

A stylized atomic symbol with a central blue dot and three intersecting blue elliptical orbits. The background features a teal gradient with large, light-colored abstract shapes that resemble atomic orbits or a stylized atom.

# **Iran's Nuclear Fuel Cycle Facilities: A Pattern of Peaceful Intent?**

## **OVERVIEW:**

# **Nuclear Energy or Nuclear Weapons?**

- Confirmed record of hiding sensitive nuclear fuel cycle activities from the IAEA.
- Iran's rationale for "peaceful" nuclear fuel cycle does not hold up under scrutiny.
  - Given Iran's insufficient uranium reserves, Iran cannot achieve its goal of nuclear energy independence.
  - Moreover, indigenous fuel cycle costs are substantially greater than importing nuclear fuel at market prices...or taking full advantage of its current wasted hydrocarbon resources.
- But Iran's uranium reserves could give Iran a significant number of nuclear weapons. In fact, Iran's facilities are scaled exactly like another state's facilities that were designed to produce fissile material for nuclear weapons.



# Fuel Cycle Rationalization

Senior Iranian officials have stressed **two themes** to rationalize Iran's extensive nuclear fuel cycle expenditures in support of plans to build 7000 Megawatts of nuclear power by 2020:

1. **“Iran cannot rely on energy from fossil fuels for the following reason: resources are limited...and the local use of these resources will drastically affect foreign exchange earnings.”**

-- Iranian Vice-President and Atomic Energy Minister  
Aghazadeh, May 2003

2. **“The best use that a country like mine can make out of its uranium ores is to replace oil as a primary source of energy...within two decades most of our oil production will be consumed internally, leaving nothing tangible for export.”**

-- Iranian Representative to the IAEA, Ambassador Salehi, March 2003

The background of the slide features a stylized, light-colored atomic symbol (resembling the Fermi symbol) overlaid on a teal-to-white gradient. The symbol consists of three elliptical orbits intersecting at a central point.

# **Iran's Nuclear Fuel Cycle Facilities: Concealment & Deception**

# A History of Concealment & Deception

Long-standing IAEA safeguards violations show that Iran kept its nuclear activities hidden until they were first revealed by others.

Iran's provision of "changing or contradictory information," as described by the Director General, leaves major issues remain unresolved:

- Apart from "contamination," the full extent of centrifuge research and development;
- The full extent of plutonium experimentation;
- Military involvement in any nuclear activity.



# Natanz Gas Centrifuge Uranium Enrichment Complex



- Covert facility in remote location, could enrich uranium for weapons
- Dummy structures to prevent detection and identification
- Concealed underground, hardened, well defended

Vehicle Entrance Ramp  
(before burial)

Bunkered underground  
production halls

Admin/engineering  
office area

*DigitalGlobe Quickbird commercial satellite image*

20 SEP 02



Vehicle Entrance Ramp  
(after burial)

Bunkered underground  
Centrifuge cascade halls

Helicopter  
pads

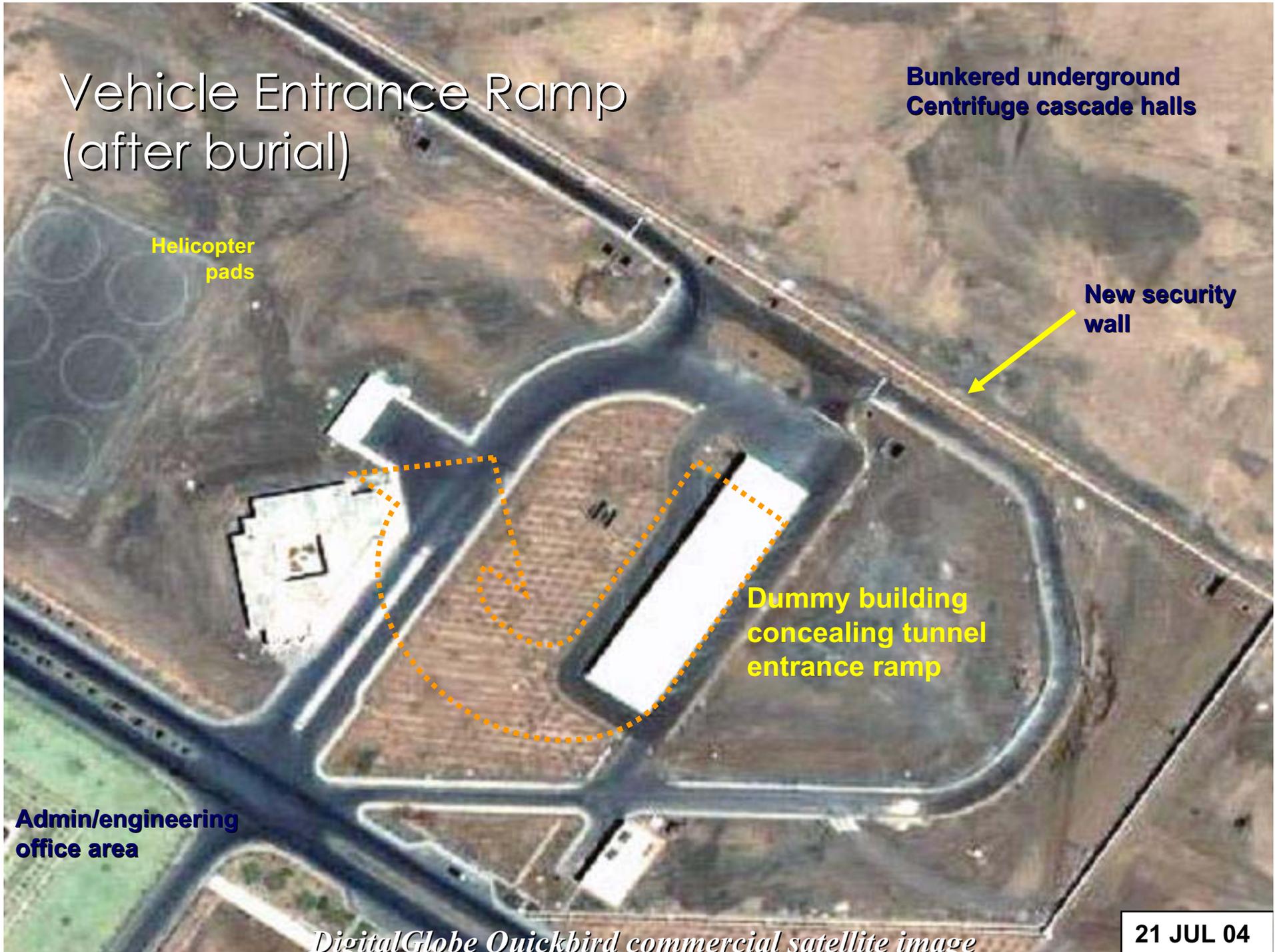
New security  
wall

Dummy building  
concealing tunnel  
entrance ramp

Admin/engineering  
office area

*DigitalGlobe Quickbird commercial satellite image*

21 JUL 04



# Concealment Effectiveness

**Buried Centrifuge  
Cascade Halls**

**Dummy Bldg Located Over  
Vehicle Entrance Ramp**

