Israel. In contrast, the *Daily Telegraph* of London reported last week that Iran had secretly given to Israel a series of aerial photographs of Iraq's reactor.

Lie No. 5: Begin lied that the Iraqi reactor would be activated some time between early July and early September, after which time Israel would not be able to carry out a hit for fear of the radioactivity that would result. According to French nuclear specialists, the Iraqi reactor was not scheduled to go "hot" until the end of 1981.

Why Iraq was not building a bomb

by Dr. John Schoonover

The Osirak reactor that was recently attacked and destroyed by the Israeli Air Force is a very unlikely candidate for a bomb-producing facility. While Iraq seems determined to enter the atomic age, in order to do so, it is essential to train the technicians to carry out the industrial and research functions associated with nuclear and radioactive materials. But Osirak's destruction appears to be primarily motivated by the long-standing Israeli policy of keeping the Arab countries in a state of technological backwardness.

Could Iraq produce a bomb?

Atomic bombs are constructed from either the fissile isotopes of uranium (U-233 and U-235) or the plutonium isotope Pu-239. In the case of U-235, the material must be extracted from natural uranium, of which it comprises only about 0.7 percent, while U-238 makes up nearly all the remainder. The extraction process, called enrichment or isotope separation, is an expensive, large-scale industrial process. At this time, it can be said categorically that Iraq does not have the plant to carry out isotopic enrichment on the required scale.

Plutonium, on the other hand, does not occur at all in nature, and must be created in a fission nuclear reactor, a continual process in conventional electricitygenerating reactors.

Plutonium can be separated from spent nuclear fuel rods by a purely chemical process, which, despite the need for special handling equipment to deal with the high-level radioactivity, is much more feasible than isotope separation.

The Osirak reactor is a 70 megawatt swimming pool-type reactor, a standard design that uses ordinary water as a coolant, moderator, and biological shield. Its fuel consists of 93 percent pure U-235, in an amount sufficient to make a small atomic bomb. However, it could not be diverted for this purpose because of the safeguards that have been instituted.

The fuel for the reactor, as well as the reactor itself, is supplied by France. Before the fuel is to leave France it is heavily irradiated, making it literally too hot to handle without the special equipment known as a hot cell, a radioactively shielded room in which materials can be manipulated by remote control equipment. Iraq has ordered three hot cells from Italy to be installed at the Osirak research station, but as far as is currently known, none of them have arrived on the site.

France also keeps tight control over the fuel after delivery. When the fuel has been consumed in the reactor, the spent rods are to be returned to France for reprocessing, and new rods supplied. At no time is there any storage of spent fuel rods in Iraq. The only fuel on hand is that which is installed in the reactor. If any of the fuel were diverted to construct bombs, the loss would be immediately noticed, since the reactor would be inoperable.

Technically, the Osirak research reactor could be used to produce plutonium. The fact that the reactor has a high yield of neutrons and uses a fuel composed of highly enriched uranium means that it can be used to irradiate materials placed in it. However, unless low enrichment or natural uranium is put into the reactor core, in addition to the fuel assembly uranium, the reactor would be a poor plutonium breeder, because the high enrichment of the fuel means that the fertile material, U-238, that could produce Pu-239 has been largely removed from the fuel.

Further, the material will be contaminated with Pu-240 if the fertile U-238 is left in the reactor for more than a few weeks at a time. Pu-240 is undesirable in an atomic bomb because its spontaneous emission of neutrons would cause the bomb to go off fractions of a second too early.

Safeguards

In addition to these technical difficulties, the reactor is under supervision by the French government, and by the United Nations' International Atomic Energy Agency. Logs must be kept by the users to show what the reactor has been used for, how long it has been operated, what materials have been irradiated, and for what purpose. Stated usage of the reactor must tally with the measurable degree to which the fuel has been consumed. IAEA inspectors have free access to all the records and all the facilities. It is possible to imagine a scenario in which a series of imaginary experiments is concocted to account for the amount of use that the reactor is getting, but at some point such a complex scheme would be bound to break down.

The IAEA monitoring system also includes a num-

ber of technical surveillance techniques to guard against diversion of materials into weapons production, including chemical analysis, seals, cameras, and gamma-ray detection methods.

If Iraq were really interested in producing bombgrade fissile material, they would be better advised to follow the example of India. The Canadian-designed heavy water Candu reactor, is better suited for the production of high-grade plutonium than swimming pool-type reactors like Osirak. The Candu reactor is not only used by India, but also by the United States to supply plutonium for its nuclear arsenal.

Behind Israel's bomb: Dr. Yuval Neeman

by Mark Burdman

There is not a competent intelligence professional anywhere in the world who believes for a moment that Israel's unbalanced Prime Minister Menachem Begin "decided" to launch the June 7 Israeli Air Force attack on Iraq's Osirak reactor. While the prime minister may reap immediate emotional and political benefits from the attack, Mr. Begin lacks both the baseline competence and relevant international connections to have ensured the operation's success. Stated simply, the bathetic Mr. Begin was put up to launching the attack. This was instigated by a small circle of leading Israeli/Zionist elites who have both the international clout and the sense of how to manipulate Mr. Begin's well-known pathologies to launch the operation and guarantee its fulfillment.

It is *EIR*'s estimation that the brains behind the raid into Iraq was Dr. Yuval Neeman, the "evil genius" architect of Israel's nuclear bomb capabilities and offshoot computerized intelligence systems who is also the founder of the Zionist Teyiha (Renaissance) fringe political party and, in the words of the *Jerusalem Post*, "A cool and calculating believer in the importance of mysticism for revolutionary movements like Zionism."

Neeman's initiating role in the June 7 affair may not be surprising to the millions of Americans who have seen him on television since June 7 gloating about the success of the raid. But what the selective American media have not revealed is that Dr. Neeman is himself only a point man for vastly more powerful forces. These are the highest circles of the British-Canadian scientific apparatus behind the secretive "Nuclear Club of Wall Street," interfaced with the Venetian-centered aristocratic families who control the Malthusian Club of Rome International. For these circles, the Israeli raid into Iraq had two interconnected purposes: to enforce the denial of nuclear energy for peaceful purposes to the countries below the Tropic of Cancer, while ushering in an era of limited nuclear warfare in these same regions. Both goals converge on one higher aim: the depopulation of the areas of the developing world.

Neeman's role in the affair is clear, aside from his frequent pronouncements in the American media since then. Only days before the raid was carried out, the Lazard Frères-owned *Washington Post* reported that Neeman would probably be brought into the government as a coalition member should Begin be re-elected. This clearly implied that an important geopolitical deal had been struck within Israel.

Then, virtually on the eve of the raid, the Jerusalem Post ran a feature on Neeman, portraying him as the man determined to bring about a resurgence of "Zionist mysticism" in Israel while at the same time being the main contact with the faction in the Reagan administration firmly committed to the destabilization of the oilproducing Gulf countries. The Post quoted Neeman: "There are . . . powerful factors in the Reagan administration . . . who are already thinking in terms beyond the fall of the House of Saud. They are mostly concentrated in the defense and industrial establishments, and are thinking of America's real interests in the Middle East in the not-too-distant future when Saudi Arabia topples. Once that happens, Israel will again loom large as the only reliable support for the U.S. in the region. Secretary of State Haig, for example, is certainly to be counted among those holding such a view; and so should National Security Adviser Richard Allen."

Given what has happened since these words were spoken, it is clear that a deal has been struck to usher in a new regime of chaos and destabilization in the Middle East. This would be fully consistent with Neeman's oftenstated position that Israel must be built up into a supersophisticated "military fortress" whose existence would depend on and be nurtured by the enforced backwardness of the neighboring Arab states. In this view, Israel would be denied the role of sovereign nation-state desired by most of its citizens; it would instead fulfill the role originally designed for Zionism by the fundamentalist cultists among leading Venetian and Scottish-British aristocratic families: to be the "high technologyequipped" outpost overseeing the financial and strategic interests of the aristocracies of Europe committed to the perpetuation of feudalism in the region.

Neeman, Dr. Abdus Salam, and the bomb

Neeman was groomed for his point-man role early in his career. After training at the French Fourth Republic-run Chief of Staff Training School in Paris in the late 1940s, he developed a reputation as a superprecocious military systems expert. In the mid-1950s, he