

**UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

UNITED STATES

v.

- (1) MAHDI MOHAMMAD SADEGHI, a/k/a
MOHAMMAD MADHI SADEGHI and
(2) MOHAMMAD ABEDININAJAFABADI,
a/k/a "MOHAMMAD ABEDINI",

Defendants.

M.J. No. 24-1737-DLC

FILED UNDER SEAL

HIGHLY SENSITIVE DOCUMENT

**AFFIDAVIT IN SUPPORT OF
AN APPLICATION FOR A CRIMINAL COMPLAINT**

I, Ronald Neal, being first duly sworn, hereby depose and state as follows:

INTRODUCTION AND AGENT BACKGROUND

1. I am a special agent with the Federal Bureau of Investigation ("FBI") and have been since 2016. I am currently assigned to one of the FBI's counterintelligence squads in the Boston Field Office. My responsibilities include, among others, investigating the illegal export of U.S.-origin goods and technology to prohibited destinations in violation of the International Emergency Economic Powers Act ("IEEPA"), 50 U.S.C. § 1705, the Export Control Reform Act ("ECRA"), 50 U.S.C. § 4819, and the Arms Export Control Act ("AECA"), 22 U.S.C. § 2778, and related regulations. I have participated in numerous investigations, during the course of which I have interviewed witnesses, conducted physical surveillance, executed search warrants, and used other investigative techniques to secure relevant information regarding various federal crimes. As a result of my training and experience, I am familiar with the techniques and methods of operation used by individuals involved in criminal activity to conceal their activities from detection by law enforcement authorities. Additionally, through my training, education, and experience, I have become familiar with the manner in which persons conduct and attempt to conduct business,

directly or indirectly, with governments and entities in embargoed countries, such as Iran, to avoid both reporting requirements and detection by law enforcement.

PURPOSE OF THE AFFIDAVIT

2. I make this affidavit in support of a Criminal Complaint charging MAHDI MOHAMMAD SADEGHI, a/k/a MOHAMMAD MADHI SADEGHI (“SADEGHI”) and MOHAMMAD ABEDININAJAFABADI, a/k/a “MOHAMMAD ABEDINI” (“ABEDINI”) with Conspiracy to Violate IEEPA, in violation of Title 50, United States Code, Section 1705, and charging ABEDINI with Conspiracy to Provide Material Support to a Foreign Terrorist Organization, resulting in death, and Provision and Attempted Provision of Material Support to a Foreign Terrorist Organization, resulting in death, in violation of Title 18, United States Code, Section 2339B(a)(1). In addition, I submit this affidavit in support of pre-trial detention of SADEGHI and ABEDINI.

3. The facts in this affidavit come from my personal observations, my training and experience, and information obtained from other investigators and witnesses. This affidavit is submitted for the limited purpose of establishing probable cause to believe that SADEGHI and ABEDINI committed the above offenses. Accordingly, I have not included each and every fact known to me and other law enforcement officers involved in this investigation. I have set forth only the facts that I believe are needed to establish the requisite probable cause.

4. As set forth herein, there is probable cause to believe that SADEGHI and ABEDINI have violated Title 50, United States Code, Section 1705, and that ABEDINI has violated Title 18, United States Code, Section 2339B(a)(1).

PROBABLE CAUSE

5. The charges arise out of a conspiracy in which ABEDINI, SADEGHI, and others known and unknown conspired to violate IEEPA and the Iranian Transactions and Sanctions Regulations (“ITSR”), by procuring U.S.-origin goods, services, and technology, from, among others, a U.S. semiconductor manufacturer headquartered in Norwood, Massachusetts (“U.S. Company 1”) and causing those goods, services, and technology to be exported, reexported, and supplied to Iran. In addition, there is probable cause to support charging ABEDINI with Conspiracy to Provide Material Support to a Foreign Terrorist Organization, resulting in death, and Provision and Attempted Provision of Material Support to a Foreign Terrorist Organization, resulting in death, in violation of Title 18, United States Code, Section 2339B(a)(1).

6. ABEDINI was a co-founder of, and still serves as the Managing Director of, San’at Danesh Rahpooayan Aflak Co. (“SDRA” or “SADRA”), a company based in Iran. SDRA’s main business is the sale of both integrated and inertial navigation systems and supporting software. The overwhelming majority of SDRA’s net sales between 2019 and 2023 came from SDRA’s sale of its Sepehr Navigation System (“Sepehr” or the “Sepehr Navigation System”) to the Islamic Revolutionary Guard Corps (“IRGC”)¹ Aerospace Force, which is the strategic missile, air, and

¹ Also known as IRGC; Islamic Revolutionary Guards Corps; Islamic Revolution Guards Corps; Iran’s Revolutionary Guard Corps; Islamic Revolutionary Corps; IRG; The Iranian Revolutionary Guards; Islamic Revolutionary Guards; Iran’s Revolutionary Guards; Revolutionary Guards; Revolutionary Guard; Army of the Guardians of the Islamic Revolution; The Army of the Guardians of the Islamic Revolution; AGIR; Pasdaran; Pasdaran-e Inqilab; Pasdarn-e Enghelab-e Islami; Sepah; Sepah Pasdaran; Sepah-e Pasdaran-e Enghelab-e Eslami; Sepah-e Pasdaran Enghelab Islami; Islamic Revolutionary Guard Corps-Qods Force; IRGC-Qods Force; IRGC-QF; Qods Force; Sepah-e Qods; Jerusalem Force; Al Qods; Islamic Revolutionary Guard Corps (IRGC)-Qods Force; Pasdaran-e Enghelab-e Islami (Pasdaran); Sepah-e Qods (Jerusalem Force); Qods (Jerusalem) Force of the IRGC; Qods Force; IRGC Ground Forces; Islamic Revolution Guards Corps Ground Force; Basij; Baseej; Basij-e Melli; Islamic Revolution Guards Corps Resistance Force; Basij Resistance Forces; Mobilization of the Oppressed; Mobilization of the

space force within the IRGC. The IRGC is an Iranian military and counterintelligence organization under the authority of the Supreme Leader of Iran. Among other things, the IRGC plays a key role in Iran's development of ballistic missiles and in Iran's support for international terrorism and foreign terrorist organizations, such as Hamas, Hizballah, and others. The primary application of SDRA's Sepehr Navigation System is in Unmanned Aerial Vehicles ("UAVs")—also known as drones—as well as cruise and ballistic missiles.

7. SADEGHI, who is a current employee of U.S. Company 1, was, at all relevant times, aware of ABEDINI's role with SDRA.

8. In 2019, ABEDINI co-founded a company in Switzerland ("Illumove"), which serves as a front for SDRA to conceal SDRA's involvement in certain exports of goods and technology from the United States and business transactions with U.S. companies, including U.S. Company 1. As further set forth herein, ABEDINI and SADEGHI used Illumove to procure U.S.-origin goods, services, and technology for export to Iran, in violation of U.S. export controls and sanctions laws.

9. In addition to conspiring with SADEGHI to violate IEEPA, ABEDINI conspired with others known and unknown to provide material support to the IRGC by selling its Sepehr Navigation System to the IRGC, including the IRGC Aerospace Force, and by procuring goods

Oppressed Unit; Mobilization of the Oppressed Organization; Organization of the Mobilisation of the Oppressed; Sazman Basij Melli; Sazman-e Moghavemat-e Basij; Sazeman-e Basij-e Mostazafan; Vahed-e Basij-e Mostazafeen; Vahed-e Basij Mostaza'feen; National Mobilization Organization; National Resistance Mobilization; Resistance Mobilization Force; Nirooye Moghavemate Basij; Niruyeh Moghavemat Basij; IRGC Air Force; Islamic Revolution Guards Corps Air Force; Islamic Revolutionary Guards Corps Air Force; Islamic Revolutionary Guard Corps Air Force; IRGCAF; Sepah Pasdaran Air Force; Air Force, IRGC (Pasdaran); Islamic Revolutionary Guards Corps Aerospace Force; Aerospace Force of the Army of the Guardians of the Islamic Revolution; AFAGIR; Aerospace Division of IRGC; IRGC Aerospace Force; IRGCASF; IRGC Navy; Islamic Revolution Guards Corps Naval Force.

and technology from U.S. Company 1, including technology that had not yet been publicly released, to aid SDRA's business objectives in support of the IRGC. One of SDRA's long-term business objectives was to meet Iran's military needs—*i.e.*, that of the IRGC—by being able to domestically produce the electronic components used in navigation systems due, in part, to the high costs imposed by U.S. export control and sanctions laws. Among the products that SDRA hoped to produce internally were the sensors used in SDRA products, such as the Sepehr Navigation System, which utilized electronic components from multiple U.S. companies, including U.S. Company 1.

10. SDRA's near-exclusive sale of the Sepehr Navigation System to the IRGC Aerospace Force also directly benefitted the IRGC, which was designated by the United States Department of State as a Foreign Terrorist Organization ("FTO") on April 15, 2019. According to open-source information, the IRGC Aerospace Force, which is part of the FTO, is the strategic missile, air, and space force within the IRGC. The IRGC Aerospace Force also serves as the primary operator of Iran's fleet of UAVs.

11. Based on my training and experience, I know that the IRGC develops UAVs, which have been provided to and utilized by Iran-backed militias across the middle east, including lethal attacks against U.S. service members and allied forces. At least certain of those UAVs utilize the Sepehr Navigation System.

12. For example, SDRA's Sepehr Navigation System has played a direct role in terrorist attacks against U.S. troops. Specifically, on or about January 28, 2024, three U.S. servicemembers were killed, and more than forty others were injured, in a drone attack by IRGC-backed militants on a military base located in northern Jordan, near the Syrian border. The military outpost is known as "Tower 22."

13. The drone that caused the death of the three U.S. service members was subsequently recovered and parts of that drone were analyzed by the FBI. That analysis found the words SADRA CO. LTD—also known as SDRA—in the data strings on the microcontroller for the drone’s navigation system. The analysis also found that the firmware used in the navigation system was a version of the Sepehr Navigation System.

Relevant Legal Background

The International Emergency Economic Powers Act

14. The International Emergency Economic Powers Act (“IEEPA”), codified at Title 50, United States Code, Sections 1701 to 1708, confers upon the President authority to deal with unusual and extraordinary threats to the national security and foreign policy of the United States. Section 1705 provides, in part, that “[i]t shall be unlawful for a person to violate, attempt to violate, conspire to violate, or cause a violation of any license, order, regulation, or prohibition issued under this title.” 50 U.S.C. § 1705(a).

15. Beginning with Executive Order 12170, issued on November 14, 1979, the President has found that “the situation in Iran constitutes an unusual and extraordinary threat to the national security, foreign policy and economy of the United States” and declared “a national emergency to deal with that threat.”

16. On March 15 and May 6, 1995, the President issued Executive Orders 12957 and 12959, prohibiting, among other things, the exportation, reexportation, sale, or supply, directly or indirectly, to Iran of any goods, technology, or services from the United States or by a U.S. person, wherever located, and on August 19, 1997, issued Executive Order 13059 clarifying the previous orders. These Executive Orders, which remained in effect at all times relevant to the conduct described herein, authorized the United States Secretary of the Treasury to promulgate rules and

regulations necessary to carry out the Executive Orders. Pursuant to this authority, the Secretary of the Treasury promulgated the Iranian Transactions Regulations (renamed in 2013 the Iranian Transactions and Sanctions Regulations, or “ITSR”), implementing the sanctions imposed by the Executive Orders. *See* 31 C.F.R. Part 560.

17. Title 31, Code of Federal Regulations, Section 560.204 of the ITSR prohibits, among other things, the exportation, reexportation, sale, or supply, directly or indirectly, from the United States, or by a U.S. person, of goods, technology, or services to Iran or the Government of Iran (with certain limited exceptions), including the exportation, reexportation, sale, or supply of goods, technology, or services to a third country knowing that such goods, technology, or services are intended for Iran or the Government of Iran, without a license from the U.S. Department of Treasury, Office of Foreign Assets Control (“OFAC”). Section 560.205 of ITSR prohibits the reexportation from a third country by a non-U.S. person of any goods, technology, or services that have been exported from the United States, knowing that such goods, technology, or services are intended for Iran, without a license from OFAC. And Section 560.206 of the ITSR prohibits U.S. persons, wherever located, from engaging in any transaction or dealing in or related to goods or services of Iranian origin, or goods, technology, or services for exportation, reexportation, sale, or supply, directly or indirectly, to Iran or the Government of Iran.

18. The ITSR further prohibit transactions that evade or avoid, have the purpose of evading or avoiding, cause a violation of, or attempt to violate the ITSR. *See* 31 C.F.R. § 560.203.

19. Pursuant to its authority under the Export Control Reform Act, 50 U.S.C. §§ 4801-4826—and prior to August 2018, IEEPA—the U.S. Commerce Department’s Bureau of Industry and Security (“BIS”), through the Export Administration Regulations (“EAR”), 15 C.F.R. Parts

730-774, reviews and controls the export of certain items, including goods, software, and technologies, often called dual-use items, from the United States to foreign countries.

20. In particular, the EAR restricts the export of items that could make a significant contribution to the military potential of other nations or that could be detrimental to the foreign policy or national security of the United States. The EAR imposes licensing and other requirements for items subject to the EAR to be lawfully exported from the United States or lawfully reexported from one foreign destination to another.

21. The most sensitive items subject to EAR controls are identified on the Commerce Control List (“CCL”), published at 15 C.F.R. part 774, Supp. No. 1. Items on the CCL are categorized by Export Control Classification Number (“ECCN”), each of which has export control requirements depending on destination, end use, and end user. An ECCN identifies the export controls associated with a specific item.

The IRGC FTO Designation

22. The IRGC is an Iranian military and counterintelligence organization under the authority of the Supreme Leader of Iran. The IRGC plays a key role in Iran’s development of ballistic missiles and in Iran’s support for international terrorism and foreign terrorist organizations and exercises significant control and influence over the Iranian economy, especially in the oil and gas sector. The IRGC was designated on or about October 25, 2007 by OFAC, as an Specially Designated National (“SDN”) under Executive Order 13382, relating to the proliferation of weapons of mass destruction (“WMDs”), for its role in supporting the proliferation of ballistic missiles capable of carrying WMDs and procuring equipment that could be used to support the Government of Iran’s ballistic missile and nuclear programs.

23. The IRGC was further designated on or about October 13, 2017 by OFAC as a Specially Designated Global Terrorist (“SDGT”) under Executive Order 13224, relating to global terrorism, for its role in supporting the terrorist activities of the IRGC’s Qods Force (“IRGC-QF”). The IRGC-QF was designated by OFAC as an SDN under Executive Order 13224 on or about October 25, 2007, for its role as the Government of Iran’s primary arm for executing the Government of Iran’s policy of supporting terrorist and insurgent groups, including Hizballah, Hamas, and the Taliban, and insurgent forces in Iraq and Yemen, including Ansarallah, commonly referred to as the Houthis. On or about April 15, 2019, the U.S. Department of State designated the IRGC as an FTO under Section 219 of the Immigration and Nationality Act for the IRGC’s direct involvement in terrorist plotting, support for terrorism, and hostage-taking.

24. Among its activities hostile to the United States and its allies, the IRGC has actively targeted nationals of the United States and its allies living around the world for kidnapping and/or execution, both to repress and silence dissidents critical of the Iranian regime and to take vengeance for the death of Qasem Soleimani, who was killed by a U.S. drone strike in Baghdad on or about January 3, 2020. For example, in 2022, U.S. law enforcement detected and disrupted an IRGC plot to murder a former U.S. National Security Advisor in or around Washington D.C.

25. Additionally, the IRGC is engaged in terrorist activity as it provides material support to other FTOs, including Hamas, Hizballah, and others.

Relevant Individuals and Entities Background

ABEDINI and SDRA

26. During the relevant period, ABEDINI was a resident of both Iran and Switzerland.

27. In or about 2011, ABEDINI co-founded SDRA in Tehran, Iran. The other co-founders of SDRA—whose identities are known to the United States—are SDRA Employee 1,

employees had worked with the IRGC Aerospace Force on projects involving, among other things, integrated navigation systems and guided missiles.

32. ABEDINI has also represented on his resume that, from at least in or about 2019 to 2021, he was a consultant to the Self Sufficiency Jihad Research Organization, which I believe to be a reference to the IRGC Aerospace Force's Self Sufficiency Jihad Research Organization. The Self Sufficiency Jihad Research Organization is a research arm of the IRGC Aerospace Force that is responsible for, among other things, the research and development of ballistic missiles and flight test launches. The IRGC Aerospace Force's Self Sufficiency Jihad Research Organization was sanctioned by OFAC pursuant to Executive Order 13382 on or about July 18, 2017. During the time in which ABEDINI has represented that he was serving as a consultant to a component of the IRGC, the United States designated the IRGC as an FTO.

SADEGHI and U.S. Company 2

33. During the relevant period, SADEGHI was a naturalized U.S. citizen originally from Iran and a resident of Natick, Massachusetts.

34. SADEGHI obtained degrees from the University of Tehran in electrical engineering and electronics and subsequently received a Ph.D in electrical engineering from a U.S. university.

35. In or about 2015, SADEGHI and two other U.S. persons known to the United States ("Person 1" and "Person 2"), formed a company based in Massachusetts that holds itself out as a fitness wearables company, specializing in wearable sensors that provide kinetic monitoring ("U.S. Company 2"). SADEGHI is also the CEO of U.S. Company 2.

36. In or about August 2015, SADEGHI, Person 1, and Person 2 created a business proposal for a presentation to the Iranian National Elites Foundation ("INEF"), which is an Iranian governmental organization whose main purpose is to recognize, organize, and support Iran's elite

national talents. In exchange for funding from INEF, SADEGHI proposed to create a sister company in Iran (“Iranian Company 1”).

37. In or about August 2016, SADEGHI and Person 2 traveled to Iran and made an in-person presentation to INEF in support of their proposal. U.S. Company 2 sought a \$790,000 loan from INEF, and in return, the “IRAN Benefits” would include, among other things, intellectual property, knowledge transfer, and capability development. INEF subsequently provided Iranian Company 1 with a portion of the requested funding in or about February 2017.

38. Based on the investigation and the facts that follow here, I believe that SADEGHI, Person 1, and Person 2 understood that their plans to set up companies funded by the Iranian government were in violation of U.S. laws. For example, on or about December 3, 2015, Person 2 sent an email to SADEGHI and Person 1 to schedule a meeting. In that email, Person 2 referred to Person 1 as the “CEO, President and owner of [Iranian Company 1]” and asked to have weekends off. Person 1 responded, “[Y]ou can have all the weekends off you want if you promise to bring me some chai when I’m in jail.” Similarly, on August 1, 2016, SADEGHI asked Person 1 for input on the name of U.S. Company 2’s sister company in Iran, stating, “After all, it is all yours!” Person 1 responded, “I guess I should know what name it is when I am in court getting sentenced.”

39. Since March 2019, SADEGHI has been employed as an engineer for U.S. Company 1.

The IEEPA Conspiracy and Sanctions Evasion Scheme

40. From at least in or about August 2018 to the present, ABEDINI, SADEGHI, and others known and unknown, conspired to export, reexport, and supply goods, services, and technology—including electronic components and technology from U.S. Company 1, certain of

which have UAV applications—from the United States to Iran—including to SDRA and ABEDINI—without first having obtained the required licenses or approvals from OFAC, as required by law. As part of the conspiracy, ABEDINI, SADEGHI, and others known and unknown, engaged in conduct designed to conceal the prohibited activities and transactions from detection by the U.S. Government to avoid penalties and disruption of the illegal activities.

ABEDINI Procures Controlled Parts from U.S. Company 1

41. Since at least in or about 2014, ABEDINI has been aware that that he could not procure parts from U.S. Company 1 for use in Iran. While a student at Sharif University in Tehran, and after ABEDINI had founded SDRA, ABEDINI sought parts from U.S. Company 1, stating that he needed some of the sensors for his Ph.D thesis in robotics and mechatronics. U.S. Company 1 advised ABEDINI that it could not provide him with the requested sensors due to U.S. export control and sanctions laws involving Iran.

42. ABEDINI subsequently traveled to Switzerland to complete his post-doctoral work at a Swiss university in Lausanne, Switzerland. In or about January 2016—and after, according to the SDRA Business Plan, SDRA and its employees had already completed projects for the IRGC—ABEDINI was able to procure parts from U.S. Company 1 to his university address in Switzerland. An invoice from U.S. Company 1 reflects that the products were shipped to Switzerland and that the recipient was “SDRA, Mohammad Abedini.” Many of the U.S. Company 1 products contained on the invoice were on the CCL, including parts that can be used in navigation systems. As U.S. Company 1 had previously informed ABEDINI, the U.S. Company 1 parts were subject to U.S. export controls and sanctions.

43. Notwithstanding that U.S. Company 1 had advised ABEDINI about the prohibitions on exporting U.S. Company 1 parts to Iran, in or about January 2016, ABEDINI sent

an email to officials at the Geneva airport in Geneva, Switzerland asking whether he could transport “sample parts” from U.S. Company 1 in his luggage on a flight from Geneva to Tehran. ABEDINI falsely told the Swiss officials that the parts were general parts with no restrictions, typically used in student projects. ABEDINI attached the January 2016 invoice from U.S. Company 1 to the email, which listed “SDRA, Mohammad Abedini” as the recipient with an address in Switzerland. According to U.S. Company 1’s export classification page, many of the U.S. Company 1 parts listed on the invoice were on the CCL, which were subject to U.S. export licensing of the BIS. Geneva airport officials advised ABEDINI that he could bring the U.S. Company 1 parts to Tehran in his carry-on luggage.

44. ABEDINI traveled to Iran in or about May 2016. In light of ABEDINI’s inquiry to Geneva officials and his subsequent travel to Iran, I have reason to believe that ABEDINI traveled with the U.S. Company 1 electronic components in his luggage, in violation of U.S. export controls and sanctions.

45. Between in or about January 2016 to January 2018, ABEDINI used U.S.-based electronics distributors to order electronic components from multiple U.S.-based manufacturers, including U.S. Company 1, for delivery in Switzerland, often to ABEDINI’s university address. At least certain of these parts included microcontrollers that are used in the Sepehr Navigation System.

ABEDINI and SADEGHI Work Together in Iran

46. In addition to ABEDINI’s direct orders of U.S.-origin electronic components, SADEGHI also procured U.S.-origin electronic components on behalf of ABEDINI and SDRA. Shortly after forming Iranian Company 1 in Iran, in or about November 2016, SADEGHI, through Iranian Company 1, entered into a contract with SDRA (*i.e.*, ABEDINI’s company) in Iran to

purchase firmware and hardware prototypes from SDRA for \$250,000. The contract listed SADEGHI as the representative of Iranian Company 1 and SDRA Employee 1 on behalf of SDRA. SADEGHI sent a copy of the contract to ABEDINI and SDRA Employee 1.

47. In or about December 2016, SADEGHI placed an order for U.S.-origin electronic components from a U.S.-based manufacturer. The bill of sale included a certificate of compliance, which stated: “NOTE: ONE OR MORE ITEMS ON THIS ORDER ARE CONTROLLED FOR EXPORT.” SADEGHI listed his home address in Massachusetts as the billing address for the order, but he listed SDRA as the customer reference for two of the items on the invoice. SADEGHI traveled to Iran on or about January 2, 2017 and returned to the United States on or about February 10, 2017. SADEGHI forwarded that invoice to ABEDINI in or about April 2017, at which time, travel records indicate that ABEDINI was located in Iran. Based on the fact that SADEGHI listed SDRA as the customer reference for certain of the electronic components, and based on SADEGHI’s business operations with SDRA through Iranian Company 1, I believe that SADEGHI likely traveled with the electronic components to Iran, in violation of U.S. export control and sanctions laws.

48. SADEGHI also had additional interactions with SDRA in Iran, which further indicate that SADEGHI was familiar with SDRA’s business operations. For example, according to records obtained by investigators, SADEGHI logged on to his U.S.-registered email account using an Iran-hosted SDRA IP address on multiple occasions, beginning as early as 2017. Specifically, an IP address that resolved to five subdomains of sdra.co.ir—the domain used by SDRA—in Tehran, Iran, was used by SADEGHI on three occasions, including in January 2017

and September 2017.² According to travel records, SADEGHI was physically in Iran on the dates he logged in to his account using the SDRA IP address. SADEGHI's use of the SDRA IP address indicates that SADEGHI, was using a SDRA electronic facility, either remotely, or at a SDRA site and while in he was in Iran.

49. Additionally, in or about January 2018, SADEGHI emailed ABEDINI with the contact information for a U.S. Company 1 distributor in Hong Kong. Based upon my training and experience and the background of the investigation, I believe that SADEGHI was advising ABEDINI how he could evade U.S. export control laws and sanctions by ordering U.S. Company 1 parts through a non-U.S. distributor that would ship U.S. Company 1 parts to ABEDINI in Iran.

50. In addition to the above-referenced interactions with SDRA through Iranian Company 1 and through SADEGHI's use of SDRA's electronic facilities, SADEGHI and ABEDINI continued to have a business relationship through U.S. Company 2. Specifically, in or about July 2018, ABEDINI invested in U.S. Company 2, purchasing an 11% stake in U.S. Company 2 in exchange for U.S. Company 2 intellectual property.³

ABEDINI Established Illumove in Switzerland as a Front For SDRA

51. As part of the conspiracy to transfer U.S.-origin goods, services, and technology to Iran and SDRA, and to facilitate SDRA's continued provision of material support to the IRGC, ABEDINI established Illumove in Lausanne, Switzerland to serve as a front company for SDRA.

52. In or about 2018, due in part to ABEDINI's ability to procure U.S.-origin parts for SDRA by shipping the parts to Switzerland, ABEDINI began the process of transitioning certain

² SADEGHI also logged into his account using the SDRA IP address in February 2019. The same SDRA IP address used by SADEGHI in 2017 and 2019 was used hundreds of times by multiple SDRA employees between 2015 and 2021.

³ As of late 2023, financial documents suggest that Illumove, ABEDINI's Swiss front company, owned the U.S. Company 2 shares.

of the SDRA business operations to Switzerland. Specifically, on or about August 9, 2018, a professor with whom ABEDINI was familiar, advised ABEDINI that, “considering the proposed partnership and the return of U.S. sanctions, you must relocate your business anyway. Switzerland seems a good option.”⁴

53. Approximately one month later, on or about September 10, 2018, ABEDINI and an individual known to the United States (“Swiss Employee 1”) submitted a business plan in Switzerland in support of a new company named SadraLab. The business plan listed ABEDINI and Swiss Employee 1 as the founders of SadraLab, and stated that SadraLab would focus on providing navigation systems to a wide range of industries. As discussed above, ABEDINI’s company in Iran, SDRA, also focused on the design and manufacture of navigation systems, which it primarily sold to the IRGC. Notwithstanding ABEDINI’s extensive experience with SDRA developing navigation systems, the biography for ABEDINI that was included in the Swiss business plan omitted any mention of SDRA or its primary customer, the IRGC; however, the business plan included (likely by mistake) a visible SDRA logo in one of the graphics contained in the plan. ABEDINI’s biography also omitted any mention of his connection to the IRGC or the Iranian military.

54. The business plan listed U.S. Company 2 as a current customer, and the September 10, 2018 email submitting the business plan also attached a letter of intent signed by SADEGHI as the CEO of U.S. Company 2.

⁴ To provide context for the reference to “the return of U.S. sanctions,” on May 8, 2018, the President announced that the United States would withdraw from the Joint Comprehensive Plan of Action (“JCPOA”)—more commonly known as the Iran nuclear deal—which imposed restrictions on Iran’s nuclear facilities in exchange for sanctions relief. Soon thereafter, the United States reimposed wide-ranging sanctions on exports to Iran.

55. In or about mid-2019, ABEDINI and Swiss Employee 1 formed Illumove, S.A. as a company in Lausanne, Switzerland. According to an email from Swiss Employee 1, the Illumove name was selected after the name SadraLab was rejected by the “board.” Based on context, I have reason to believe that the “board” Swiss Employee 1 was referring to was the board of SDRA. The SadraLab name was rejected approximately six months after the IRGC was designated as an FTO.

56. An English translation of an internal Illumove document, which appears to be a draft agreement between SDRA and Swiss Employee 1, indicates: (i) that Illumove was founded to serve as the sales and branding arm of SDRA; (ii) that ABEDINI would be the designated shareholder of Illumove because of sanctions on Iran and because an Iranian-origin company could not be a corporate shareholder in Switzerland; and (iii) that Illumove’s earnings were to be transferred to SDRA through ABEDINI in an appropriate way and without endangering the integrity and reputation of Illumove. Although the Illumove document indicates that a primary purpose of Illumove was to evade sanctions on Iran and sets out, in part, how Illumove would achieve that objective, the agreement also states that “[i]n doing his responsibilities [Swiss Employee 1] will not take responsibility for any illegal activities that are against the international laws, and specifically against the laws of Iran or Switzerland, or for circumvention of sanctions.”

SADEGHI Starts Working at U.S. Company 1 and Facilitates a
Contract Between Illumove and U.S. Company 1

57. In or about August 2017—after SADEGHI’s company in Iran, Iranian Company 1, had purchased hardware and firmware from SDRA—SADEGHI suggested a joint project between Iranian Company 1’s U.S.-based sister company (U.S. Company 2) and U.S. Company 1 in Massachusetts. SADEGHI reached out to U.S. Company 1 through an employee at U.S. Company 1 whom SADEGHI knew from the U.S. university where he obtained his graduate degree (the “U.S. Company 1 Employee”). SADEGHI and U.S. Company 2 subsequently entered into a Non-

Disclosure Agreement (“NDA”) with U.S. Company 1, in which the parties acknowledged that they were exploring a possible business relationship. The NDA allowed for the delivery of proprietary information in furtherance of those discussions, and as part of the agreement, both parties agreed to follow all applicable export laws and regulations. U.S. Company 1 Employee subsequently provided SADEGHI with proprietary U.S. Company 1 parts and datasheets⁵ for those parts that had not yet been publicly released.

58. Although the relationship between U.S. Company 1 and U.S. Company 2 does not appear to have resulted in a formal contract, in or about March 2019—approximately one month after SADEGHI had traveled to Tehran and again accessed his email account using SDRA’s IP address—SADEGHI was hired by U.S. Company 1 to work as a microelectromechanical systems engineer.

59. Soon after SADEGHI was hired by U.S. Company 1, SADEGHI began taking steps to introduce ABEDINI—who, by this time had invested in SADEGHI’s U.S. company (U.S. Company 2), and had started the process to establish a Swiss front company for SDRA—to U.S. Company 1 Employee.

60. Specifically, on or about August 6, 2019, SADEGHI paid for ABEDINI to travel to Switzerland. While in Switzerland, on or about August 17, 2019, ABEDINI registered the illumove.com domain with a U.S.-based web hosting company and domain registrar.

61. Soon thereafter, on or about August 27, 2019, SADEGHI, using his U.S. Company 1 email address, emailed ABEDINI at ABEDINI’s newly created Illumove email account with the subject line “test.” Later that same day, after receiving confirmation from ABEDINI that

⁵ The datasheets discussed herein summarize the technical performance and characteristics of U.S. Company 1’s electronic components.

ABEDINI's Illumove email account worked, SADEGHI emailed U.S. Company 1 Employee to introduce ABEDINI.

62. SADEGHI's email to U.S. Company 1 Employee stated, in part: "Here is the contact person of the company I was talking about: Mohammad Abedini m.abedini[at]illumove.com. They have recently started a company in Lausanne, Switzerland. Mohammad is their CTO and has a 50% appointment with [the Swiss university]. I have worked with him and the team closely at [U.S. Company 2] and based on my experience they are very competent in HW [hardware], FW [firmware], and SW [software] development. Probably for the U.S. Company 1 parts design, they need the same handholding as the other guys needed but the nice thing is that it will be a one stop shop." SADEGHI's email to U.S. Company 1 Employee did not include ABEDINI; however, investigators subsequently located this email in ABEDINI's email account in a folder titled, "SDRA."

63. Based on facts known to me through this investigation, I believe that SADEGHI's email to U.S. Company 1 Employee was misleading. At the time SADEGHI sent the above-described email to U.S. Company 1 Employee, SADEGHI had not collaborated "closely" with the Illumove "team" because Illumove had only recently been established. Indeed, SADEGHI's test email to ABEDINI's Illumove email account indicates that SADEGHI was aware that ABEDINI had just created his Illumove email account.

64. Moreover, prior to sending this email SADEGHI had primarily collaborated with ABEDINI and SDRA through Iranian Company 1. Based on SADEGHI's prior interactions with SDRA and ABEDINI, it appears that the "team" he was referring to was the SDRA team. Specifically, before Illumove finalized a contract with U.S. Company 1, SADEGHI discussed the expertise of the "Illumove guys" in navigation systems with a coworker at U.S. Company 1. Using

a Company 1 internal messaging system, SADEGHI told a coworker at U.S. Company 1 that ABEDINI had been “working on Navigation algorithms for about 7 years now,” or since in or about 2013. As discussed previously, ABEDINI founded SDRA in or about 2011, and its primary business was the “[d]esign, implementation, and production of flight computer for navigation, aerospace guidance and control systems for unmanned aircrafts” and “long-range missiles,” among other things. Illumove, on the other hand, did not exist until in or about 2019.

65. After SADEGHI introduced ABEDINI and Illumove to U.S. Company 1, U.S. Company 1 Employee emailed ABEDINI about a potential collaboration between Illumove and U.S. Company 1 for Illumove to develop the hardware and software for an evaluation tool that could be used for a wide range of U.S. Company 1 inertial sensors. U.S. Company 1 Employee copied SADEGHI on the email to ABEDINI. ABEDINI returned a signed NDA to U.S. Company 1 on or about September 2, 2019. The NDA stated that the proprietary information that would be shared pursuant to the NDA was subject to U.S. export laws and that each party agreed to follow all applicable export laws and regulations.

66. Soon thereafter, on or about September 10, 2019, on behalf of Illumove, ABEDINI ordered multiple electronic components, which were subject to export controls, through a U.S. distributor and listed the shipping address as a lab at the Swiss University. According to the datasheets for those parts, the electronic components had aerospace applications. On or about September 11, 2019, SADEGHI sent ABEDINI U.S. Company 1 proprietary information relating to the requirements for a potential project (the “Evaluation Board Project”).

67. ABEDINI left Switzerland and returned to Iran approximately one week later, on or about September 17, 2019. Based on my training and experience and the results of this investigation, including the facts set forth herein, I believe that ABEDINI took the U.S.

technology, which had not been publicly released, and the U.S.-origin electronic components with him to Iran, in violation of U.S. export control and sanctions laws.

The U.S. Company 1-Illumove Contract

68. In or about October 2019, after ABEDINI had returned to Iran, U.S. Company 1 Employee sent ABEDINI a project proposal for the Evaluation Board Project. The project proposal indicated that U.S. Company 1 was seeking assistance to develop a mechanism for customers to evaluate whether U.S. Company 1's electronic components, including semiconductors, would work with customer-specific software, allowing a customer to answer the questions: "How does the part work?" and "Is the information generated from the sensor what I really need?" The Evaluation Board Project was intended to work with a wide range of U.S. Company 1's sensors, including the type of inertial sensor used in the Sepehr Navigation System.

69. Approximately one month later, in November 2019, ABEDINI responded to U.S. Company 1 Employee and SADEGHI—copying Swiss Employee 1—using his Illumove email address and attaching Illumove's proposal for the U.S. Company 1 Evaluation Board Project. The Illumove proposal claimed that Illumove "provides navigation solutions for a wide range of industries." As discussed previously, SDRA's primary income is derived from its sales of the Sepehr Navigation System to the IRGC. There is no information to suggest that Illumove, on the other hand, had any independently created navigation products as of November 2019.

70. The project proposal also stated that the Illumove team had "worked with almost 50% of [U.S. Company 1] sensors mentioned in the scope of the project." As Illumove had only been created months before the November 2019 project proposal—and based on SADEGHI's email concerning how long ABEDINI and his team had worked on "Navigation algorithms"—I

believe that the experience that ABEDINI referenced was his experience using U.S. Company 1 sensors with SDRA, rather than Illumove's experience.

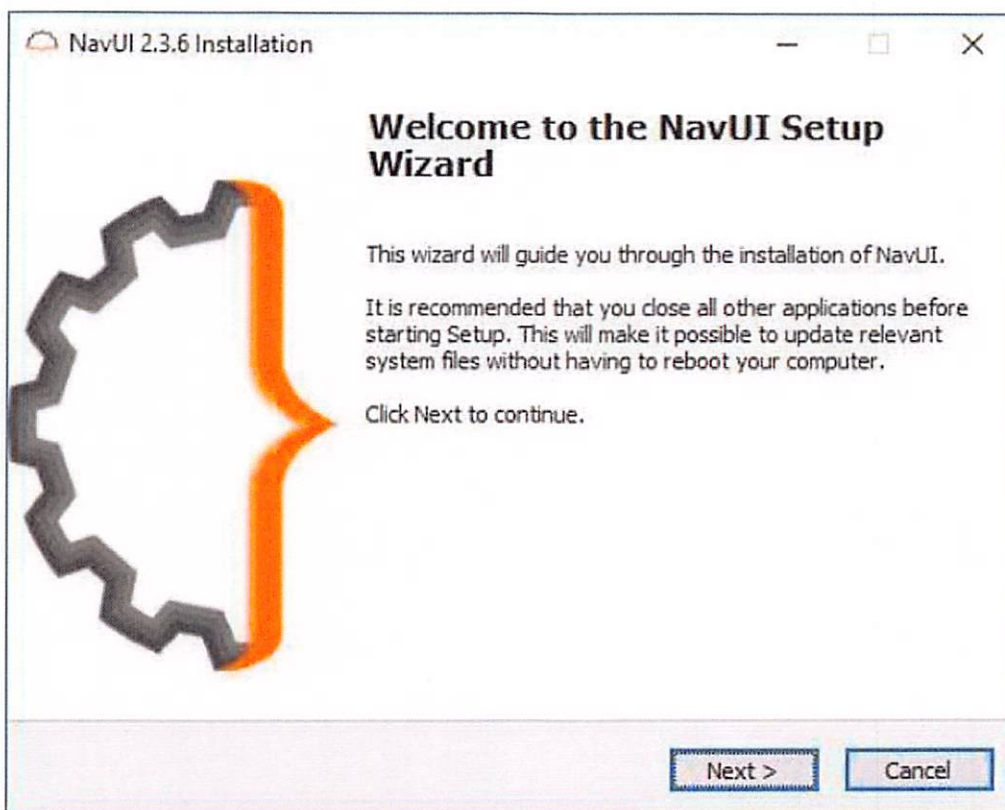
71. Thereafter, on multiple occasions, SADEGHI inquired about the status of the Evaluation Board project and/or advocated for ABEDINI and Illumove with U.S. Company 1. For example, in January 2020, SADEGHI introduced ABEDINI to a separate U.S. Company 1 employee for a new U.S. Company 1 project, stating that ABEDINI had a "wealth of experience in sensor fusion algorithms, and specifically working with [U.S. Company 1's] IMUs and sensors."

72. In or about March 2020, SADEGHI expressed frustration when the COVID-19 pandemic delayed further immediate progress on a contract between U.S. Company 1 and Illumove. Between August and September 2020, SADEGHI sent three different emails to employees within U.S. Company 1 asking about "possible collaboration" between U.S. Company 1, Illumove, and ABEDINI, specifically with regard to the development of a U.S. Company 1 algorithm. And between May and June 2021, SADEGHI again made multiple inquiries about finalizing the contract between Illumove and U.S. Company 1, stating that he wanted to "kickstart this effort as soon as possible."

73. In or about August 2021, ABEDINI and Illumove, with SADEGHI's assistance, secured a contract from U.S. Company 1 for the Evaluation Board Project. Pursuant to the contract, Illumove would develop an evaluation board to test a wide range of U.S. Company 1 inertial sensors, including the type of inertial sensor used in the Sepehr Navigation System, and to display the results of those tests on a user interface or "UI". Among other things, as part of the Evaluation Board Project, Illumove was to develop the evaluation board hardware, as well as source code for the project, which would be provided to U.S. Company 1. Illumove was also to develop a particular algorithm that would remain embedded in U.S. Company 1 software, which

U.S. Company 1 would then be required to license from Illumove for future use. When the contract between U.S. Company 1 and Illumove was finalized, SADEGHI was listed as a backup support engineer for the project.

74. Based on my review of SDRA records, there is reason to believe that SDRA was already using certain of the technology that ABEDINI proposed to develop for U.S. Company 1 as part of the Evaluation Board Project. For example, in the project proposal, ABEDINI stated that Illumove had an in-house developed software, which was called “NavStudio.” However, search warrant returns indicate that NavStudio—also known as “Navigation Studio” or “NavUI [Navigation User Interface]”—is a SDRA-developed software that had some application with the Sepehr Navigation System. For example, in May 2019, ABEDINI sent an email to an individual with an email address that ended in @chmail.ir, which I know to be an Iranian email provider. Attached to that email was a zip file named “SNavUI v4.2.5,” which contained a file named “Navigation Studio.exe” that I believe to be the executable—*i.e.*, the machine code that a computer runs when the file is triggered—for Navigation Studio. That file further contained six references to SDRA and five references to Sepehr, including the following file path: “D:\[Last name of SDRA Employee 3]\Projects\Sepehr_v3.0\UI\SNavUI_v4.2.1\SNavUI\obj\Release\Navigation Studio.pdb.” Additionally, a Sepehr user manual located in ABEDINI’s email account includes step-by-step instructions for how to install the “NavUI” software and includes a prominent SDRA logo. According to metadata, the manual was created on or about September 4, 2017. The following image is from the user manual and includes the SDRA logo, as well as a reference to the NavUI, *i.e.* Navigation Studio User Interface.



75. Images of the user interface that Illumove included in the U.S. Company 1 project proposal also contained both the SDRA logo and a reference to "Navigation Studio." That image was similar to an image investigators obtained through search warrant returns, which shows a SDRA user interface for the Sepehr Navigation System being tested in Tehran in or about 2021. The same SDRA logo and reference to "Navigation Studio" are visible in the SDRA photo.

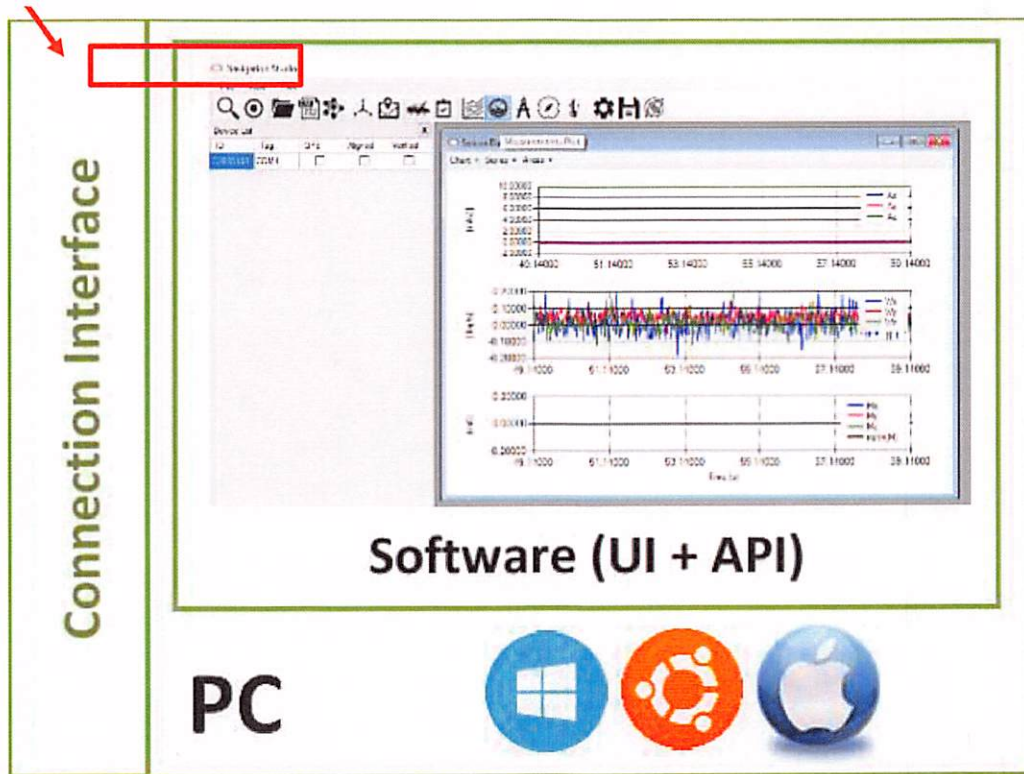
SDRA User Interface in Tehran

SDRA Logo and "Navigation Studio" Reference



Proposed Illumove User Interface with SDRA Logo

SDRA Logo and "Navigation Studio" Reference



Illumove Utilized SDRA Employees on the Evaluation Board Project and Transferred U.S.- Origin Goods, Services, and Technology to Iran

76. In or about April 2021, shortly before finalizing the contract with U.S. Company 1, ABEDINI advised Swiss Employee 1 that Illumove wished to terminate its work contract with him at the end of April 2021. Thereafter, on multiple occasions, ABEDINI used SDRA employees to conduct work on the U.S. Company 1 Evaluation Board Project, and transferred U.S. origin goods and technology to SDRA in Iran.

77. For example, an internal SDRA document sent by SDRA Employee 1 in or about August 2021 indicates that SDRA employees in Iran were working for Illumove. In that document—which was translated by an FBI linguist—SDRA Employee 1 complained to SDRA Employee 2 about, among other things, the time that ABEDINI was spending on Illumove projects and the fact that ABEDINI wanted the “people working with *Illumove*” to be paid in U.S. dollars. (emphasis in original). SDRA Employee 1 said that “any amount paid in dollars from the Swiss company’s account must have the approval from SDRA Company” and that he believed “payments in dollars to employees who work in Iran is not right, and any work done for this company [*i.e.*, Illumove] should be considered as work done for SDRA.”

78. Additionally, in or about August 2022, ABEDINI and U.S. Company 1 employees communicated about hardware and software documentation that had been uploaded to U.S. Company 1’s cloud-based collaboration application, to which ABEDINI and Illumove had access. A U.S. Company 1 employee requested that ABEDINI “ask [his] SW [software] team to make this a priority focusing on the Windows UI for the moment.” ABEDINI subsequently forwarded the email chain, which included multiple photos reflecting efforts between U.S. Company 1 and ABEDINI to troubleshoot the evaluation board and user interface, from U.S. Company 1 to a SDRA employee approximately four days later.

79. There is also evidence that SDR A employees in Iran participated in calls and/or video meetings with U.S. Company 1 from Iran. For example, financial records kept by ABEDINI indicate that, on multiple occasions, ABEDINI purchased Virtual Private Network (“VPN”) services for Illumove and categorized the purchases as for the “[U.S. Company 1] Project.” VPNs create a secure connection between a user’s device and a remote server, which masks a user’s IP address and location. Based on my training and experience, I know that VPN services are often used in criminal enterprises to obfuscate the location of a user’s device, and I have reason to believe that SDR A employees, including ABEDINI, were utilizing VPN services to mask their location while working on the U.S. Company 1 project in Iran.

80. Moreover, emails and meeting minutes from in or about November 2023 reference a meeting between U.S. Company 1 and Illumove in which Illumove and U.S. Company 1 were to “[r]eview Illumove architecture, components, code, etc.” The email chain reflected that attendees for Illumove included, in addition to ABEDINI, two individuals both of whom had Illumove email addresses. Based on the results of this investigation, including the facts that follow here, I believe that the other two Illumove email addresses belonged to two SDR A employees (“SDR A Employee 3” and “SDR A Employee 4”).

81. Specifically, the names of the individuals with Illumove email addresses differ only slightly from the names of SDR A Employee 3 and SDR A Employee 4, both of whom reside in Iran. In light of the content of the meeting—about which SDR A Employee 3 and SDR A Employee 4 were likely to have relevant expertise—the similarity between the “Illumove” email addresses and the names of the SDR A employees, and considering ABEDINI’s purchase of VPN services for the U.S. Company 1 project, I have reason to believe that the individuals who remotely joined

the meeting with U.S. Company 1 on behalf of Illumove are in fact SDRA Employee 3 and SDRA Employee 4.

82. On at least fourteen occasions between in or about March 2022 and April 2024, U.S. Company 1 also shared U.S. Company 1 technology, including datasheets for U.S. Company 1 electronic components—many of which had not yet been released to the public—with ABEDINI while ABEDINI is believed to have been in Iran. For example, on or about December 21, 2023, an employee at U.S. Company 1 emailed ABEDINI’s Illumove email account and attached five datasheets for U.S. Company 1 electronic components, three of which were marked as “Confidential.” One of those components, which has navigational and direction-finding capabilities, is listed as ECCN 7A994 and is regulated by the Department of Commerce under the “Antiterrorism” designation. At the time U.S. Company 1 sent ABEDINI the five datasheets, travel records indicate that ABEDINI was located in Iran. As recently as April 23, 2024, U.S. Company 1 sent ABEDINI an unreleased datasheet for a U.S. Company 1 electronic component. Based on travel records, ABEDINI was located in Iran at the time. Additional emails between ABEDINI and U.S. Company 1 indicate that U.S. Company 1 provided additional datasheets on the internal U.S. Company 1 site to which ABEDINI—and likely other SDRA employees—had access.

83. On other occasions, ABEDINI shared the datasheets (*i.e.*, the U.S.-origin technology) with one or more SDRA employees. For example, on March 10, 2022, as part of the project with U.S. Company 1, SADEGHI emailed ABEDINI’s Illumove account and attached multiple proprietary U.S. Company 1 datasheets, four of which were marked as confidential. Later that day, a different employee at U.S. Company 1 emailed ABEDINI a datasheet for a different

U.S. Company 1 part, which was noted as “preliminary.” ABEDINI forwarded both of the U.S. Company 1 emails and their attachments to a known SDRA employee the same day.

84. Throughout the course of the project with U.S. Company 1, ABEDINI also used Illumove to transfer U.S.-origin goods to Iran—goods that he could not have shipped directly to Iran due to U.S. export controls and sanctions laws. Since in or about May 2022, U.S. Company 1 has made at least ten direct shipments of U.S. Company 1 electronic components to ABEDINI at the registered address for Illumove in Switzerland—which is an address at the Swiss university. The shipments from U.S. Company 1 have included integrated circuits, sensors, and evaluation boards for multiple U.S. Company 1 parts. For example, U.S. Company 1 shipped accelerometers, gyroscopes, and inertial measurement units, certain of which have navigation and UAV applications.

85. On multiple occasions, travel records reflect that ABEDINI returned to Iran soon after receiving the U.S. Company 1 parts in Switzerland. For example, on or about April 18, 2023, U.S. Company 1 advised ABEDINI that it had shipped approximately \$15,000 worth of U.S. Company 1 parts to ABEDINI in Switzerland. Many of the parts were classified as ECCN 7A994, which includes export controls for “navigation direction finding equipment” and “aircraft inertial navigation systems.” On May 5, 2023, ABEDINI arrived in Switzerland from Tehran. ABEDINI departed Switzerland approximately two weeks later, on May 18, 2023. The same day that ABEDINI returned to Iran, he forwarded the email from the U.S. Company 1 employee, which included the list of parts that had been shipped to ABEDINI in Switzerland, to a SDRA employee. Based on ABEDINI’s prior inquiry to Swiss authorities about carrying U.S.-origin electronic components to Iran in his luggage, the timing of his travel to Switzerland and back to Iran, and the fact that he sent the list of U.S. Company 1 parts to a SDRA employee after returning to Iran, I

believe that ABEDINI transported to the U.S. Company 1 parts to Iran for the benefit of SDRA—and in particular, SDRA’s business with the IRGC.

86. Additionally, based on the investigation, I believe that SADEGHI knew ABEDINI was in Iran during the period in which he worked on the U.S. Company 1 project. For example, investigators located a photograph in one of ABEDINI’s email accounts, which appears to be from in or about September 2022—approximately three years after ABEDINI entered into an NDA with U.S. Company 1 and approximately one year after ABEDINI started working on the Evaluation Board Project. The photograph shows ABEDINI and SADEGHI riding together in a vehicle. The date of the photograph coincides with SADEGHI’s travel to Iran.

87. Moreover, at least one meeting invitation found in SADEGHI’s email account with U.S. Company 1 indicates that ABEDINI accepted a meeting with SADEGHI while in Iran. As indicated in the relevant meeting invitation, the meeting time that was sent to SADEGHI reflects the time that the meeting would occur for SADEGHI in Massachusetts and for ABEDINI in Tehran.

88. Notwithstanding SADEGHI’s close ties to, and business relationship with, ABEDINI and SDRA, as well as his engagement with the INEF and receipt of INEF funds for Iranian Company 1, SADEGHI provided U.S. authorities with false information about his connections to the Iranian government and his business operations in Iran. For example, in or about August 2024, SADEGHI was inspected by U.S. Customs and Border Protection upon returning to the United States from Iran. During the inspection, SADEGHI acknowledged that he was aware of U.S. sanctions on Iran and said he was required to know about such sanctions because of his work for U.S. Company 1. SADEGHI then falsely stated that he had never done business with the Iranian government or with anyone in Iran. As discussed above, however, SADEGHI’s

business, Iranian Company 1, had received funding from INEF, which has ties to the Iranian government; through Iranian Company 1, SADEGHI contracted with SDRA for the purchase of SDRA technology; and SADEGHI has facilitated the export of goods, services, and technology to ABEDINI and Illumove with knowledge that those items are intended for Iran.

The Material Support Conspiracy

ABEDINI, through SDRA, Provided Material Support to the IRGC, which is a Designated Foreign Terrorist Organization

89. From at least on or about April 15, 2019, up to and including the date of this Complaint, ABEDINI and others known and unknown, also conspired to provide material support and resources to a FTO, namely, the IRGC.

90. As previously discussed, ABEDINI co-founded SDRA in 2011, is the current CEO, and owns approximately 32% of SDRA. ABEDINI spends the majority of his time in Iran and remains involved in SDRA's business operations, including through procuring parts in Switzerland and elsewhere for SDRA's Sepehr Navigation System.

91. SDRA has done business with the IRGC since at least in or about 2014. For example, as discussed above, according to the SDRA Business Plan, SDRA had multiple projects with the IRGC Aerospace Force, including projects for guided rockets and integrated navigation systems. Among the potential uses identified for SDRA's products were guidance and control in UAVs and missile systems.

92. The IRGC was designated by the United States Secretary of State as an FTO on April 15, 2019, pursuant to Section 219 of the Immigration and Nationality Act. The designation of the IRGC as an FTO was reported in multiple international media outlets, including in Iran.

93. Moreover, according to a resume that a SDRA employee submitted to an Iranian organization on behalf of ABEDINI, ABEDINI served as a consultant to the IRGC between 2019

and 2021, including at the time the IRGC was designated as an FTO. Specifically, in his resume, ABEDINI stated that he served as a consultant for the “Self Sufficiency Jihad Research Organization,” which, as discussed above, I believe to be a reference to the IRGC Aerospace Force’s Research and Self Sufficiency Jihad Organization.

94. After the designation of the IRGC as an FTO, SDRA continued to do business with the IRGC. For example, an analysis of SDRA’s financial records indicates that, between in or about March 2019 to in or about March 2023, the majority of SDRA’s net sales were for the Sepehr Navigation System, which SDRA sold almost exclusively to the IRGC Aerospace Force. In fiscal year 2021, SDRA’s sales of the Sepehr amounted to approximately 52,450,470,900 Iranian Rials (approximately \$1,258,811 USD), which accounted for approximately 87% of SDRA’s total net product sales. The following year, in fiscal year 2022, SDRA’s sales of the Sepehr increased by approximately 556% to 291,772,106,100 Iranian Rials (approximately \$7,001,331 USD), which accounted for nearly 96% of SDRA’s net product sales for the year. This increase in sales between 2021 and 2022 coincided with Russia’s full-scale invasion of Ukraine in February 2022. According to both a 2023 public report by the Defense Intelligence Agency and multiple open-source reports, Russia is using Iranian-provided lethal UAVs in its war against Ukraine.

95. Of the total sales of the Sepehr in fiscal year 2021, SDRA sold all but approximately 1% to the IRGC Aerospace Force. And in 2022, all but approximately 0.5% of SDRA’s total Sepehr sales were to the IRGC Aerospace Force.

The Sepehr Navigation System and the Tower 22 Attack

96. On January 28, 2024, shortly after 5:00 a.m. local time, three U.S. servicemembers were killed and more than 40 others were injured when a drone, later identified as a Shahed-101P

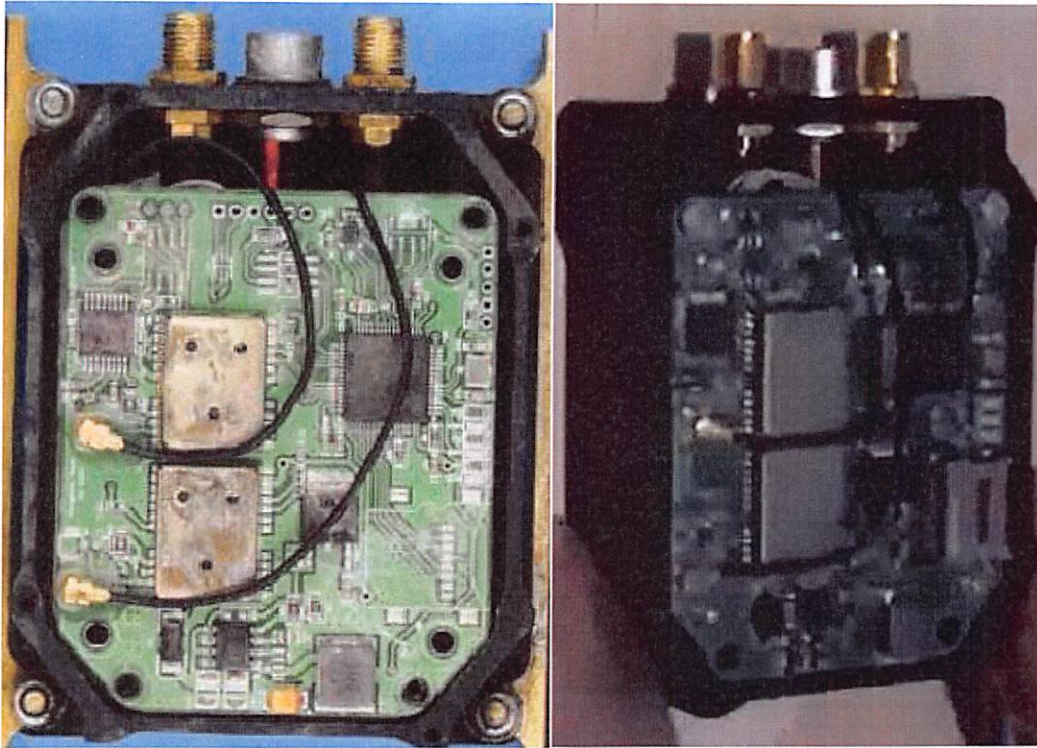
One-Way Unmanned Aerial System, struck living quarters at a U.S. military outpost in Jordan (Tower 22).

97. The drone that struck the Tower 22 site and resulted in the death of the U.S. servicemembers was recovered and was analyzed by the FBI's Terrorist Explosive Device Analytical Center ("TEDAC").

98. Among other things, TEDAC was able to extract data from the microcontroller found on the drone that struck Tower 22.⁶ The data extraction reflected that the navigation system used in the drone: (i) was manufactured by SADRA CO. LTD (SDRA is alternatively known as SADRA); (ii) the device was listed as "SPHR"; and (iii) the navigation system operated using the Sepehr v.1.43.023 firmware. Based on TEDAC's analysis, as well as other evidence in this case, there is probable cause to believe that the drone that struck the Tower 22 site and resulted in the death of U.S. servicemembers utilized the same Sepehr Navigation System that SDRA routinely sold and continues to sell to the IRGC Aerospace Force, which as discussed above, is the strategic missile, air, and space force within the IRGC that also serves as the primary operator of Iran's fleet of UAVs.

99. As reflected in the images below, the image of the navigation board is also consistent with images of the Sepehr navigation boards produced by SDRA, which investigators have located in ABEDINI's email account.

⁶ A microcontroller is essentially a small computer that processes inputs from the sensors, the operator, and possibly other sources like GPS modules.



(Left: Sepehr Board from Tower-22 ; Right: Sepehr Board from SDRA Lab)

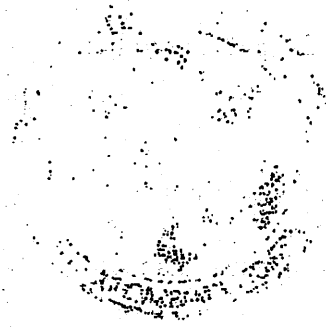
100. As the CEO of SDRA, ABEDINI was not only aware of SDRA’s business with the IRGC Aerospace Force, but ABEDINI also possessed firmware in one of his accounts about the same version of Sepehr—1.43.023—that was used in the drone that hit Tower 22 and caused the deaths of three U.S. servicemembers.

101. Moreover, ABEDINI also helped procure electronic components from U.S. microelectronic distributors for SDRA’s Sepehr Navigation System projects. As discussed above, one of the ways ABEDINI procured parts for Sepehr was through the Swiss company, Illumove. Specifically, a review of ABEDINI’s financial records indicates that between 2021 and 2022, on multiple occasions, ABEDINI used Illumove to make thousands of dollars’ worth of purchases for Sepehr projects.

102. And based on the investigation, I know that the microcontroller from the drone that struck Tower 22 (that contained the SDRA manufactured Sepehr Navigation System) was



[The following text is extremely faint and illegible due to the quality of the scan. It appears to be several paragraphs of a document.]



manufactured in 2022 and was shipped on a date in March 2022. Based on the date of the shipment of that microcontroller, I believe that SDRA installed its Sepehr Navigation System onto that microcontroller at some point after March 2022.

CONCLUSION

103. Based on the foregoing, there is probable cause to believe that MAHDI MOHAMMAD SADEGHI and MOHAMMAD ABEDININAJAFABADI conspired to violate the International Emergency Economic Powers Act (IEEPA), in violation of Title 50, United States Code, Section 1705. There is also probable cause to believe that MOHAMMAD ABEDININAJAFABADI conspired to provide material support to a Foreign Terrorist Organization, resulting in death, and provided or attempted to provide material support to a Foreign Terrorist Organization, resulting in death, in violation of Title 18, United States Code, Section 2339B(a)(1).

Sworn to under the pains and penalties of perjury,


Ronald Neal
Special Agent, FBI



Sworn before me this 13th day of December, 2024.


HONORABLE DONALD L. CABELL
CHIEF UNITED STATES MAGISTRATE JUDGE