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The Physics Research Center Telexes: New ISIS Studies and Findings

By David Albright and Paul Brannan

ISIS is releasing four new reports based on its further assessment of a set of about 1,600 telexes detailing the procurement activities of Iran's Physics Research Center (PHRC) in the late 1980s and early 1990s. The information in these telexes and evidence gathered by the International Atomic Energy Agency (IAEA) support that the PHRC managed a parallel, secret military nuclear program in the 1990s whose long-term aim was to lay the basis for Iran's development of nuclear weapons.

The new evidence of Iran's early, secret military nuclear program reinforces the need for Iran to explain its past efforts and come clean on any on-going nuclear weapons activities. Only by understanding Iran's past military nuclear activities can confidence develop that Iran is not seeking nuclear weapons today. Revelations about the activities of the PHRC are a good place to start, as discussed in a [report by Olli Heinonen and Albright](#). An Iranian decision to address forthrightly and cooperatively the PHRC issues would help build confidence that the difficult negotiating process starting between the P5+1 and Iran has a chance of ensuring that Iran is not seeking nuclear weapons.

The four new reports by David Albright and Paul Brannan are:

- 1) [Iranian Smuggling for Military Nuclear Programs: From Shahid Hemmat Industrial Group to the Physics Research Center](#)
- 2) [The Telexes: Whole Body Counters and the Physics Research Center](#)
- 3) [The Telexes: Front Company Kala Naft](#)
- 4) [Telexes: Amir Kabir University and Dr. Shahmoradi](#)

Earlier ISIS analysis of the telexes is in two reports on the ISIS web site, [here](#) and [here](#), and in a Washington Post [article](#). Supplements on the web site contain the telexes discussed in each report and are available [here](#).

New Findings

The 1,600 telexes provide a detailed snapshot of the PHRC's wide-ranging overseas procurement efforts in the late 1980s and early 1990s and its focus on acquiring the wherewithal for many aspects of the nuclear fuel cycle. The telexes outline efforts to acquire goods for gas centrifuges, uranium conversion, and heavy water production, computer codes useful to a nuclear weapons program, and scientific and engineering information important to developing the nuclear fuel cycle. These telexes are a unique set that can be freely discussed and assessed.

These new ISIS studies reinforce that Iran needs to update and correct its declaration to the IAEA about the PHRC and its head, Sayyed Abbas Shahmoradi-Zavareh. One major shortcoming in Iran's previous declaration to the IAEA is the denial that the PHRC and Shahmoradi used Sharif University of Technology as a purchasing front. The new ISIS reports support that the PHRC was buying for itself and using Sharif University of Technology as a front to facilitate the purchase of certain goods overseas. The university served to hide the true end use from overseas suppliers by providing an educational rationale for the purchases. Telexes reveal that while the initial order came from Sharif University's purchasing department, as the time came to finalize payments, PHRC and its head, Shahmoradi, appeared in financial-related telexes as the responsible party. Moreover, [an earlier ISIS report](#) charted the decrease in the use of Sharif University in PHRC procurements after international media accounts in 1993 charged that the university was buying for a secret gas centrifuge program.

Special Role of Ali Akhbar Salehi while Head of Sharif University

Although Sharif University was a front, it was complicit in PHRC's procurements. Moreover, the new reports and the other telexes also indicate that Ali Akhbar Salehi, Iran's current Foreign Minister and former head of the Atomic Energy Organization of Iran (AEOI), knew about these purchases, and likely the deception, when he was head of Sharif University in the early 1990s. In one case (see *The Telexes: Whole Body Counters and the Physics Research Center*), the express mail company DHL could not deliver two packages of important documents to Shahmoradi at Sharif University, and it was told to re-deliver them to the purchasing manager of Sharif University or Salehi. According to another telex, Shahmoradi received from Sharif University the "full authority to make final decision at the whole purchasing stages (i.e. ordering, terms of payment and delivery, opening L/C [letters of credit], etc" (telex 171). This telex was signed "Sharif University of Technology." Shahmoradi could conduct his smuggling operations with the full authority of the university. Salehi, as head of the university, must have granted that authority to Shahmoradi. He would be expected to be aware of Shahmoradi's use of this authority and the intended purpose of the goods ordered by Sharif University and the PHRC.

ISIS obtained a copy of a letter signed by Salehi as head of Sharif University in 1991 that served as an end user guarantee to a European supplier. This letter and the associated telexes demonstrate that he was personally aware of the PHRC purchases. The name of the supplier is being withheld because the company wants to maintain its confidentiality. In this letter, Salehi certified non-military use of purchased goods and assured the supplier that the goods would be used at the university for teaching and demonstration purposes or for research purposes by Sharif University students. The procurements associated with this letter were handled by Shahmoradi. Moreover, after the supplier was unable to obtain its payment from Bank Sepah's branch in Frankfurt, the bank branch sent its questions to Shahmoradi at the PHRC telex number and not to Sharif University's telex. This was likely because the actual purchaser was the PHRC.

The PHRC and Sharif University also made or attempted several other procurements from this same company in 1990 and 1991, at least one of which had the distinctive order number that signifies department 2 a department within the PHRC that is associated with gas centrifuges. In this case, the telexes were from Sharif University's telex number and had no mention of the PHRC—demonstrating how procurements destined for a secret gas centrifuge effort would be procured via Sharif University. Moreover, one of these telexes (file number withheld to protect the company's identity) stated that Sharif University had indicated or implied in a request for prices that the items were "components for nuclear research and uranium enrichment". The company responded that it could not provide any quotations for these items for fear of violating export laws. The telexes in this case do not name Salehi, but the procurement is done under the name of the institution he headed. Since he knew of other procurements to this company, it is reasonable to conclude that he knew about this one as well.

Shahmoradi's Smuggling Activities

The report titled *Iranian Smuggling for Military Nuclear Programs: From Shahid Hemmat Industrial Group to the Physics Research Center* shows that the former head of the Physics Research Center, Shahmoradi, was involved in Iranian smuggling efforts in the 1980s when he was at the Iranian missile entity Shahid Hammat Industrial Group (SHIG). There, he is linked to procurement fronts or trading companies that aided Iranian procurements in Europe and the United States for equipment with centrifuge applications and chemical precursors for mustard gas. After Shahmoradi transitioned to the PHRC, he continued to use some of these fronts in PHRC's purchasing efforts. Telexes reveal companies and telex names that were used by intermediaries to further procurements for the PHRC and its front Sharif University. The individuals involved in some of those efforts may have used or formed other companies that engaged in illicit procurements for this network or became involved in procuring illegally for other Iranian entities.

The report *The Telexes: Whole Body Counters and the Physics Research Center* provides new details of an ongoing investigation into Iran's procurement of U.S.-origin equipment that was traced in 2004 to the headquarters of the PHRC at Lavisian Shian in north Tehran. The information shows that Iran misled the U.S. supplier about the final end user of the equipment, which was stated to be Sharif University.

The telexes show that the PHRC sought goods under the name of innocent sounding Iranian companies, some of which were only sanctioned by supplier countries many years later. The third report, *Telexes: Front Company Kala Naft*, discusses one of these companies. The PHRC used the name of a known Iranian procurement company associated with the oil and gas industry to procure covertly for its nuclear program. This company Kala Naft was eventually sanctioned by Britain and Japan ten years later.

Although Shahmoradi purchased many goods through Sharif University of Technology, he also made purchases in the name of at least one other university, Amir Kabir University, also known as Polytechnic University. The fourth report, *Telexes: Amir Kabir University and Dr. Shahmoradi*, is an assessment of a subset of telexes concerning an order of a mini-computer by Amir Kabir University. The report concludes that the PHRC was likely using this other Iranian university as a front to purchase goods for itself, in this case a U.S. origin mini-computer made by Digital Equipment Company. This sale may have violated U.S. re-export control laws.

Final Note

The telexes indicate that Iran for years has used intricate networks of smugglers aimed at outfitting its military nuclear efforts. In addition to settling serious concerns regarding the PHRC and its military nuclear activities, a long-term solution to the nuclear crisis needs to include a commitment by Iran not to procure illegally for its nuclear or missile programs. An ISIS discussion of the need for Iranian anti-proliferation commitments as part of a long term agreement can be found [here](#).