*

6 The fracture at the door corner is consistent with a tensile loading direction upper
7 left to lower right plus some out of plane bending. The fracture appears to be a
8 complex fracture surface consistent with tensile overstress, of which the load case
9 is not evident. The skin fracture surface directs in the vertical and under an angle of
10 45 degrees heading aft, with out-of-plane deformations of the sheet material,
11 together with fracture of the frame at STA1546.5. This frame fracture is, it was
12 concluded, the result of a combination of tension and bending in a direction
13 opposite to the frame curvature. The determination of the direction is based on the
14 alignment of the fracture surface.

15
16 In the area investigated, no repairs were observed. Traces of fatigue or corrosion
17 were not found.

18



19
20 *Figure 63 – Severely deformed fuselage structure aft of passenger door 3R,*
21 *including aft cargo door surrounding structure (source: DSB)*
22

23

1 3.11.3.4 Cockpit and front fuselage

2 The rupture along the circumferential joint at STA655 appears to be consistent with
3 a downward bending moment applied unto the cockpit section causing tension in
4 the upper fuselage and compression in the lowest shells. The fracture surfaces in
5 the upper and side shells are consistent with tensile overstress fracture, while the
6 lowest shells exhibit indications of compression and bending, like for example
7 stringer crippling.

8

9 The forward fuselage section has separated approximately along the passenger
10 floor into a cockpit section connected to the lower fuselage sections until STA655,
11 and upper fuselage sections above stringers 27L and 27R.

12

13 The upper part between frame stations STA246 and STA655 was found at a
14 different site near Petropavlivka, whilst the cockpit section, mostly attached to the
15 lower fuselage sections, was found near Rozsypne. The upper fuselage sections
16 have not been retrieved and could therefore not been examined, while most of the
17 structure of the cockpit and lower fuselage section have been found and examined
18 for the fracture patterns and fracture surfaces.

19

20 After the full rupture of the forward fuselage at STA655, the remainder of the
21 fuselage in front of the wing seems to have developed fractures in longitudinal
22 direction at locations between stringer R4 and R79, and near stringer R2910 and
23 R3411 (longitudinal joint). At the left hand side a fracture has developed along
24 stringer L2912 with evidence of out-of-plane deformation of the skin. These fracture
25 orientations seem consistent with a radial opening of the fuselage. Many cases of
26 peeling and tensile fracture have been observed; the longitudinal joint at R34 failed
27 by separation rather than shear, and the skin near STA825 separated in tension
28 from the back-up structure.

29

30 All evidence and ruptured fuselage panels observed was limited to the area before
31 STA951.

32

33 Based on the position that the wreckage was found in, it has been determined that
34 the centre part of the aeroplane landed upside down facing aft. Given the positions
35 of the engines and the parts of the wings, this part tumbled forward during its
36 descent. It is noted that this conclusion was confirmed on location after NBAAI
37 investigators had come to a similar conclusion on 18 July 2014 using a
38 photographic reconstruction.

1 3.11.3.5 Rear fuselage

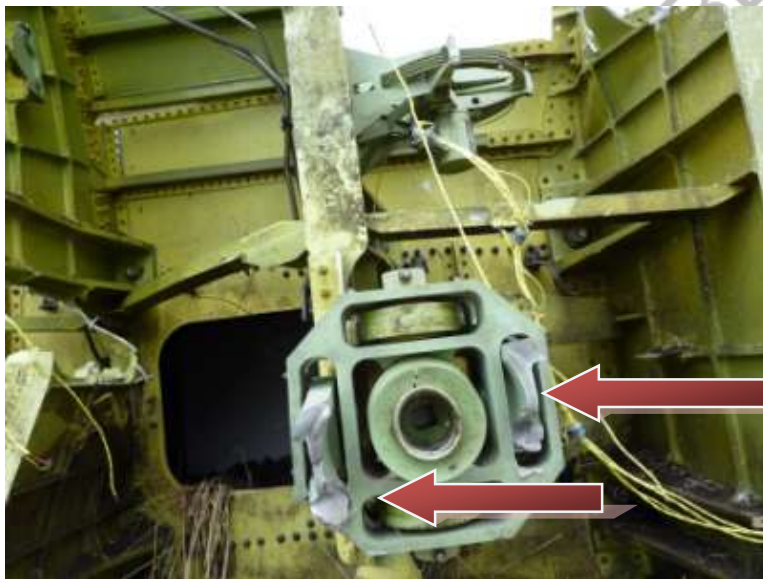
2 The separation of the rear fuselage probably took place after the separation of a
3 large skin panel on the left upper side of the fuselage, (data base number 40)
4 extending from half way the main landing gear wheel bay to about 1.5 meters aft of
5 door 3L & 3R) and possible of other upper fuselage parts at that area, not
6 recovered, immediately followed by the separation caused by failure of the
7 remainder of the fuselage at STA1546.5.

8

9 This last separation was caused by a bending moment to the right, as seen from the
10 direction of flight, that resulted in a shear load acting on the damaged, incomplete
11 aft fuselage at STA1546.6.

12

13 The distortion to the parts of the vertical stabilizer (indicated by two arrows in Figure
14 64) provides direct evidence of the overload that the aeroplane was subjected to
15 during its fall. The way that the parts are bent shows that these forces were from the
16 side, pushing the vertical stabilizer over to the right, as seen from the direction of
17 flight.



18

19 *Figure 64 – Overload failure of the vertical stabilizer (Source: DSB)*

20 3.11.3.6 Rear pressure bulkhead

21 The parts available belonging to the rear pressure bulkhead as discussed in
22 2.12.2.4 were examined. The fractures in circumferential direction followed the
23 intersection with either the fuselage, or at the stiffening straps. These fractures are
24 predominantly tensile overstress fractures in the net section.

25

1 In addition, circumferential fractures were observed at the centre element of the
2 dome. Also these fracture surfaces are consistent with overstress fractures as result
3 of combinations of tension and out of plane bending.

4
5 In radial direction fractures were observed also consistent with tensile overstress
6 fractures. These fractures follow the fastener row underneath the radial stiffeners.
7 The plate in the vicinity of the fracture, as well as the stiffener, exhibits significant
8 deformations.

9
10 At some locations along the connection between pressure bulkhead and fuselage
11 the fractures deviated from their circumferential path, towards adjacent stiffening
12 straps. A few irregular fractures were also observed.

13
14 The fractures observed in the bulkhead were consistent with tensile overstress,
15 caused either a pressure difference or a disintegrating fuselage structure, where a
16 relatively flexible, thin, walled dome is pulled apart by the surrounding structure.

17
18 There are indications that there was no sudden failure by overpressure of the rear
19 pressure bulk head:

- 20 • No damage or deformation consistent with an overpressure in the fuselage tail
21 cone structure.
- 22 • Rear pressure bulkhead parts and parts of surrounding fuselages structure were
23 found at the rear end of the debris pattern, not at the beginning of it.

24
25 In the bulkhead dome no repairs were observed. Traces of fatigue or corrosion were
26 not found.

27 3.11.3.7 Wings and empennage

28 A review of the two wingtips and the horizontal stabilizers indicated the direction of
29 the failure. In the case of the wingtips, the stringers and ribs on both sides showed
30 signs of having been torn backwards.

31
32 The two horizontal stabilizers both showed evidence of having failed after bending
33 upwards. On the left stabilizer bolts and brackets exhibited the signs of the
34 bending. The evidence of upwards bending on the right stabilizer was seen in the
35 way that the stringers had been bent. The extensive use of composite materials in
36 the stabilizers made further analysis impossible.

37
38 The high-energy object penetration on the inboard flaperon on the left wing was
39 analysed as part of the analysis in the effects and origin of the high-energy objects.

1 3.11.3.8 Negative pressure relief valve

2 A pressure relief valve from the right forward side of the aeroplane was found
3 opened into the extreme position. As the negative pressure difference over the
4 pressure relief valve is normally relatively small and builds up gradually, the
5 observed damage (See Appendix O) has to be the result of an unusual condition.
6 Because the valve is designed for the relief of small pressure differences, it cannot
7 be ruled out that the damage might have been the effect of a shock wave, caused
8 by the external detonation, which occurred on the left hand side of the aeroplane.
9 However, the relief valve found was from the right side of the fuselage. It might have
10 come into the extreme position due to ground impact or due to transportation and
11 handling.

12 3.11.3.9 Main landing gear

13 As evidenced by the recovered main landing gear assemblies there were no intact
14 lock links to secure the side/drag braces; both were sheared off. In addition, in an
15 in-flight breakup, air loads from the fall, collision with other debris, ground impact
16 and disturbance during recovery/transportation, could all randomise the motion of
17 unsecured side/drag braces. The Flight Data Recorder data indicated that the
18 landing gear was in the retracted position at the last recorded position of the
19 aeroplane. Therefore it is likely that landing gear extension of one of the gears is a
20 result of the in-flight break-up and/or the following ground impact.
21

22 **Findings**

23 The failure sequence is consistent with the failure initiating near the left hand side of
24 the cockpit.

25
26 There was an almost simultaneous separation between the cockpit with the lower
27 fuselage and upper fuselage at stringer 27 from nose to Station 655 and the heavily
28 damaged cockpit with lower and upper forward fuselage at Station 655, followed by
29 the fuselage between STA655 and STA951 opening in a radial fashion and
30 separating.

31
32 The fracture of the rear fuselage section near doors 3L and 3R at STA1546.5 (to
33 the rear of the wing) indicates a high lateral bending moment to the right on the
34 fuselage. The fractures in the rear pressure bulkhead are consistent with overstress
35 fractures.

36
37 The wingtips both failed, tearing rearward. After this, the stabilizer and fin separate
38 from the rear fuselage again with a high lateral bending moment to the right.
39

1 It is likely that landing gear extension of one of the gears is a result of the in-flight
2 break-up and/or the following ground impact.

3

4 The investigation did not indicate the presence of pre-existing damage, such as
5 fatigue, corrosion or inadequately performed repairs.

6

7 3.11.4 In-flight break-up scenario

8 Following the separation of the cockpit from the fuselage, the cockpit descended
9 with a steep angle. The horizontal distance between the last known position of the
10 aeroplane, recorded on the FDR, and the location of the cockpit, including the nose
11 wheel bay is about 2.3 km.

12

13 The distribution of the aeroplane wreckage parts over a large area indicates that the
14 aeroplane broke up in the air. The forward parts of the aeroplane were found
15 closest to the last Flight Data Recorder point, indicating that these parts broke off
16 from the aeroplane first. Since the centre and aft parts of the aeroplane were
17 discovered significantly further to the east, this indicated that these parts continued
18 in a down and forward trajectory and disintegrated later.

19

20 The failure analysis of the aeroplane's structure, as described in paragraph 3.11
21 shows a sequence whereby the aeroplane's fuselage separates at STA655; a point
22 towards the rear of the business class section of the aeroplane. A second structural
23 failure occurs at STA1546.5 behind the wing, causing the rear fuselage and tail to
24 separate. The three parts of the aeroplane fell in different locations. The debris
25 locations of the remainder of the aircraft (near Hrabove) cannot be explained by a
26 'simple' ballistic trajectory, suggesting that part still had some lift and thus continued
27 'flying' for some time.

28

29 **Aerodynamic stability**

30 If one flies straight and level in an aeroplane, with the forces trimmed out and the
31 pilot makes no control inputs, the aeroplane will maintain a constant path through
32 the air (assuming still air). Moving the controls to a new positioning and holding
33 them there will cause the aeroplane to deviate slowly from the straight and level
34 flight. If only the ailerons are moved, the aeroplane starts slowly to bank and will
35 turn to the left or right as commanded. As it banks, it also slips so as to not only
36 deviate from its flight path but also it will start to descend. These movements

1 intensify over time. The bank angle and the roll angle will increase over time whilst
2 the radius of the turn will decrease over the same time; the aeroplane flies in a
3 tighter and ever steeper spiral. The slipping flight causes lateral loads on the vertical
4 stabilizer and on the fuselage. This lateral load increases over time. Without
5 correction by the pilot, this continues until structural failure of the aeroplane in flight
6 or impact with the ground.

7
8 When the fuselage forward of STA888 separated from the aeroplane it caused the
9 centre of gravity of the rest of the aeroplane to move rearward. The influence of the
10 moment around the aeroplane's lateral axis is considered to be relatively small.
11 There were no more control inputs from the flight crew possible and the control
12 surfaces would have been in their neutral positions. As a result of this, the
13 behaviour of the aeroplane, rotations round the three axes and thus the flight path,
14 were determined by the dynamic stability of the aircraft.

15
16 The flight path with respect to the ground will depend on the wind speed and
17 direction at the heights between the start of the event and impact with the ground. In
18 a situation without control inputs, the behaviour of the aeroplane is determined by
19 the dynamic stability of the aeroplane. In such a situation, the behaviour of the
20 aeroplane's movement can be periodic, known as Dutch Roll, or be a-periodic;
21 *spiral mode*. The spiral mode is caused by the fact that, for most aeroplanes, the
22 static directional stability is larger than the absolute value of the static roll stability.

23
24 In the case of the accident aeroplane, a bank angle slowly increased after the
25 separation of the cockpit, causing the side slip angle to increase. From the positions
26 of the wreckage on the ground, it is certain that the aeroplane turned to the left in
27 slowly following an increasingly curved path.

28
29 Due to the tightening spiral and slip angle, the lateral load on the vertical fin and the
30 fuselage increased. This loading caused an increasing bending moment to the right
31 on the fuselage behind the wing, that eventually resulted in a structural failure of the
32 fuselage by a vertical bending moment. The failure occurred at a point close to the
33 passenger doors, 3L and 3R. As all of these parts aft of STA888 were found on the
34 ground closely spaced, it can be concluded that the structural failure described here
35 happened at a relatively low altitude.

36
37 The examination of the wreckage distribution also shows that the final heading of
38 the wreckage was to the north. This suggests that the final part of the descent
39 trajectory had a decreasing radius. This is consistent with a change to the dynamics
40 of the wreckage as the tail separates.

1

2 After the separation at STA1546.5, passenger doors 3L and 3R, the wing with the
3 centre fuselage section, without the tail plane, is longitudinally unstable but the roll
4 stability is positive. In this situation the centre of pressure is behind the centre of
5 gravity, it becomes longitudinally unstable, causing it to tumble forward. The rotation
6 rate and the number of rotations is unknown, but it is expected to be few due to the
7 low altitude.

8

9 The centre section was found upside down with few indications on the ground of
10 horizontal movement having struck the ground in a nearly horizontal attitude, with a
11 large descent angle. This is a consequence of the forward rotation described above.
12 moving in rearward direction.

13

14 A part of the fuselage just in front of door 3R was found under the aeroplane's keel
15 beam structure and a part of the lower fuselage, just in front of the centre wing, was
16 found just ahead of the main wreck. This is consistent with an upside down centre
17 section moving in rearward direction when hitting the ground.

18

19 It is not possible to accurately determine the time between the start of the break-up
20 and the impact with the ground. The wreckage distribution suggests that the forward
21 part of the aeroplane is unlikely to have fallen at the same speed as the remainder
22 of the aeroplane. Taking into account the descent speed and the path that the
23 remainder of the aeroplane followed (see explanation on aerodynamic stability
24 above), the centre and rear parts of the aeroplane were estimated to have taken
25 about a minute and a half to reach the ground. Other lighter parts (e.g. cargo and
26 baggage) will have taken longer to reach the ground.

27

28 Findings

29 The debris found near wreckage area 2 and wreckage area 3 is consistent with a
30 rapid separation of the cockpit section and numerous smaller parts of the front
31 section of the aircraft, that started at the last recorded aircraft location or slightly
32 thereafter.

33

34 The centre and rear part of the fuselage remained, initially, intact, gliding
35 aerodynamically and came to rest about 8.5 kilometres to the east. The centre
36 section travelled the further than the rear part of the fuselage.

37

38 The time between the start of the break-up and the impact with the ground cannot
39 be accurately determined. Taking into account the descent speed and the path that

1 the remainder of the aeroplane followed, the centre and rear parts of the aeroplane
2 were estimated to have taken between 1 – 1.5 minutes to reach the ground. Other,
3 lighter parts, will have taken longer.

4

5 3.11.5 Passenger oxygen system

6 When the cabin of the aeroplane depressurised, the cabin altitude of 13,500 feet
7 was exceeded, which normally deploys the passenger oxygen masks. However, no
8 system data was found to confirm this, because it had not been stored in the
9 equipment recovered and the recorder that had the capability to store such
10 information was not recovered. FDR data shows that the cabin pressure altitude is
11 recorded as being 4,800 feet during cruise up to the moment that the recording
12 stopped at 13:20:03 (15:20:03 CET) (see Appendix K).

13

14 According to the manufacturer, when depressurisation occurs the deployment of the
15 masks may take a few seconds. Since electrical power to the Cockpit Voice
16 Recorder and Flight Data Recorder was lost almost instantly after the penetration by
17 the high-energy objects, Electrical power to the solenoid was probably also lost
18 immediately making it unlikely the passenger emergency oxygen masks were
19 deployed. Nevertheless, the solenoid switches might have been moved into the
20 unlocked position as a result of the forces on them during the accident or due to
21 impact with the ground.

22

23 A visual examination of four generators recovered from the wreckage showed that
24 the metal wires that normally initiate the production of oxygen had been pulled out
25 and that the indicator stripe on the oxygen generators showed a black stripe
26 indicator suggesting that they had been 'fired', producing oxygen, see below figure
27 65. Some masks may have deployed as a result of the aeroplane's disintegration
28 and all may have been exposed to strong winds or other dynamic forces during the
29 fall of the aeroplane. Additionally, as it requires only a small force of only a few
30 Newton (Federal Aviation Administration specification TSO-C64 refers) to remove
31 the firing pin from the oxygen generator, it is conceivable that the oxygen
32 generators were fired as a result of either the dynamic forces during the fall or from
33 the impact with the ground.

34

1

4 CONCLUSIONS

2 The Dutch Safety Board determined the following conclusions in relation to the
3 accident to flight MH17 on 17 July 2014.

4 4.1 Cause

5

6 The Dutch Safety Board determined the following main conclusions regarding the
7 cause of the accident to flight MH17:

- 8 • On 17 July 2014, a Boeing 777-200 with registration 9M-MRD, operated by a
9 licensed and qualified flight crew, was in cruise flight at flight level 330 close to
10 the Ukrainian / Russian Federation border and under the control of Ukrainian Air
11 Traffic Control.
- 12 • At 13.20:03 (15.20:03 CET) the structural integrity of the airworthy aeroplane
13 was compromised and the flight crew were immediately incapacitated by the
14 detonation of a 9M314-model warhead containing pre-formed fragments.
- 15 • The 9M314-model warhead carried by a 9M38-series missile was launched
16 from a Buk, Buk-M1 or Buk-M1-2 surface-to-air missile system in an area south
17 of Snizhne, Ukraine.
- 18 • The aeroplane consequently broke up in flight and fell to the ground near the
19 town of Hrabove, Ukraine. All 298 occupants lost their lives.
- 20 • Other scenarios that could have led to the disintegration of the aeroplane were
21 considered, analysed and excluded based on the evidence available.

22 4.2 Supporting conclusions

23 The Safety Board's investigation's main conclusion is supported by the following
24 material.

- 25 1. *Moment of the in-flight break-up* The establishment of the moment of
26 the in-flight break-up of the aeroplane is supported by the following findings:
 - 27 a. The Cockpit Voice Recorder and Flight Data Recorder stopped abruptly
28 at 13.20:03 (15.20:03 CET) because the power supply was interrupted.
 - 29 b. The automatic Emergency Locator Transmitter activated within 2
30 seconds of the Cockpit Voice Recorder and Flight Data Recorder
31 ceasing to record.
 - 32 c. The raw surveillance radar data from the Ukrainian Air Navigation
33 Service Provider and the radar screen video replay from the Russian
34 Federation's Air Navigation Service Provider showed that flight MH17

- 1 was in straight and level flight at FL330 until 13.20:03 (15.20:03 CET)
2 as it crossed the eastern part of Ukraine.
- 3 d. The raw data from Ukrainian Air Navigation Service Provider further
4 showed that flight MH17 was not transmitting any secondary
5 surveillance data from 13.20:03 (15.20:03 CET) onwards.
- 6 e. The Russian Federation's Air Navigation Service Provider radar screen
7 video replay of the combined primary and secondary radar data showed
8 target tracks from the aeroplane from 13.20:03 (15.20:03 CET) onward
9 which were the result of coasting and of falling debris.
- 10
- 11 2. *Sound peak* The Cockpit Voice Recorder recorded a 2.3 milliseconds sound
12 peak that originated outside the aeroplane from a position above the left side
13 of the cockpit, propagating from front to aft. The signal triangulation was
14 consistent with the impact of a warhead detonating outside and to the left of
15 the cockpit.
- 16
- 17 3. *No other aeroplanes* There was no evidence of other aircraft, civilian or
18 military, in the direct vicinity of flight MH17. According to radar data only three
19 other aeroplanes were in Dnipropetrovsk Control Sector 4 at the time of the
20 accident, all commercial air transport category aeroplanes. Two were flying
21 eastbound one was flying westbound. All were under control of Dnipro Radar.
22 At 13.20 (15.20 CET) the distance between the closest of these aeroplanes
23 and flight MH17 was 33 km.
- 24
- 25 4. *High-energy object damage* The damage observed on the forward
26 fuselage and cockpit area of the aeroplane indicates that there were multiple
27 impacts from a large number of high-energy objects from outside the
28 aeroplane. This caused sufficient structural damage to lead to an in-flight
29 break-up. The pattern of damage observed to the forward fuselage and cockpit
30 area of the aeroplane was not consistent with the damage that would be
31 expected from any known failure mode of the aeroplane, its engines or
32 systems.
- 33
- 34 5. *Fragments from one location* The aeroplane was struck by a large
35 number of small objects with different shapes and sizes; cubic and in the form
36 of a butterfly or bow-tie, moving at high velocity. The direction of both the
37 penetrating and the non-penetrating fragments originated from a single
38 location outside left and above the cockpit. The fragments caused damage to
39 the left side of the cockpit, the left engine cowling lip ring and the left wing tip.
40

- 1 6. *Damage pattern* The location, shape and boundaries of the damage to the
2 wreckage of flight MH17 and the number and density of hits on the wreckage
3 was consistent with fragmentation spray pattern damage of pre-formed
4 fragments from different shapes and sizes in a 9N314-model warhead carried
5 on the 9M38-series of missiles and installed on the Buk, Buk-M1 or Buk-M1-2
6 surface to air missile system.
7
- 8 7. *Pre-formed fragments* High-energy objects found in the aeroplane and
9 the bodies of the flight crew were mainly of unalloyed steel some of which
10 showed evidence of having passed through the aeroplane's exterior surface
11 and cockpit windows. Some of the objects showed traces of explosive
12 residues. There were no high-energy objects found in the bodies of
13 passengers. The objects found are consistent with the pre-formed fragments
14 in the 9N314-model warhead carried on the 9M38-series of missiles as
15 installed in the Buk, Buk-M1 of Buk-M1-2 ground to air missile system.
16
- 17 8. *Blast* Simulation of the blast after detonation of the 9N314-model warhead
18 creates an area of very high pressure (shock wave) near the cockpit. The
19 simulation showed that the blast causes structural damage to the aeroplane
20 structure up to 35 metres from the point of detonation. This was consistent
21 with the damage found on the aeroplane wreckage.
22
- 23 9. *Failure sequence* After the initial impact, the aeroplane broke up as follows:
24 a. There was an almost simultaneous separation of the cockpit from the
25 forward part of the fuselage when the high-energy objects penetrated
26 the cockpit. The cockpit from the forward part of the fuselage came to
27 rest 2.3 kilometres from the last position recorded on the Flight Data
28 Recorder.
29 b. The centre and rear part of the fuselage remained, initially, intact,
30 gliding aerodynamically and came to rest about 8.5 kilometres to the
31 east. The centre section travelled further than the rear part of the
32 fuselage. This part came to rest upside down in two parts with the
33 centre section beyond the empennage. The wreckage caught fire.
34 c. Some seats fell free of the fuselage, whilst others remained attached
35 to the floor.
36 d. The time between the start of the break-up and the impact with the
37 ground could not be accurately determined, but the centre and rear
38 parts of the aeroplane were estimated to have taken about 1 – 1.5
39 minutes to reach the ground. Other, lighter parts, will have taken
40 longer.

1 10. *Launch area* The missile was fired from within an area of about 250 km², that
2 is approximately 15 km by 17 km. This area is located to the south of, and
3 including, the village of Snizhne, Ukraine.

4 **4.3 Excluding other causes**

5 The Dutch Safety Board has investigated and analysed a number of different
6 possible causes of the accident. The Safety Board excludes the following matters
7 as having had a role in the accident to flight MH17.

- 8
- 9 1. *Crew* The flight crew members were properly licensed and qualified to
10 conduct the flight. There is no evidence that the crew handled the aeroplane
11 inappropriately nor were they under the influence of alcohol, drugs or
12 medicine.
- 13
- 14 2. *Airworthiness and flight plan* The aeroplane was in an airworthy
15 condition on departure from Amsterdam Airport Schiphol and there were no
16 known technical malfunctions that could affect the safety of the flight. An Air
17 Traffic Control flight plan had been filed and the flight crew had been provided
18 with an operational flight plan, NOTAMs, loading and weather information.
- 19
- 20 3. *Loading and cargo* The mass and centre of gravity of the aeroplane
21 were within authorised limits. There was no cargo classified as dangerous
22 goods on board the aeroplane, nor was any evidence found of explosion with
23 dangerous goods inside the aeroplane.
- 24
- 25 4. *Airspace* On 17 July 2014, airspace restrictions were in place for the
26 eastern part of Ukraine and parts of the bordering airspace in the Russian
27 Federation from ground level up to FL320. There were no restrictions for flight
28 MH17 to fly in Dnipropetrovs'k Flight Information Region planned flight levels
29 FL330 and FL350.
- 30
- 31 5. *Climb* The flight crew's decision not to accept the air traffic controller's
32 request to climb from FL330 to FL350 was determined to be a normal
33 operational consideration. Flying at the lower flight level had no influence on
34 the ability of the surface to air missile to engage the aeroplane.
- 35
- 36 6. *Weather* The weather on the planned flight route showed the presence of
37 thunderstorms moving north from the Black Sea. On request by the flight crew,
38 the air traffic controller authorised flight MH17 to circumnavigate this weather.
39 Flight MH17 did not deviate from the width of airway L980 by more than
40 approximately 1.5 NM. In the last recorded position at 13.20:03 (15.20:03

- 1 CET), flight MH17 was within the width of airway L980. The weather had no
2 influence on the accident to MH17.
3
- 4 7. *Pre-existing damage* There was no indication of a presence of pre-
5 existing airframe damage, including fatigue or corrosion or inadequately
6 performed repairs. There was no indication of engine failure.
7
- 8 8. *No warnings* Analysis of the Cockpit Voice Recorder and Flight Data
9 Recorder confirmed the normal functioning of the aeroplane's systems prior to
10 the accident. No warnings, failures or discrepancies were found in the data for
11 the accident flight. No aural alerts or warnings of aircraft system malfunctions
12 were heard on the Cockpit Voice Recorder. The communication between the
13 flight crew members gave no indication of any malfunction or emergency prior
14 to the occurrence. The engine parameters were consistent with normal
15 operation during the flight. The recorded aircraft data showed no malfunctions,
16 warnings, failures or discrepancies for the duration of the flight.
17
- 18 9. *Other weapons*
- 19 a. *Air to air gunfire* The high-energy object damage was not caused by air to
20 air gunfire because the number, the size and type of high-energy objects
21 impact damage is not consistent with gunfire impact damage and the
22 trajectories of the high-energy objects that struck the aeroplane are not
23 parallel but converge to a single location close to, and above, the
24 aeroplane.
- 25 b. *Air to air missile* The high-energy object damage was not caused by an
26 air to air missile because there was no military aircraft in the area of flight
27 MH17 to launch such a missile. Air to air missile warheads do not have
28 butterfly or bow-tie shaped fragments, and an infra-red guided missile
29 would have caused damage to the aeroplane nearer the engines.
- 30 c. It is extremely improbable that the aeroplane was struck by more than one
31 weapon system simultaneously.
32
- 33 10. *Other scenarios* Other possible scenarios that could have led to the
34 disintegration of the aeroplane were considered and analysed. These
35 scenarios were an on-board fire or a fuel tank explosion, the detonation of an
36 explosive device inside the aeroplane, lightning strike, and impact by a meteor
37 or space debris re-entering the atmosphere. All of them were excluded based
38 on the available evidence.

Annex 205

AstroAWANI, #RememberingMH17: The Funeral Of Wan Amran Wan Hussin

(3 September 2014)



#RememberingMH17 : The Funeral Of Wan Amran Wan Hussin

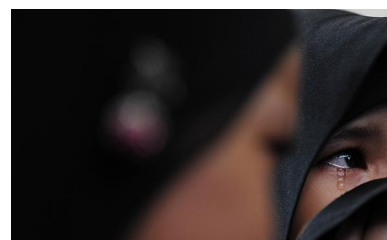
September 3, 2014



5/17

Relatives and friends of captain Malaysia Airlines flight MH17, Captain Wan Amran Wan Hussin do the special prays at Shah Alam mosque.
AWANI/SHAHIR OMAR

Foto



#RememberingMH17 : The funeral of Wan Amran Wan Hussin | Astro Awani



Annex 206

New Straits Times, *MH17: Two more remains to arrive on Sunday: Liow* (22 August 2014)

MH17: Two more remains to arrive on Sunday: Liow



By [Nuradilla Noorazam](#) - August 22, 2014 @ 11:42am



Federal Territory Mufti Dr Zulkifli Al Bakri leads the solat jenazah for Ahmad Hakimi Hanapi (left) and flight attendant Nur Shazana Mohamed Salleh at Putra Mosque in Putrajaya.

PUTRAJAYA: The remains of Malaysia Airlines (MAS) flight MH 17 co-pilot Ahmad Hakimi Hanapi, 29, was finally laid to rest at the Muslim burial ground, here in Presint 20 at about 3pm.

His remains was buried alongside crew member Nurshazana Mohamed Salleh, 31, after the solat jenazah (final prayers) at the Putra Mosque in Presint 2 at about 12:35pm.

Nurshazana's body was buried first before Friday prayers upon her family's request, while Ahmad Hakimi was buried later following requests from relatives and his MAS colleagues.

A minor commotion broke out over Ahmad Hakimi's burial time as a uniformed pilot, believed to be his colleague, had insisted that the burial be postponed pending the arrival of other mourners.

The shouting led to a slight commotion as several relatives prevented the organisers from proceeding with the burial.

It was understood that while waiting for the mourners to arrive, those present at the cemetery conducted another solat jenazah for Ahmad Hakimi's remains in a surau there.

Ahmad Hakimi's wife Asmaa Aljuned, was also said to have seen his body after the coffin was unsealed in the surau.

The sealed coffin draped with Jalur Gemilang was carried by eight pallbearers from the Royal Malay Regiment.

The coffins were slowly lowered down using four strands of ropes.

Many were seen wiping away tears and some were wailing as the soil began covering the graves.

Additional reporting by Hani Shamira Shahrudin. Azim Idris, Rahmat Khairulrijal.

Annex 207

BBC News, *MH17 crash: My revealing fragments from east Ukraine* (16 April 2015)

MH17 crash: My revealing fragments from east Ukraine

 [bbc.com/news/world-europe-32283378](https://www.bbc.com/news/world-europe-32283378)

By Jeroen Akkermans Dutch RTL News
correspondent



Image copyright Jeroen Akkermans

Image caption Firefighters put out flames in the main fuselage of flight
MH17

When a journalist investigates a crime scene something is wrong. It is not his job. We leave the search for evidence in the hands of the police for a good reason.

But on 17 July 2014, Malaysia Airlines flight MH17 exploded over eastern Ukraine and the remains of 298 passengers and crew fell in a warzone with frontlines instead of police lines.

I visited the site several times and, after months of seeing evidence lying at the scene undisturbed, I decided to take some small fragments with me. At least three of them were later linked to a surface-to-air missile by forensic analysis and experts.

360 degree view of fragment linked by analysts to warhead used by Buk missile launcher

Media caption 360 degree view of a fragment linked by analysts to a Buk warhead

Men with guns

The victims came from several countries; 196 were Dutch citizens and my country was in shock.

The wreckage of MH17 was spread over more than 35 sq km (13.5 sq miles) and, when I first arrived, flags had already been put in place locating where the body parts were.

There was no order, just men with guns. But nobody stopped us entering and filming what was dubbed "the biggest crime scene in the world".

Everywhere lay desolate parts. It was a scene of war; death; hell.

I took pictures of serial numbers, holes and craters in an attempt to understand the magnitude of it all.

Russian-backed separatists had been fighting the Ukrainian army for control of the MH17-zone and the entrance to the area was obstructed by roadblocks manned by armed rebels.



Image copyright Jeroen Akkermans

Image caption Part of the front of the plane landed in the main street of Petropavlivka

Investigators from the Netherlands arrived four days later.

By the time of their arrival, Ukrainian firemen had retrieved most of the bodies and body parts from the burning sun, put them in plastic bags and on to a waiting train with refrigerated carriages.

Soon the Dutch investigators were pulled out. Dutch authorities considered the warzone too dangerous for collecting evidence.

Nevertheless the Netherlands was asked to take over the investigation from Ukraine.

Initially the Dutch saw it as a logical and necessary step.

When lines of coffins were flown back and driven by hearse to an army barracks, our small country was in tears.

It felt as if everyone knew a passenger on board MH17.

The Dutch expected nothing less than swift conclusions from their investigators. But the investigators' hands were tied by commitments to Ukraine - even though its army had not been ruled out as a suspect - and by a formal refusal to negotiate with separatists.



Image copyright Jeroen Akkermans

Image caption A preliminary Dutch report suggested the plane was downed by a large number of high-velocity objects

The delay in collecting the wreckage and reports of body parts still at the scene left a population in mourning increasingly angry and frustrated.

In September 2014 a preliminary report indicated MH17 was brought down by a great number of objects piercing the plane with high velocity; there was no evidence of human or technical failure.

It was criticised as too little, too late.

Personally, I saw the report as a clue that many of these objects might still be in the wreckage.

But three months after the crash, still nobody had collected possible evidence.

No investigators. No police lines.



Image copyright Jeroen Akkermans

Image caption Jeroen Akkermans with some of the fragments from the crash scene in eastern Ukraine

Early in November, on my third visit to the MH17 zone, I took the decision to search for fragments that could not belong to a Boeing or the cargo. I picked up around 20 "suspect" small pieces.

My main suspect was a fragment that looked to me like cluster ammunition: rusty, heavy metal with sharp edges.

I recognised this kind of ammunition from other warzones.

A couple of days after I had left the area, Dutch investigators finally started transporting the first parts of wreckage to the Netherlands.

Getting my fragments out of the country was one thing, getting it analysed was another.

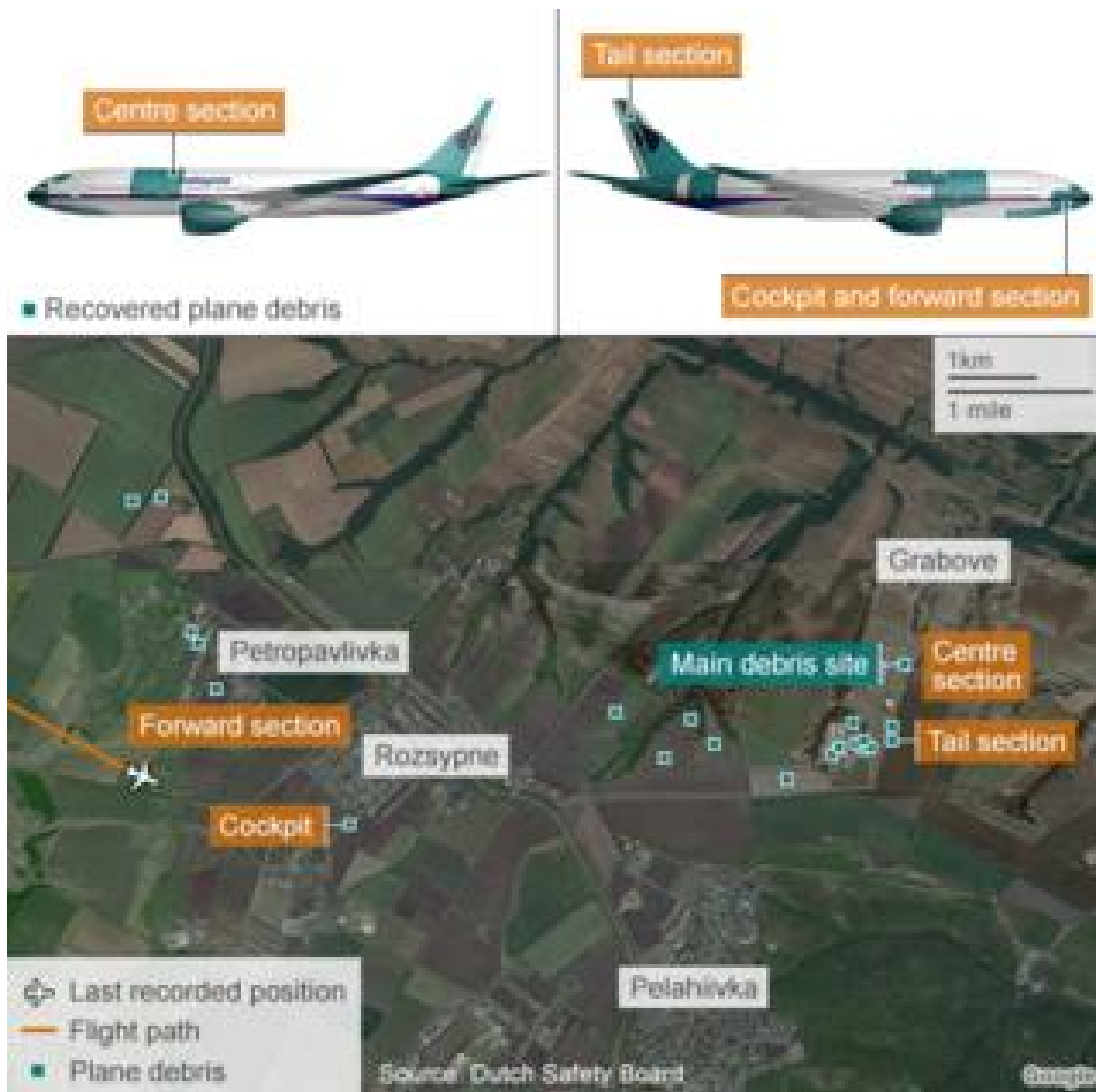


Image caption Parts of the plane were found 8km (5 miles) from the main debris site

[Jeroen Akkermans' report for Dutch RTL News](#)

[What we know about MH17 crash](#)

[Investigators appeal for Buk missile evidence](#)

[Air disaster that touched a nation](#)

Forensic back-up

The theory about the downing of MH17 is divided into two camps.

One side is convinced a Ukrainian SU-25 fighter jet shot MH17 down.

The opposing side believes it must have been a Russian surface-to-air missile launched from separatist-held territory.

I spoke to many experts in different countries on possible air-to-air and surface-to-air weaponry and showed them the fragments.

All ruled out air-to-air ammunition. Instead, they were convinced at least three of the pieces I had taken had the markings of a surface-to-air missile. Fired from a Russian Buk missile launcher, perhaps?

Forensic back-up is both essential and expensive.

I was allowed to witness forensic analysis of a piece where the time-consuming peeling of the coating revealed the Cyrillic letter Л.

Media
caption Extensive
forensic analysis
was required to
remove the
coating from
one fragment

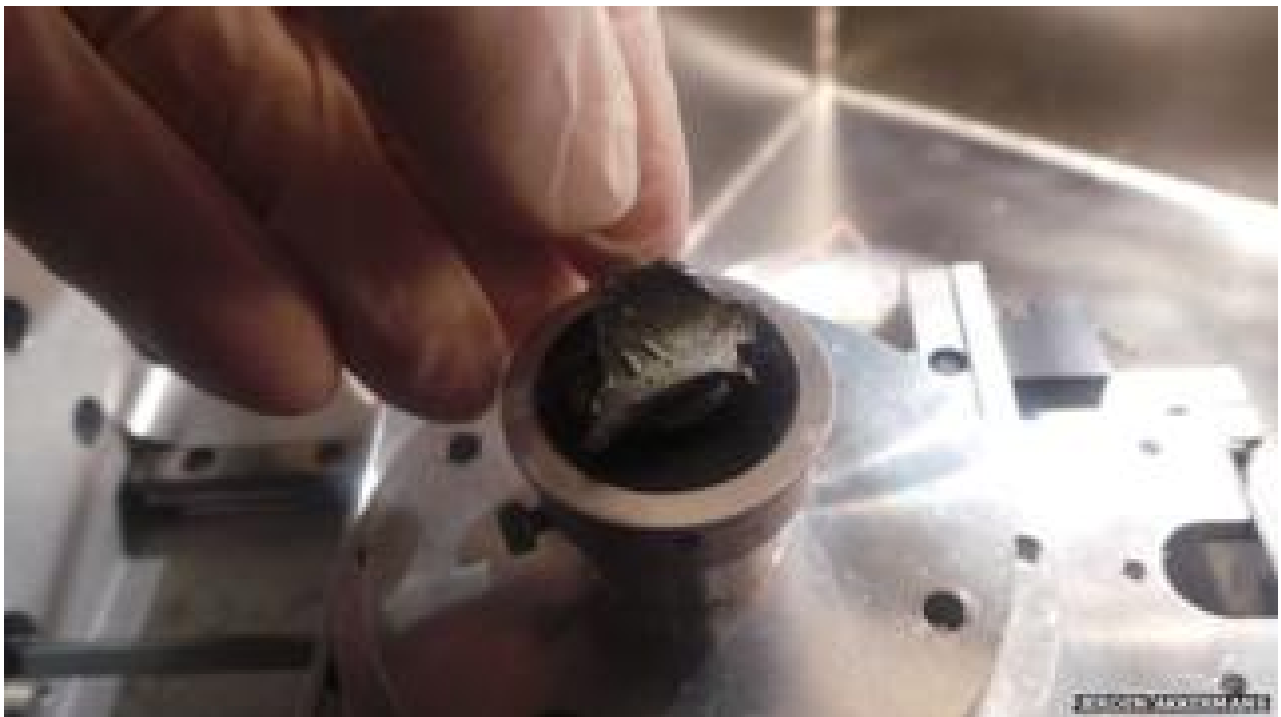


Image copyright Jeroen Akkermans

Image caption Eventually the Russian letter Л and number 2 became clear

'Pure mathematics'

The rusty fragment - my main suspect - indeed turned out to consist of the heavy metal you would expect for this kind of ammunition, with damage typical of a fragment that had pierced another metal-object with high velocity.

Forensic analysis and experts from British defence analysts IHS Jane's linked the damaged, hour glass-shaped fragment to a 9N314 warhead, which arms at least one type of the Buk system's missiles.

German missile expert Robert Schmucker went through all the data.

"Looking at the damage, the velocity, the height and the fragments, it all adds up to a Buk missile, to me it is pure mathematics," he told me.

After four months of investigation, for the first time we were able to present the public with physical evidence of a Buk.

Far bigger steps to the truth about MH17 still need to be taken. Who is responsible and will they be brought to justice? Quite frankly, I am not optimistic.

But was I entitled to do what I did?

Since my work was broadcast, there has been a public debate in the Netherlands about whether or not a journalist can take evidence from a crime scene.

Some have called me a thief obstructing the rule of law.

I see it instead as my journalistic obligation.

The search for truth is my job. Many agreed.

Unexpected backing came from Dutch Vice Prime Minister Lodewijk Asscher, who told a news conference: "RTL News and Jeroen Akkermans are free to pursue their own investigation."

I have since handed the fragments over to the Dutch authorities. It will be part of their investigation.

298 victims from 10 countries



Image copyright Reuters

- Netherlands: 196
- Malaysia: 42
- Australia: 27
- Indonesia: 11
- UK: 10
- Belgium: 4
- Germany: 3
- Philippines: 3
- Canada: 1
- New Zealand: 1

Jeroen Akkermans is a correspondent for Dutch RTL News. His extensive collection of photographs covering the MH17 disaster can be found on Flickr.

Annex 208

RT, Serial numbers of missile that downed MH17 show it was produced in 1986, owned by Ukraine - Russia (17 September 2018)

Serial numbers of missile that downed MH17 show it was produced in 1986, owned by Ukraine - Russia

RT

The serial numbers found on debris of the Buk missile which downed Malaysian Airlines Flight MH17 over eastern Ukraine show it was produced in 1986, the Russian military said. The projectile was owned by Ukraine, they added.

There are two serial numbers found on fragments of the missile, which shot down the passenger airliner in June 2014 according to an international team of investigators led by the Netherlands. The numbers were marked on the engine and the nozzle of the missile.

The Russian military on Monday said they had traced them to a missile which had the producer serial number 8868720.

Speaking to journalists, Gen. Nikolay Parshin showed a document trail of the Buk missile. According to the documents, some of which have been declassified for the presentation, it was produced at a military plant in Dolgoprudny in the Moscow region in 1986.

The missile was shipped from the plant on December 29, 1986 and delivered to military unit 20152 located in what is now Ukraine. It is now called 223rd anti-aircraft defense regiment of the Ukrainian armed forces, the report said. The unit took part in Kiev's crackdown on rebels in eastern Ukraine in June 2014, the general said.

The evidence disproves the accusations by Ukraine and some other parties, which claim that a missile fired by a launcher, secretly delivered from Russia, was responsible for the downing of MH17, the Ministry of Defense report said. All the materials have been sent to the Dutch investigators, the Russian military added.

The Russian military also challenges video footage used by the UK-based group [Bellingcat](#), which calls itself a citizen journalism organization, to back its allegations about the delivery of the Buk launcher from Russia. The Defense Ministry showed a video clip with some of the footage, highlighting inconsistencies, which it said proved that the footage had been manipulated to place images of the launcher into background which were not in the original.

The Bellingcat investigation was featured in the latest update by Dutch prosecutors involved in the MH17 investigation, prompting them to directly accuse Russia of providing the launcher and the missile. The Russian military said it decided after this to study the purported trail of photo and video evidence showing the path of the launcher in detail. The Russian video showed an example of how an Abrams tank can be shown to be carried by a trailer in the streets of Ukraine in the same way.

The third part of the presentation was what the Russian officials called a record of intercepted communications of Ukrainian officials discussing, in 2016, the risk of flying through restricted airspace over Ukraine. Among a barrage of complaints one phrase says unless the restrictions are respected *"we'll f***ing f**k up another Malaysian Boeing"*.

The Russian military say the complaints came from Col. Ruslan Grinchak, who serves in a brigade responsible for radar control in Ukrainian airspace. His unit tracked the MH17 flight in 2014, so he may have information which is not publicly available about the disaster, and his outburst may have been factual rather than hyperbolic, they suggested.

Gen. Igor Konashenkov, who hosted the briefing, said that Ukraine failed to provide radar data from its stations to the Dutch investigators. He also suggested that archive documents from the Ukrainian unit, which received the Buk missile back in 1986, would be of use to the probe, unless Kiev claims that they are no longer available. He stressed rules are in place which mean that such documents should still be stored in Ukraine.



The Russian military said they had no evidence to disprove a scenario, involving the Ukrainian rebels capturing the missile from the Ukrainian army, but pointed out that Ukrainian officials publicly denied anything like this had ever happened.

Malaysian Airlines flight MH17 was shot down over eastern Ukraine on July 17, 2014, falling in the rebel-held part of the country. The crash claimed the lives of 283 passengers and 15 crew members, most of them Dutch nationals. Russia was blamed by Western media in the first days after the tragedy, even before any evidence had been collected on the ground.

The Joint Investigation Team, which is lead by the Netherlands, includes Ukraine, but not Russia. Moscow [believes](#) that the investigation is biased, failing to obtain all necessary evidence from Ukraine and relying on questionable sources while ignoring evidence provided by Russia, which doesn't fit the theory [favored](#) by Kiev. For instance, Moscow said a theory was never tested that the airliner could have been downed by a fighter jet spotted by Russian radar stations near flight MH17. The theory was later proven false by the discovery of debris from the Buk rocket.

Think your friends would be interested? Share this story!

Annex 209

Federal Bureau of Investigation, *Richard Reid's Shoes*

Richard Reid's Shoes | Federal Bureau of Investigation



This is the pair of shoes Richard Reid—also known as the shoe bomber—tried to detonate. (Click image to view high-res.)

On December 22, 2001—just months after the 9/11 attacks—Richard Reid boarded American Airlines Flight 63 from Paris to Miami with homemade bombs hidden in his shoes.

During the flight, Reid tried to detonate his shoes, but he struggled to light the fuse. Crew members and passengers noticed and restrained him.

The plane diverted to Logan International Airport in Boston, and Massachusetts State Police officers took Reid into custody. Reid told FBI agents that he made the shoes himself.

On October 4, 2002, Reid pleaded guilty to eight terrorism-related charges. A judge sentenced him to life in federal prison.

This is the pair of shoes Reid—also known as the “shoe bomber”—tried to detonate. FBI bomb techs determined that the shoes contained about 10 ounces of explosive material.

During a preliminary hearing, an FBI agent revealed how dangerous the homemade bomb was. She said that bomb techs determined that the bomb would have blown a hole in the plane’s fuselage and caused the plane to crash if it had detonated.

Annex 210

The New York Times, *Explosive on Planes Was Used in Past Plots* (30 October 2010)

22.02.2023, 23:43

Packages' Explosive PETN Used in Past Plots - The New York Times

The New York Times

<https://www.nytimes.com/2010/10/31/world/middleeast/31petn.html>

Explosive on Planes Was Used in Past Plots

By Kenneth Chang

Oct. 30, 2010

Pentaerythritol tetranitrate, or PETN, the explosive found in two bombs hidden in printer cartridges that were being shipped via jets from Yemen to the United States, is a hallmark of earlier Qaeda-linked terrorism attempts on airplanes.

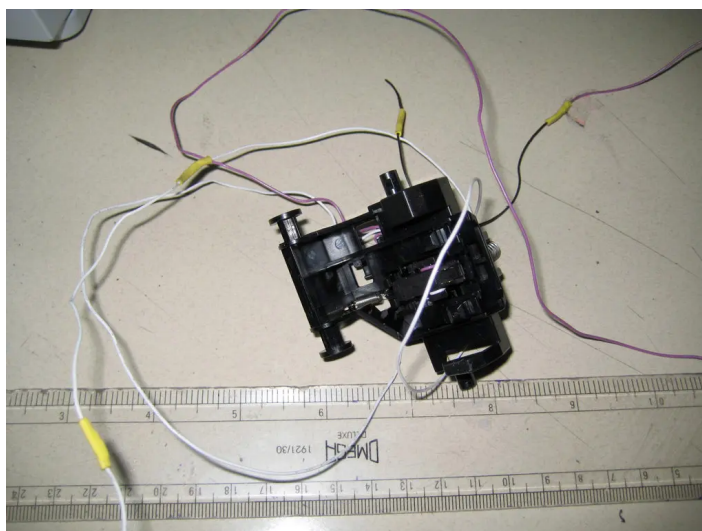
In 2001, PETN was found hidden in the shoes of Richard C. Reid during an American Airlines flight. Last Christmas, Umar Farouk Abdulmutallab had three ounces of PETN hidden in his underwear on a Northwest flight from Amsterdam to Detroit.

An assassination attempt in August 2009 on Saudi Arabia's intelligence chief, Prince Mohammed bin Nayef, also employed PETN. Al Qaeda in the Arabian Peninsula, an arm of the terrorist network, claimed responsibility for the attack, which took the life of only one person, the suicide bomber's.

But other terrorist groups have also used PETN, and the presence of the explosive itself does not decisively point to Al Qaeda. "That's a very common explosive," said Jimmie C. Oxley, a professor of chemistry at the University of Rhode Island. "There's no reason to think a lot of people didn't have access to do that."

PETN, a white powder that was introduced after World War I, belongs to the same chemical family as nitroglycerin. It is about 70 percent more powerful than T.N.T., and is stable. PETN generally does not explode when dropped or set on fire. Usually, a strong shock wave from a blasting cap or an exploding wire detonator is needed to set it off.

Those properties make it well suited for a variety of commercial applications. PETN is a major ingredient of the plastic explosive Semtex and is used in detonation cables.



Part of a toner cartridge found onboard a cargo plane in Dubai. Dubai Police, via European Pressphoto Agency

For terrorists, PETN is an attractive choice for package bombs. Its stability means it is unlikely to explode prematurely, but at its destination, it will go off with deadly force when detonated. (Conversely, the stability of PETN also thwarted the attacks of Mr. Reid and Mr. Abdulmutallab, who were not able to detonate their explosives.)

Dubai officials said that the printer cartridge bomb intercepted there on Friday included lead azide, an explosive to detonate the PETN, and a cellphone circuit, presumably to allow the bomb to be set off remotely. Neal Langerman, president of Advanced Chemical Safety, a consulting firm in San Diego, said it appeared "to be a fairly sophisticated device."

Judging from photos of the Dubai bomb, Dr. Oxley estimated that the printer cartridge contained about two pounds of PETN.

The British home secretary, Theresa May, said Saturday that the second bomb, intercepted in Britain on Friday, contained enough explosive to bring down a plane.

The target of the bombs remains unclear; they could have been directed at the synagogues or Jewish community centers in Chicago to which they were addressed.

22.02.2023, 23:43

Packages' Explosive PETN Used in Past Plots - The New York Times

Placement of a bomb in a plane can be as important as its size in determining the amount of damage it could cause, Dr. Oxley said. While the printer cartridge contained more PETN than Mr. Reid's shoes or Mr. Abdulmutallab's underwear, the bomb maker could not be certain where in the airplane the package would be located. Mr. Reid and Mr. Abdulmutallab tried to detonate their devices close to the wall of the respective planes on which they were flying, to increase chances that the explosion would blow a hole in the aircraft.

"Last year, the guy had more control," Dr. Oxley said, referring to Mr. Abdulmutallab. But the printer cartridge bomb, she said, had so much more PETN that "my guess, and this is only a guess, it may have had a higher probability" of taking down an airplane.

Dr. Langerman said it was curious that the two most recently intercepted devices apparently were different in design. That may indicate that the explosive makers had different targets in mind.

Annex 211

The Kyiv Independent, *British instructors train Ukrainian military to operate NLAW tank killers*
(PHOTOS) (25 January 2022)

British instructors train Ukrainian military to operate NLAW tank killers (PHOTOS)

Illia Ponomarenko



A British military serviceman instructs his Ukrainian colleagues in operating NLAW anti-tank grenade launchers at the Yavoriv training range in Lviv Oblast on Jan. 25, 2022 (Army Inform)

Ukrainian military service members have started mastering NLAW anti-tank grenade launchers [provided recently](#) as defense assistance to Kyiv by the United Kingdom amid the looming threat of all-out assault by [Russia](#).

The studies began on Jan. 25 at the Ukrainian Armed Forces' 184th Training Center in Lviv Oblast, under the guidance of British personnel, part of the U.K.'s training mission in Ukraine, Operation ORBITAL, according to the military.

"Very soon, the first several dozens of Ukrainian military service members will be able to effectively employ these anti-tank missile systems and also train other Ukrainian soldiers," said Lieutenant General Pavlo Tkachuk, the Ground Forces Academy principal in charge of the training center.

The U.K.'s Secretary for Defense Ben Wallace [announced](#) the decision to provide Ukraine with NLAW anti-tank systems was announced by the in an address to the House of Commons on Jan. 18.





Lieutenant General Pavlo Tkachuk, the Ground Forces Academy principal (ArmyInform)

Shortly following the announcement, nearly 2,000 grenade launchers were transferred to Kyiv by Royal Air Force transport aircraft, with minimal public awareness.

The defensive weapons were sent as part of the U.K.'s additional assistance package for Ukraine. The U.K. also sent a small number of military instructors to provide appropriate training for Ukrainian troops.

Afterwards, Wallace also said London was considering sending even more assistance to Kyiv as Russia had failed to de-escalate despite intense Western diplomatic efforts.

As of January, Russia is reported to have massed over 120,000 troops in and around Ukraine, raising fears of a large-scale invasion and occupation.

The NLAW is known as a type of man-portable, short-range, fire-and-forget missile system operated by the U.K. and a number of other militaries across the world.

It is a Swedish-British project designed by Saab Bofors Dynamics in the early 2000s and manufactured by Thales Air Defence in Britain.

According to the arms developer, these are easy-to-use, disposable tank killers most suitable for the infantry. Launchers weighing 12.5 kilograms have a combat range between 20 and 800 meters, and they require just 5 seconds to detect and engage a target.

Similar to American-made FGM-148 Javelin systems, the NLAWs supplement Ukraine's arsenal of highly-mobile tank killers at the right time for repelling Russian attacks in restrictive terrain,

British instructors train Ukrainian military to operate NLAW tank kille... <https://kyivindependent.com/national/british-instructors-train-ukraini...>

especially in intense urban warfare.



A NLAW grenade launcher demonstrated at the Ukrainian Armed Forces' 184th Training Center in Lviv Oblast (Army Inform)

Annex 212

Reuters, *Ukraine holds military drills with U.S. forces, NATO allies* (20 September 2021)

Ukraine holds military drills with U.S. forces, NATO allies

2 minute read September 20, 2021 11:59 PM GMT+3 Last Updated a year ago



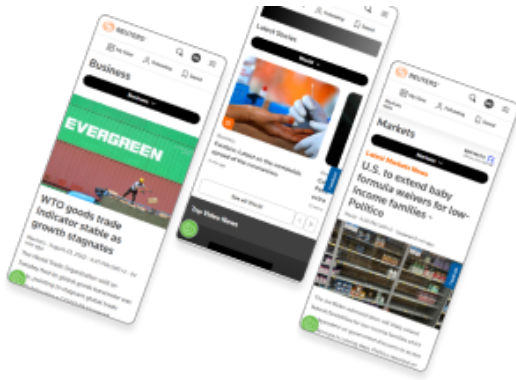
[1/5] Servicemen of the U.S. and Ukrainian armies attend the opening ceremony of the "RAPID TRIDENT-2021" military exercise at Ukraine's International Peacekeeping Security Centre near Yavoriv in the Lviv region, Ukraine September 20, 2021. REUTERS/Gleb Garanich

YAVORIV, Ukraine, Sept 20 (Reuters) - Ukraine began joint military exercises with U.S. and other NATO troops on Monday, at a time when neighbouring Russia and Belarus have been holding large-scale drills that alarmed the West.

Ukraine, at war with Russia-backed separatists since 2014, has long sought closer integration with Western militaries in the hope of one day joining NATO.

A Ukrainian defence ministry spokesman said 4,000 Ukrainian troops and 2,000 foreigners would participate in the "RAPID TRIDENT - 2021" drill, due to run until Oct. 1.





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"I believe that each of you will concentrate all your knowledge, all your efforts in order to show the aggressor countries that they have no chance," Ihor Palahniuk, training commander of Ukraine's forces, said at the opening ceremony at Ukraine's International Peacekeeping Security Centre near Yaroviv in the country's west.

The U.S. military said in a statement the drill involved a brigade combat team of the Washington National Guard, deployed in Ukraine since April as part of a multi-national training force. Troops from 12 countries in total would be involved, "to enhance interoperability among allied and partner nations" and demonstrate readiness.

Latest Updates

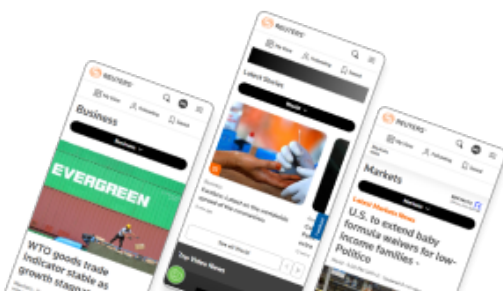
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The exercise comes on the heels of huge war games staged by Moscow near NATO and EU borders of Russia and Belarus in recent weeks, which Russia says involved 200,000 troops. Kyiv and NATO also accuse Russia of having deployed extra troops this year near Ukraine's frontiers. [read more](#)

On Monday, around 20 Russian warships began large-scale live fire exercises in the Black Sea.

In June, Ukraine, the United States and other allies held a naval exercise, Sea Breeze, in the Black Sea and southern Ukraine, despite Russian calls for the drills to be cancelled.

In July, Ukraine, the United States, Poland and Lithuania held another drill involving more than 1,200 troops. [read more](#)



Annex 213

Gallup, *Russian Language Enjoying a Boost in Post-Soviet States* (1 August 2008)

GALLUP®

AUGUST 1, 2008

Russian Language Enjoying a Boost in Post-Soviet States

Attitudes more favorable in Georgia, Moldova, and Armenia

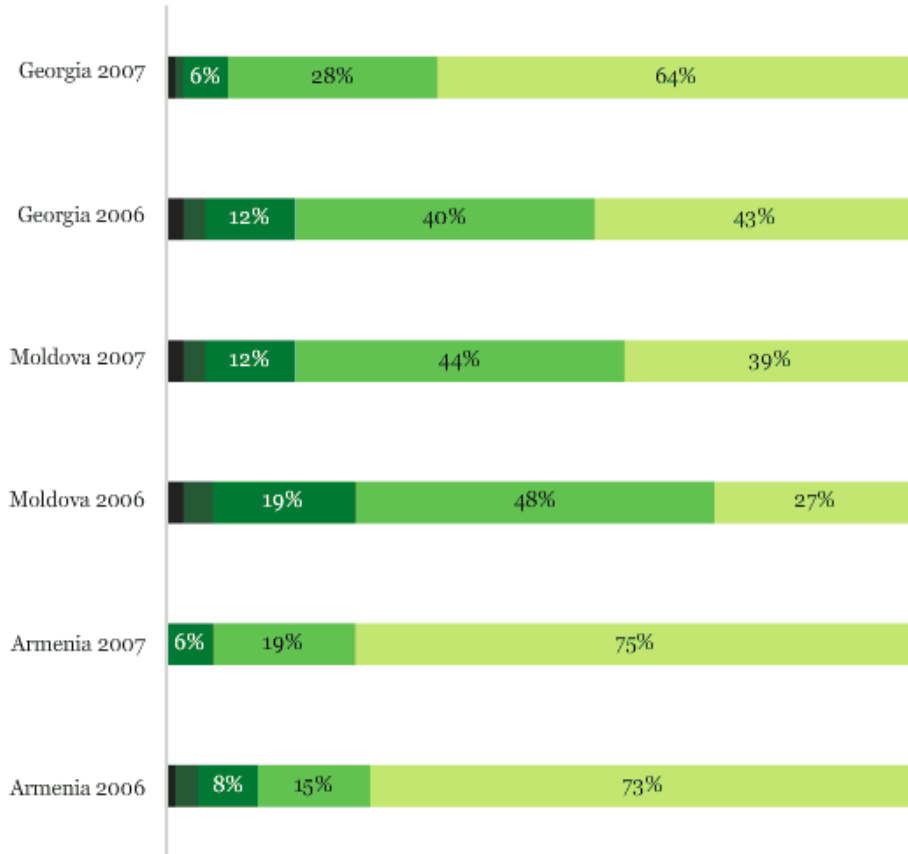
BY SERGEI GRADIROVSKI AND NELI ESIPOVA

This article is the first in a two-part series on attitudes toward the Russian language in post-Soviet states. This first article reviews regional opinions toward learning Russian; the second evaluates regional migration and the impact on emerging European and Central Asian markets.

WASHINGTON, D.C. -- Former president Vladimir Putin decreed 2007 as "The Year of the Russian Language." The declaration was not merely ceremonial -- the number of Russian speakers has declined annually since the collapse of the Soviet Union. Gallup Polls reveal increasingly favorable attitudes toward learning the Russian language in several post-Soviet states, most notably in Georgia, Moldova, and Armenia.

How important do you think it is for children in this country to learn Russian?

Don't know/Refused
 Not important at all
 Not too important
 Somewhat important
 Very important



GALLUP POLL

Russia is currently one of the top 10 spoken languages in the world, but some estimate the number of people speaking Russian is declining. In many Central and Eastern European countries, older generations often associate Russian with compulsory lessons under communism. Throughout the post-Soviet years, Moscow has stressed the significance of the Russian language as one of communication and trust, of great literature, and of global science. In contrast, some opponents have branded it as a remnant of imperialism, and they have encouraged a new generation toward fluency in their own national language.

Despite the prolonged tension between Moscow and Tbilisi, in Georgia, 64% of respondents said it is "very important" for Georgian children to learn Russian, compared with the 43% who said so in 2006. In March 2007, shortly before the Gallup survey, the Russian Embassy in Tbilisi expressed interest in opening a

Russian language school in the hopes of renewing declining interest in the language among Georgian youth.

In Moldova, the percentage of respondents saying it is very important for their children to learn Russian rose 12 percentage points, from 27% to 39%, between 2006 and 2007. This likely reflects a thaw between Moscow and Chisinau (Kishinev) resulting from the return of Moldovan wines and meat to the Russian domestic market. Russia lifted the trade ban, which had put Moldova's economy in jeopardy, in November 2006.

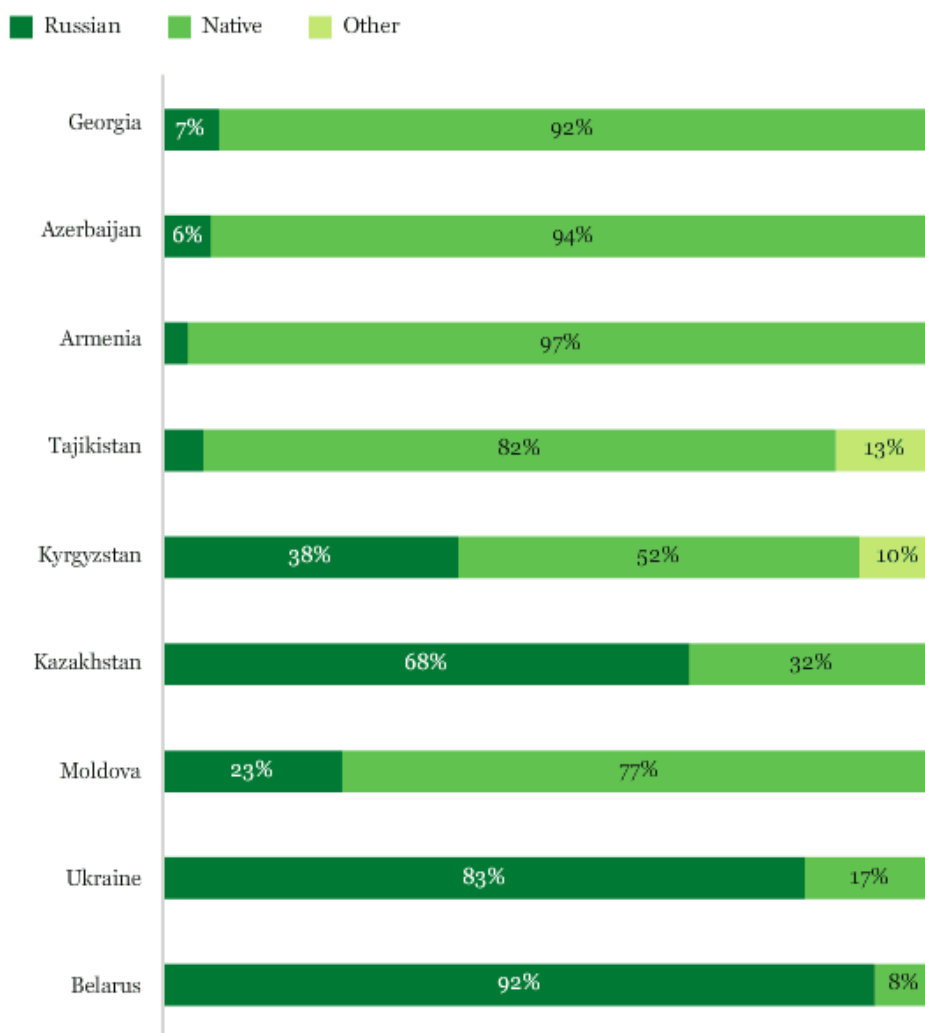
Despite the small percentage of Armenian respondents (3%) who asked to take the survey in Russian, the percentage of respondents' saying it is very important for their children to learn Russian increased two points (from 73% to 75%) from 2006 to 2007.

Russian as the Mother Tongue

Gallup Poll results underscore the prevalence of national language use over Russian; when asked in what language they preferred to conduct the Gallup interview, only respondents in the Ukraine, Kazakhstan, and Belarus overwhelmingly chose Russian. Ukraine and Kazakhstan retain larger Russian populations. In Belarus, where the interethnic differences between the Belarusians and Russians are minimal, Russian is one of the official languages.

Respondents Preferred Language for Survey

Percentage of respondents who chose to take the survey in Russian.



GALLUP POLL

Bottom Line

"The Year of the Russian Language" was a momentous attempt to maintain the status of Dostoyevsky's language. But based on official language status, Russian has fallen substantially since the collapse of the Soviet Union. The Russian language's official status is granted in only three of the countries surveyed -- Belarus, Kazakhstan, and Kyrgyzstan. In three other countries -- Moldova, Ukraine, and Tajikistan -- Russian is identified as a "language of interethnic communication."

Survey Methods

Results are based on face-to-face interviews conducted in 2006 and 2007 with

approximately 1,000 residents, aged 15 or older, in each country. For results based on the total sample of national adults, one can say with 95% confidence that the maximum margin of sampling error is ± 3 percentage points. In addition to sampling error, question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of public opinion polls.

Ian T. Brown contributed to this report.

RELEASE DATE: August 1, 2008

SOURCE: Gallup <https://news.gallup.com/poll/109228/russian-language-enjoying-boost-postsoviet-states.aspx>

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Annex 214

Opinio Juris, *Kevin Jon Heller, MH17 Should Be Framed as Murder, Not as a War Crime*
(11 August 2014)

MH17 Should Be Framed as Murder, Not as a War Crime

11 Aug MH17 Should Be Framed as Murder, Not as a War Crime

It has become quite common to describe the downing of MH17 as a war crime. In late July, for example, Navi Pillay, the UN High Commissioner for Human Rights, [said](#) that “[t]his violation of international law, given the prevailing circumstances, may amount to a war crime.” More recently, William Burke-White has said that, [for framing purposes](#), “[t]he time has come for governments and international organizations to call the attack on MH17 a probable war crime.”

[I]f whoever launched the missile did so with the intent of killing the civilian passengers aboard MH17, the act was unmistakably a war crime.

Even if the objective was to strike a Ukrainian transport aircraft, the act likely constitutes a war crime. Fundamental to the law of war, including the law applicable in non-international armed conflicts, is the [principle of distinction](#) – the requirement that fighting parties distinguish between civilian and military targets. In the [words of the International Committee of the Red Cross](#), that duty of care includes doing “everything feasible to verify that targets are military objectives.”

In this case, many steps could easily have been taken to differentiate MH17 from a military-transport plane, including visual identification (perhaps with binoculars), radar-signature analysis, and a check of the civilian aircraft transponder-code broadcast. If, as seems likely, these basic steps were not taken, even an accidental strike on MH17 would constitute a war crime.

If the Ukrainian separatists did indeed intend to kill civilians, Bill and Navi Pillay are absolutely right to describe the attack as a war crime – in this case, murder and/or intentionally directing attacks at civilians or civilian objects (to use the Rome Statute’s terminology). But [everything we know to date](#) about the attack indicates that the separatists honestly believed MH17 was a Ukrainian military transport, not a civilian airplane. If so, that changes the legal assessment of the attack considerably. The attack would still qualify as murder under domestic law – but it would not qualify as a war crime, under either the Rome Statute or the jurisprudence of the ICTY. (The latter likely representing the customary definition of the war crimes of murder and attacking civilians or civilian objects, which most states would apply in a prosecution based on universal jurisdiction.)

Let’s go in order. The problem with describing the attack on MH17 as a war crime under the Rome Statute is Article 32(1), which provides that “[a] mistake of fact shall be a ground for excluding criminal responsibility only if it negates the mental element required by the crime.” The *actus rei* of the war crime of murder and the war crime of intentionally directing attacks at civilians or civilian objects each include a circumstance element: the individuals attacked must qualify

as civilians (or as otherwise protected persons). The relevant *mens rea* for circumstance elements is knowledge, pursuant to Art. 30(3) of the Rome Statute: “For the purposes of this article, ‘knowledge’ means awareness that a circumstance exists.” Black-letter criminal law provides that an honest mistake of fact negatives any *mens rea* that requires subjective awareness. So if the separatists honestly believed they were attacking a Ukrainian military transport, they were not aware that they were attacking civilians. In which case they could not be convicted of either the war crime of murder or the war crime of intentionally directing attacks at civilians or civilian objects.

The result is no different under the ICTY’s jurisprudence, even though the ICTY applies a lower *mens rea* to the war crimes of murder and attacking civilians. A complete discussion of the issue is beyond the scope of this post; suffice it to say here that an accused will be responsible for either war crime only if he was reckless toward the possibility that the objects of his attack qualified as civilian. (*Dolus eventualis* in civil-law terminology.) Recklessness is a subjective mental state in the ICTY’s jurisprudence; as the Trial Chamber noted in *Brdjanin*, specifically in the context of murder, “the threshold of *dolus eventualis*... entails the concept of recklessness, but not that of negligence or gross negligence.” Like the ICC, the ICTY [recognizes](#) mistakes of fact. As a result, the separatists could not be convicted of either the war crime or murder or the war crime of attacking civilians under ICTY jurisprudence if they honestly believed they were attacking a Ukrainian military transport: although that belief might have been negligent, even grossly negligent, its honesty meant that they were not subjectively aware they were attacking civilians.

The bottom line is that the accidental downing of civilian airplane based on an honest belief that the airplane was a military objective is not a war crime. Failing to take adequate precautions may violate IHL, but it is not criminal. The downing of MH17, therefore, should be framed not as a war crime but as murder.



Topics

[Courts & Tribunals](#), [Foreign Relations Law](#), [International Criminal Law](#), [International Human Rights Law](#), [National Security Law](#), [Organizations](#)

Annex 215

Intentionally omitted

Annex 216

5.ua, Kharkov Stena Pub Terrorist Attack: Prosecutors Demand 12 Years' in Prison for Accused Bomber – Details (27 September 2019)

(translation)

Translation

5.ua, *Kharkov Stena Pub Terrorist Attack: Prosecutors Demand 12 Years' in Prison for Accused Bomber – Details* (27 September 2019), available at: <https://www.5.ua/ru/rehyoni/terakt-v-pabe-stena-v-kharkove-prokuratura-prosyt-12-let-tiurmi-dlia-obvyniaemoi-podrobnosti-199997.html>

Kharkov Stena Pub Terrorist Attack: Prosecutors Demand 12 Years' in Prison for Accused Bomber – Details



The Kharkov Stena pub terrorist attack case, *Channel 5*

The bomb attack took place back in 2014. The pub was a meeting place for volunteers and activists where they collected aid for the military men and displaced people from the ATO zone.

Prosecutors demand 12 years' imprisonment and seizure of property for the suspect in the terrorist attack on the Stena pub, as reported by *Channel 5*.

The bomb attack took place in the pub on the 9th of November 2014. The pub was a meeting place for volunteers and activists where they collected aid for the military men and displaced people from the ATO zone.

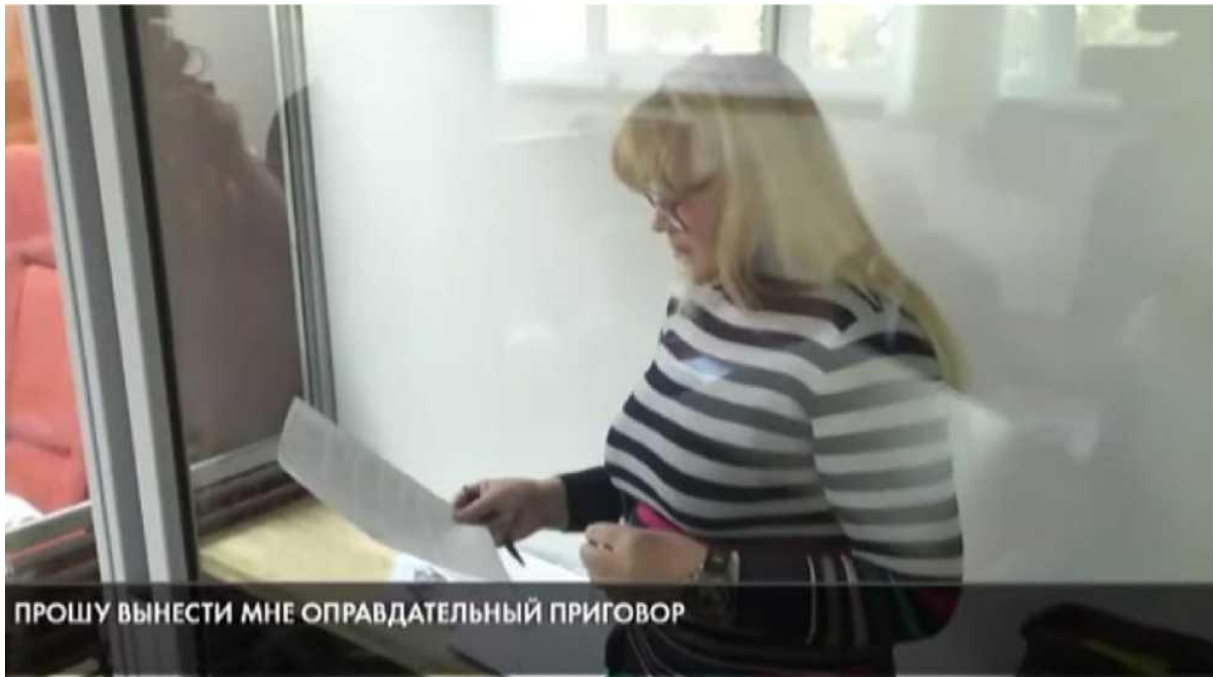
The bomber left an explosive device next to the bar counter. 13 people were injured as a result of the blast.

Marina Kovtun, the woman who is alleged to have activated the bomb, is charged with committing a terrorist attack. Also, she is accused of the actions aimed at changing state borders, sabotage, leading a terrorist group, and acquisition and storage of arms.

According to witnesses' testimonies, the accused received training in acts of sabotage in the Russian Federation. In a training camp in Belgorod, she was known under the call sign Z. Later, she organised a sabotage group in Kharkov.

From the very beginning of the trial Mrs Kovtun pleaded not guilty. Now she says the indictment is unlawful. The court's verdict is expected to be pronounced on the 7th of October.

Marina Kovtun states: “In 2014, I was abducted by people wearing black masks with machine guns. I was tortured, threatened and blackmailed. Any evidence obtained by torture must be destroyed in accordance with Ukrainian and European law. I ask the Court for acquittal”.



Responding to that, Vita Dubovyk, the press secretary for the Kharkov regional prosecutor, points out: “We believe that adequate evidence has been collected and presented to the Court, that it has been duly examined by the Court, and that a verdict may be rendered now. In the closing argument today, the lead prosecutor asked the Court to impose a penalty of 12 years’ imprisonment, a maximum term provided by Article 258, under which Mrs Kovtun is accused”.

As *5.UA* reported earlier, the bomb attack on the Stena pub took place in Kharkov last November. The SBU detained 12 persons involved in the crime. In February 2015, the terrorists who committed the attack on the Stena pub were released as part of POW exchange.