Iran's great nuclear deception

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"We found a lot of CDs there, what should we do with them? Should we bring them with us?"

In the middle of the last night of January 2018, Mossad agents [broke into a secret vault](https://www.ynetnews.com/articles/0,7340,L-5310679,00.html) on the outskirts of Tehran, while their commanders watched from afar. The agents encountered an unexpected problem, a "rich people problems," according to a person familiar with the details of the operation.

The large room contained 32 huge Iranian-made safes, each 2.7 meters in height. The safes were loaded onto heavy container-like installations, on wheels that can carry massive weight.

The documents were secreted behind two different doors—a heavy iron door inside the facility and another iron door equipped with an alarm system and cameras at the facility's exterior wall.

This is where the Iranian Ministry of Defense decided to keep one of the greatest secrets of the Islamic Republic. In fact, only a handful of people in Iran even knew that the Iranian nuclear archive was inside this warehouse, in the heart of a sleepy suburb in the capital.

But it did not remain a secret.

The agents knew how to disable the alarm system and break through the iron doors, but they also knew they did not have time to break into all the safes. They would have to make do with less than ten, and look for three types of folders: those containing Iran's correspondence with the International Atomic Energy Agency (IAEA); those detailing the construction of nuclear sites and acquisition of nuclear equipment; and most importantly, those detailing the design and production of the nuclear warhead (which has never been completed).

The safes in the Iranian nuclear archive

But then, inside the safes' room, agents found something else, besides folders: CDs, piles of them—a massive amount of DVDs and computer discs, most of them unmarked.

So what the hell were they going to do now? Should they ignore the potential secrets these CDs may hold? Or take a calculated risk with a new variable that might complicate the operation? The agents received an explicit order from the command room: take everything, including the CDs.

At one minute to five in the morning, the agents left the warehouse. When the break-in was discovered, about 12,000 Iranian security personnel went on the pursuit in an attempt to figure out who stole the nuclear archive from under their noses.

In the end, despite the unexpected piles of CDs, [all of the material was extracted from Iran](https://www.ynetnews.com/articles/0,7340,L-5248904,00.html), and no one got caught. The Iranians could only guess who was behind the heist, but until Prime Minister Benjamin Netanyahu's [famous press conference on April 30](https://www.ynetnews.com/articles/0,7340,L-5246689,00.html), they didn't know for sure what really happened to "the filthy secrets of the Iranian regime," as dubbed by Mossad director Yossi Cohen.

A few weeks later, when the material arrived in Israel, dozens of translators, experts and analysts—assisted by Persian speakers from Israel's Military Intelligence Directorate's (MID) Unit 8200—started digging through the piles of material. It was then that it became clear how important was the decision to risk everything and take the CDs.

The written material comprises of 114 folders, containing more than 55,000 pages, of which 8,500 were handwritten documents, many of them authored by senior government officials, and some by nuclear personnel who died in operations attributed to the Mossad.

But the biggest surprise was the massive amount of information stored in the 182 disks. A Mossad case officer told me he would have paid hundreds of thousands of dollars for one CD like this.

The Iranians documented everything: the equipment, the construction of secret plants and sites, the experiments, detailed presentations on the project's progress, goals and stages, and even themselves, during nuclear experiments.

The bottom line is clear: it was a mega-scam, a state-level deception, in which senior Iranian officials and hundreds of others have taken part for years.

For two decades, Iran denied having a military nuclear program. But the contents of the safes tell a different story, a completely different and undeniable account: for years, Iran has been engaged in a covert nuclear project aimed at producing five nuclear bombs, with a yield of 10 kilotons each. And this was only stage one.

According to a Western intelligence source, "over the years, we have seen all sorts of programs, but we have not always understood their overall context. Until we saw these documents, we didn't really understand how projects that were part of AMAD (the secret project's code name—RB) were translated into secret projects under the Ministry of Defense, or open projects with a hidden agenda within SPAND (the later, public name, of the project—RB). The material Israel had obtained solved these mysteries."

"The sweeping Iranian denial "is really comical at this point," the source added.

The documents don't just expose the Iranians' deceit. It also demonstrates the weakness of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which Iran signed and the IAEA failed to enforce.

The archives show that under the UN agency's nose—despite repeat warnings, the information obtained by the Mossad and other espionage agencies, and media exposés—Iran has succeeded in conducting a secret military nuclear program over a long period of time (and Israel claims Tehran continues to do so even today).

Iran continues to deny everything even now; claiming the entire story of the seized archive is fabricated and serves an Israeli-American agenda aimed at canceling the nuclear agreement. This response was to be expected. What might have been less predictable is the lukewarm international response to the material uncovered in the Israeli operation.

The reactions ranged from claims the material was "old news" to assertions it does not uncover any "smoking guns" to prove Iran is currently violating the nuclear agreement.

But if the Islamic Republic is not violating or planning to violate the agreement, why keep such a detailed archive allowing Iran to resume its nuclear effort from where it left off (assuming they actually stopped)?

For many years Israel, the United States, France, Britain and Germany have been collecting intelligence about the Iranian nuclear project. Some of this material has been handed to the IAEA over time in the hopes it would provoke an appropriate response. The intelligence gathered was classified by the IAEA into 12 different topics— referred to as "the PMD," the acronym for "Possible Military Dimensions"— each depicting research, production or other experiments related to the bomb.

Over the years, Iran has vehemently denied dealing with any of these topics. The condition for signing the nuclear agreement was that Iran would make a full disclosure of its progress in each of the 12 PMD issues. Before signing the agreement, Yukiya Amano, the Japanese diplomat who heads the IAEA, promised senior Israeli officials, according to their testimony, that "he will never sign the deal" before receiving satisfactory answers on all 12 topics.

At the end of 2015, Amano published a report practically accepting the Iranian denial of ever having a military nuclear project. Now, in light of the material discovered by the Mossad, it appears his report was based on false information.

The intelligence uncovered in the operation was revealed to the Americans, the Chinese, the Russians, the French, the British, the Germans, and of course to IAEA officials.

With the exception of the US (and, of course, Israel), it seems the world wasn’t floored by the discoveries, and Amano himself has kept quiet.

This is despite the fact that the sensitive material includes documentation of advanced stages of practical field research, experiments and timetables for the production of an atomic bomb and its adaptation to the warhead of the long-range Shahab ballistic missile.

Holger Stark, the deputy editor of the German Die Zeit newspaper, contacted the IAEA in Vienna for a response. The agency refused to comment.

Quite a lot has been written about the Mossad operation. However, media reports in Israel and abroad dealt less with the archive itself, and more with the difficult questions it poses.

Here is a glimpse into the secret intelligence gathered from Iran's safes room. These are the facts; the questions they raise are for the world to answer.

The scientists

So what is this "Iranian nuclear archive" that Mossad agents managed to transport thousands of kilometers, all the way to Israel?

Iran's secret military nuclear program began to take shape in 1992 or 1993, when the Iranians became interested in acquiring technologies for the production and operation of centrifuges for uranium enrichment. Tehran acquired much of its knowledge from Pakistan's nuclear project director, Abdul Qadeer Khan, and later from other elements, some of them Chinese.

The first centrifuges were designed at a site called Damāwand. Israel warned the international community about the construction of the nuclear enrichment facility, so Iran decided to dismantle it and build another one in its stead.

This was the site that would later become well known, the [Natanz nuclear facility](https://www.ynetnews.com/articles/0,7340,L-5280530,00.html" \t "_blank). In internal Iranian documents, the site was called "Kashan," and it houses an increasing number of centrifuges.

At first, Israel was alone in its intelligence campaign against Iran. The intelligence it brought to the attention of IAEA and Western countries was greeted with indifference. Even the United States failed to act at first, and didn't recognize the authenticity or the importance of the material the Mossad collected on Iran. Only at a later stage, when intelligence ties with Israel strengthened and additional information about Kashan was brought to their attention did the Americans start to act.

Meanwhile, the Iranians secretly set up their military program to produce an atomic bomb, entitled "The AMAD Project."

Who gave the orders? This is one question the archive answers unequivocally: the Iranian leadership. The material does not include direct instructions from Supreme Leader Ayatollah Ali Khamenei, who, after strongly denying that Iran has a nuclear program, apparently made sure his name will not be tied to the project. Nevertheless, the archive contains, without doubt, documents signed by the defense minister at the time and current Secretary of the Supreme National Security Council, Ali Shamkhani.

And he's not alone. "The plan was approved by the Cognitive Sciences and Technologies Council," the header of one document states. This is a codename for the senior group of executives who manage Project AMAD, which included the president at the time, Mohammad Khatami; then-head of the Supreme National Security Council, Hassan Rouhani (the current Iranian president); then-Defense Minister Ali Shamkhani; and the head of the Atomic Energy Organization of Iran (AEOI) at the time, Gholam Reza Aghazadeh.

So what is the purpose of the AMAD Project? The answer to this question too can be found in the archive. According to the material obtained in the Mossad operation, the Iranian plan is to produce five warheads with a yield of 10 kilotons each, and develop the ability to assemble these warheads on the Iranian-made Shahab 3 missile.

Incidentally, nuclear experts who examined the documents say that the Iranian leaders' plan lays out far more extensive infrastructure than what is needed to produce "only" five bombs.

The making of a nuclear bomb and the ability to launch it is a very complex project that requires a state effort and coordination between all Iranian army and intelligence forces.

One particularly colorful presentation, which was discovered in one of the CDs, shows the complexity of the Iranian nuclear project. According to the presentation, the plan is based on a joint effort of various Iranian bodies: the Intelligence Ministry, the Islamic Revolutionary Guard Corps (including its Aerospace Force), and the Quds Force—the Guards' secret unit, which is currently waging war with Israel at the Syrian border.

The documents mention time and again the person who is both the manager and the brains behind the nuclear program—Prof. Mohsen Fakhrizadeh. The nuclear archive includes countless documents with Fakhrizadeh's signature, including documents addressed to him, or approved by him.

For example, one letter addressed to Fakhrizadeh, dated January 19, 2001, and written by the director of the explosive mechanism developing team, delineates a long list of features needed to fit the mechanism to the rest of the nuclear bomb (which is comprised of numerous parts). Fakhrizadeh thanked the director at the bottom of his letter and gave him further instructions.

According to foreign media reports, Israel considered Fakhrizadeh as a preferred target for intelligence gathering, and even seriously considered harming him, especially during the tenure of former prime minister Ehud Olmert and the late Mossad director Meir Dagan. Since Fakhrizadeh is still alive, the assassination plan has yet to materialize. It appears Olmert decided to halt the operation, and so Fakhrizadeh's life was spared. If the former prime minister is indeed behind such a decision, there are those who to this day believe it was a mistake.

However, someone—Iranian intelligence sure it was the Mossad—was able to reach various Iranian nuclear scientists whose names appear in the seized documents.

In his handwriting, [Dr. Fereydoon Abbasi-Davani](https://www.ynetnews.com/articles/0,7340,L-4398265,00.html), a senior nuclear program official, inscribes a long technical document to Fakhrizadeh, who replied at length.

Dr. Abbasi-Davani is the Chair of the physics department at Tehran's Imam Hossein University and a key figure in Iran's nuclear program. On November 29, 2010, his colleague [Majid Shahriari was assassinated](https://www.ynetnews.com/articles/0,7340,L-4114866,00.html).

An assassin on a motorbike tried to kill Davani as well by attaching a bomb to his car window while he was driving, but Davani managed to escape at the last minute and survived. Iran's president at the time, Mahmoud Ahmadinejad, appointed Davani as his deputy to show his appreciation for the doctor's "contribution to the Islamic Republic and for his courage."

One may feel some discomfort when diving into the piles of Iranian documents, since there's something eerie about them. For example, the radical state's dream of creating weapons of mass destruction becomes an orderly and meticulous timeline in Microsoft Project, including information on the program's budgets, personnel, experiments, and more.

At times, the nuclear documents receive a more personal flair. For instance, in one of the archive's CDs, agents found "selfie" photos of an Iranian nuclear expert, the heavyset Dr. Mahdi Tranchi, wearing protective goggles and posing for the camera at the "Taleqan 1" nuclear test site.

What happened to all this effort? All those people, information, and experience gathered? Did they all just disappear?

The nuclear sites

It was not only the people who worked on the Iranian nuclear project that the documents expose. They also expose the places and sites where the nuclear plot was devised, some of which were new discoveries for the Israeli intelligence community ("I wish I had this information in real time," said a former Israeli intelligence chief when exposed to the material), including nuclear experiment sites, uranium mines located across the country, tunnels (dug to cover up their real purpose), and more.

According to the material, the Iranians were looking for an underground nuclear testing site. It goes without saying that to conduct such an experiment, they needed to first build a bomb, which the Iranians have not yet done.

Furthermore, a nuclear experiment does not depend solely on scientific ability, but mostly on the decision of the political leadership. An underground experiment would have certainly been detected by the West. Such a test would essentially constitute a declaration by Tehran that it had indeed developed a bomb.

In the meantime, until the Iranians develop a nuclear bomb, the Iranians are getting ready, and according to the documents they have already examined various possible sites and even attempted to detonate small explosives deep underground to test the ground, its durability and their own ability to record the measurements of the explosion at that location.

The Israeli intelligence community also discovered new information about some known nuclear sites. For example, the site in Fordow, near the city of Qom, is well hidden at the heart of the mountain, and is extremely resistant to bombs.

The Israeli, French, and American intelligence communities exposed it in 2010, but the archive's documents established its importance as part of the Ghadir Project (another code name for the Iranian secret nuclear program).

Another example of the scale of the Iranian fraud can be found in the Taleqan testing facility, located in an area called Parchin. IAEA reports raised serious suspicions about the site, but Iran's denials made it difficult to substantiate these suspicions.

The IAEA demanded that its inspectors be allowed to visit the site, but the agency's requests have been repeatedly denied. When the IAEA threatened to accuse Iran of violating the Nuclear Non-Proliferation Treaty, its inspectors were allowed to enter Parchin months later, only to discover that the site had been cleared, and everything in it was carefully removed from the area.

What was there before? One of the crucial steps to building a nuclear bomb is the development of an explosion mechanism that will create critical mass. In the past, Western intelligence agencies circulated sketches of the experiment sites used to build the explosion mechanism. Photos of the site taken by the Iranian scientists look exactly like the sketches.

The Iranian nuclear archive proved how much these sketches were in line with reality: it was an accurate record of the sites, bunkers, test tanks, and equipment that Iran has denied, and still denies using in Parchin / Taleqan, or anywhere else in Iran for that matter.

The experiments

The archive material contains many drawings, presentations, written documents, and photographs. Not just technical images, but also photographs of the nuclear scientists themselves. The scientists must have felt they were a part of Iranian history. Most probably none of them imagined that his pictures would ever find their way to Israel.

Many of these photographs record the nuclear experiments. Iran has denied for years that it is conducting experiments on all PMD topics. For instance, Iran has claimed it did not have any neutron detection equipment, but an archive presentation shows otherwise (with colorful text explaining its uses). Apparently the equipment is located next to the Parchin explosives test site.

In the next slide, dated February 2002, there is a description of the nuclear experiment with an exact record of the DU3, the scientific term for the neutrons' source, whose collision with nuclear fuel atoms creates a chain reaction that ends with an atomic explosion.

The archive's documents also reveal that at a nearby site, the Iranians built another tank for testing high explosives; this time with flash X-ray equipment surrounding it. This equipment made up of a sophisticated camera of sorts that can record, with a precision of nanoseconds, the moment of detonation to guarantee that all explosives go off at the same time. This is critical for making explosive lens: a simultaneous explosion of several charges around the fissile material—for example, enriched uranium at a level of 90%—will start a nuclear fission chain reaction.

A special contract signed by the Atomic Energy Organization of Iran and Tehran's Defense Ministry lays out the transfer of part of the enrichment project from the organization to the ministry, in order to produce highly-enriched uranium at a military level of 90%.

The cover-up: the Dark Side of SPND

In 2003, the United States invaded Iraq, and Tehran feared they were next in line; at the same time, the "National Council of Resistance of Iran," an Iranian opposition group, published material on the Natanz nuclear facility that led to harsh criticism and sanctions against Iran.

The Iranians were worried and so the Scientific Council decided to make some changes and close the AMAD Project, only to reopen it under a different name. This development was interpreted differently by Israel and the United States. The latter determined that closing the AMAD Project brought the nuclear program to a halt. Israel, on the other hand, claimed that it's an Iranian scam, and that the two projects are one and the same.

The documents from the archive show that Israel was right. These documents record how the general decision to close one project and reopen another became a complex bureaucratic process in August and September 2003.

The purpose of all this was to deceive the world and develop a project that will continue where the AMAD Project left off. The new project was titled "the SPND Project," and unlike its father, AMAD, which was entirely secret, SPND has two sides: the overt and public side, which allows the Iranians to claim the nuclear program is meant for peaceful purposes (medicine, etc.), and the covert side, which allows Iran to continue developing nuclear weapons.

SPND, by the way, is still active today.

"Following new instruction by the honorable Minister of Defense (Ali Shamkhani—RB), intensive meetings of Project 110 technical committee (one of the main projects of AMAD—RB) were held in order to accommodate the activities to the instructions. In the new outline, the work would be divided in two: covert (secret structure and goals) and overt (regular structure)," reads one Iranian document.

Document determining the new plan, SPND, will have an overt aspect and a covert one

What would the covert part include? For example, the documents show that the secret SPND project will include the nuclear testing facility Sareb-1, the warhead integration facility Sareb-2, and Sareb-3, the facility for the production of a nuclear warhead for Shahab 3 missiles.

According to the documents, all management personnel and 70% of the entire workforce are to transfer from "AMAD" to "SPND." The scheme was meticulously planned: the documents include a letter written by Abbasi-Davani, to the project's chief, Fakhrizadeh, on March 3, 2003: "We must make a distinction between overt and covert activities."

One of their colleagues wrote on January 9, 2003: "Overt activities are those that can be explained as part of something else, and not as part of the project (to produce an atomic bomb) itself, so we have an excuse to do them."

Dr. Masoud wrote in March 2003: "Neutron research cannot be considered 'overt' and must be covert. We have no way of rationalizing this activity (neutron research) as related to defensive measures. Neutron operations are very sensitive and we cannot explain them."

Dr. Mahdi Tranchi, the 'selfie' enthusiast, wrote: "Let there be no mistake—the manpower of the overt and covert parts will not be reduced. The whole operation will not be reduced, and every sub-project will oversee both the overt and covert parts."

And so the Iranian project continued from 2004, under SPND, until the signing of the nuclear agreement in the summer of 2015.

At some point, a senior American source told Yedioth Ahronoth, the countries negotiating the nuclear agreement with Tehran decided to "let the past go, even though everyone knew very well that the Iranians were lying, and focus on the future. It was clear to everyone that after the spiritual leader said there was no military project, he would never take it back and admit he lied. The risk was losing the entire deal because insisting on the 12 PMD topics would have led to the collapse of the negotiations."

After the nuclear agreement was signed, two parallel axes were in play. In one, Iran submitted some material, which led to an IAEA report on the PMD in December 2015. This report, which in effect ignores the questions left open, enables implementation of the nuclear agreement.

In the other, Tehran began to do everything in its power to hide everything it had on its nuclear program. This was unlike other cases of complete nuclear disarmament. Both South Africa and Libya, for example, truly ended their nuclear programs: they either destroyed all the information, so there was nothing left of their archives, or deposited everything they had—their knowledge, documents, and experience, to IAEA inspectors.

The Iranians did the exact opposite: they collected information from countless sites, including private archives and all the material of the AMAD Project, and gathered it it in the Defense Ministry's archive.

Since the agreement gives the IAEA the right to visit any suspicious site (Tehran currently denies that they have agreed to visits at military sites), the Iranians feared the Defense Ministry archive might also be a target for inspection. So in February 2016, the Iranians moved the archive to an obscure site in a remote suburb of Tehran. The facility is almost entirely unguarded, and therefore does not attract attention. Even the people guarding the facility don't know what it is that they are protecting.

The break-in

Israeli intelligence had been tracked the "AMAD archive" closely, and had been meticulously planning the operation since early 2017. One Mossad agent responsible for planning the operation said it was "Ocean's Eleven Style."

In most Mossad operations of this type, the agents usually infiltrate a building, photograph the material inside, and leave unnoticed. This time, Mossad Director Yossi Cohen decided the material must be physically seized. The reason is twofold: to limit the time agents had to spend inside the building, and to prevent Iran from spreading disinformation and claiming the documents are forged. In this manner, Israel could expose the documents to the scrutiny of the international community.

Over the course of two years, hundreds of people from all branches of the Mossad participated in the operation, and fewer than two dozen agents took part in the break-in itself.

The operation team in Israel did not sleep for several nights, during which the agents gathered inside Iran to prepare the equipment and scope out the area.

Then, on the evening of January 31, the agents entered the vault. When the operation ended and all agents were out of danger, Cohen called Netanyahu and informed him of the operation's success.

And it was, indeed, a success: The agents retrieved about half a ton of intelligence material that is worth its weight in gold. There has been very few times in the history of intelligence services since World War II when one agency has been able to obtain so much of the enemy's secret intelligence material at once.

"Israel didn't sign the JCPOA. The Mossad didn't sign the nuclear agreement," Mossad Director Cohen said in a closed forum. "I have one agreement, with the people of Israel, in which I commit not to allow the Iranians to have a nuclear bomb. That's it."

But like everything else, politics got in the way here as well. Since the operation, various claims were made in Israel and abroad against the way the material was presented.

Some believe the documents from the archive justify Netanyahu's claim that the nuclear agreement is a bad deal based on lies.

A Western intelligence source that was exposed to the material summed it up thus: "The nuclear archive is in fact an effort made by the Iranian Ministry of Defense to preserve the knowledge achieved in the 'AMAD Project' from 1998 to 2003, and to hide it from the international community, especially from the IAEA, for possible future use."

Others, on the other hand, claim these documents prove how close Iran was to producing a nuclear bomb, and so the existence of an agreement that freezes the program and puts the SPND Project under close supervision is a good idea.