Arak Heavy Water Reactor Complex: Reactor could produce... ~1-3 Bombs worth of Pu/yr

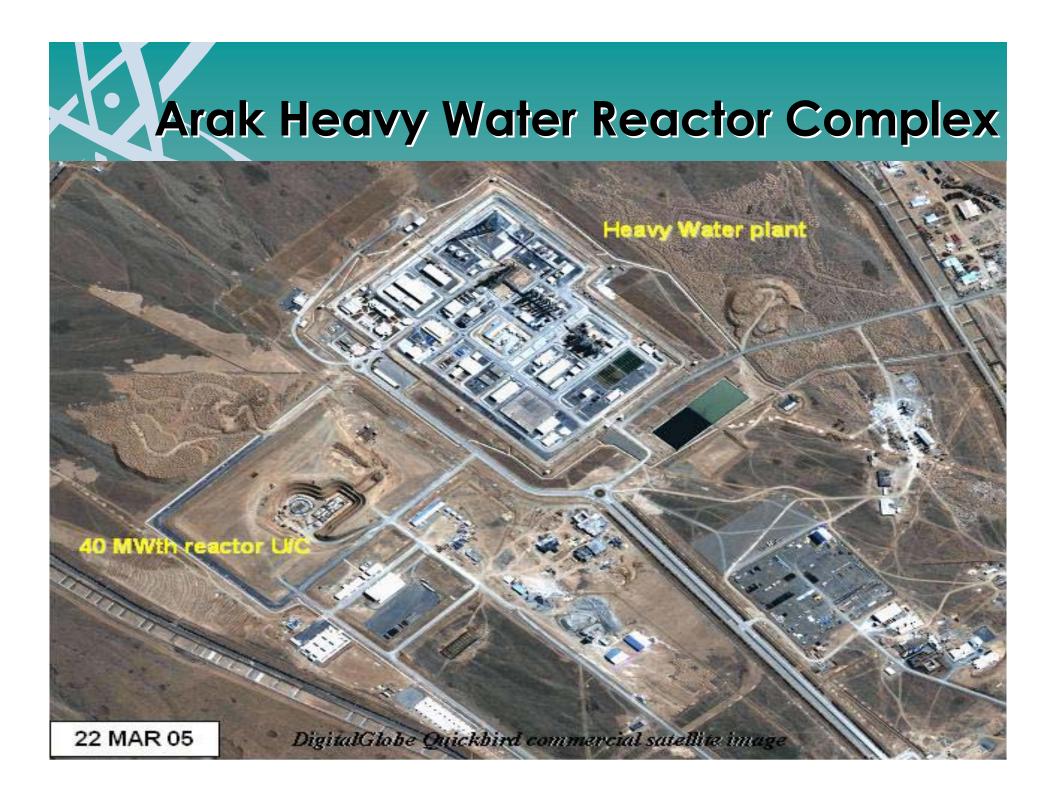
June 2004-March 2005, significant progress on Heavy Water plant construction

• Full production of primary line planned for 2005

Despite IAEA Board request to forgo construction,

• Reactor is well underway and progressing rapidly

Iran says reactor needed for medical and industrial isotopes...<u>A capability already inherent in Iran's 10 Megawatt Tehran Research Reactor</u>.



Arak 40 MWth Heavy Water Reactor

Foundation for reactor and containment structure

Foundation for reactor ventilation stack

Auxiliary building foundation (for Laboratory/Hot cells?)

DigitalGlobe Quickbird commercial satellite image

14 FEB 05

Arak 40 MWth Heavy Water Reactor

Foundation for reactor and containment structure

New excavation

Foundation for reactor ventilation stack

Auxiliary building foundation (for Laboratory/Hot cells?)

DigitalGlobe Quickbird commercial satellite image

22 MAR 05

One Uranium Mine public, One clandestine...Why?

Saghand Uranium Mine

> Uranium mining and pre-processing support facility



From AEOI website

Uranium mining shaft headframe

DigitalGlobe Quickbird commercial satellite image

24 AUG 04

Clandestine Uranium Mine & Mill Still Under IAEA Investigation

• Iran omitted from national websites, pre-2004 declarations to IAEA, and OECD/IAEA "Red Book" reporting... <u>any indication of Gachin, while regularly</u> <u>citing Saghand</u>

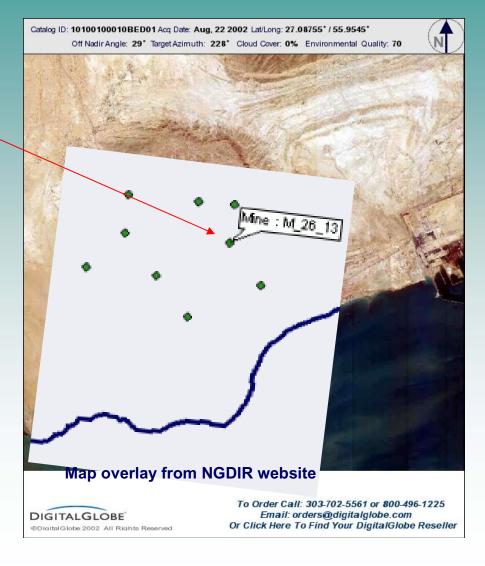
• DDG's June Oral Statement reiterated that the Agency seeks to "better understand the complex arrangements governing the current and past administration of the mine." Possible Military Involvement?

• IAEA investigating "why the work on the very promising [Gachin] project was suspended by the AEOI from 1994 to 2000" while Iran focused on the "much less promising ore deposit at Saghand."

Iranian Government Misrepresented Uranium Mine

Mine M_26_13 is located at the Gachin Uranium Mill but is <u>listed only as</u> the Sandrasang <u>mine</u> near the village of Gachin for "building stone."





Gachin Uranium Production Plant (Undeclared prior to May 2004)

ARRAN ARRAY

Reagent storage area

Production Area (leaching/ion exchange/precipitation /drying/packaging)

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Crushing / grinding circuit (Later modified) Tailings pipeline

Waste Tailings pond

DigitalGlobe Quickbird commercial satellite image

22 AUG 02

Entrance/secur

Gachin Uranium Production Plant (Undeclared prior to May 2004) Production Area

Ore receiving area

Crushing / grinding.circuit (heavily discolored from dust from recently crushed ore)

Waste Tailings pond

Tailings pipeline

eaching/ion exchange/precipital: /drying/packaging)

DigitalGlobe Quickbird commercial satellite image

"Hot-test" operations indicated

Entrance/security

gate

Discoloration from acids, wash & sludge from initial trial operations

8 JUN 04