

Week in Review

Sunday, December 20, 1998

What the Inspectors Can't Find and Why They Can't Find It

Arms inspectors have been trying for seven years to verify that Iraq has kept its promise to destroy its chemical, nuclear and biological warfare capacity, but

say many pieces of the puzzle are still unaccounted for. This table was compiled by the Wisconsin Project on Nuclear Arms Control, a research group based in

Washington that tracks the spread of weapons of mass destruction. The authors, Gary Milhollin and Kelly Nugent, based their work principally on reports from the

United Nations Special Commission and the International Atomic Energy Agency, and statements by Richard Butler, the commission's chief inspector.

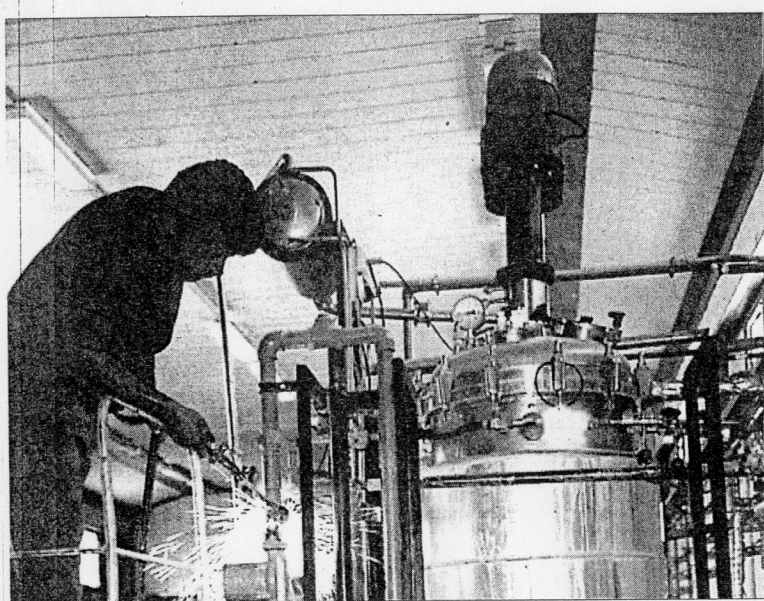
Poison Gas

UNACCOUNTED FOR IN IRAQ	HOW INSPECTORS KNOW	WHAT IRAQ SAYS
At least 3.9 tons of VX nerve gas.	Iraq admits producing this amount in 1988 and 1990.	The gas was low quality and the effort to make it failed.
VX nerve gas put into warheads.	U.S. and French tests found traces of nerve gas on warhead remnants.	The evidence was planted.
About 600 tons of ingredients for VX gas.	Out of 805 tons on hand, only 191 could be verified as destroyed.	Everything was destroyed or consumed in production.
Up to 3,000 tons of other poison gas agents.	Iraq admits producing agents in the 1980's.	They were used, thrown away or destroyed by U.S. bombs during the 1991 gulf war.
Several hundred additional tons of poison gas agents that Iraq may have produced.	Iraq had enough ingredients to make more poison gas than it admits producing.	All poison gas production has been declared.
4,000 tons of ingredients to make poison gas.	Iraq admits importing or producing them.	No records of what happened to them are available.
500 bombs with parachutes to deliver gas or germ payloads.	Iraq admits producing them.	They were secretly destroyed.
About 550 artillery shells filled with mustard gas.	Iraq admits they existed.	They were lost shortly after the gulf war.
107,500 casings for chemical arms	Iraq admits producing or importing them.	No records are available.
31,658 filled and empty chemical munitions.	Iraq admits producing or importing them.	They were thrown away, destroyed secretly or destroyed by U.S. bombs.
An Iraqi Air Force document showing how much poison gas was used against Iran, and thus how much Iraq has left.	A U.N. inspector held the document briefly in her hands before Iraq confiscated it.	Inspectors might be able to see it, but only in the presence of the Secretary General's personal envoy.
The results of a project to make binary artillery shells for sarin nerve gas.	Iraq admits it ran such a project and made experimental shells.	There are no records or physical traces of the program.
Production procedures for making poison gas.	Such procedures are needed for large-scale production.	No documents containing these procedures can be found.
Documents showing the overall size of the chemical weapons program.	Inspectors determined that specific documents are still missing.	No such documents can be found.



Ramazan Ozturk/Sipa Press

A Kurdish mother and her child killed in Halabja, where Iraq is accused of using poison gas in 1988.



Associated Press

A worker under the supervision of U.N. weapons inspectors dismantling a fermentation vat in Iraq in 1996. Such a vat could be used to make biological weapons.

Germ Warfare Agents

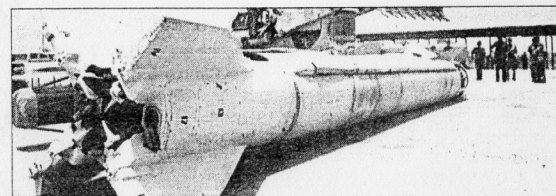
UNACCOUNTED FOR IN IRAQ	HOW INSPECTORS KNOW	WHAT IRAQ SAYS
At least 157 aerial bombs filled with germ agents.	Iraq admits filling this many.	They were secretly destroyed.
At least 25 missile warheads containing germ agents (anthrax, aflotoxin and botulinum).	Iraq admits producing them.	They were secretly destroyed.
Excess germ warfare agent.	Iraq admits producing more of the agent than was used to fill munitions.	The excess was secretly destroyed.
Spraying equipment to deliver germ agents by helicopter.	Iraq admits it tested such equipment.	Iraq refuses to explain what happened to it.
The results of a project to deliver germ agents by drop tanks.	Iraq admits the project existed, but inspectors cannot verify Iraq's account.	Everything has been accounted for.
Growth media to produce three or four times the amount of anthrax Iraq admits producing.	U.N. inspectors discovered that this much was imported.	Either the material was not imported or it went to a civilian lab.
Equipment to produce germ agents.	Iraq provided an incomplete inventory.	Everything has been accounted for.
Program to dry germ agents so they are easier to store and use.	Inspectors saw a document revealing the program's existence.	No such program existed.
Log book showing purchases for the germ warfare program.	Inspectors saw the log book in 1995.	The book cannot be found.
List of imported ingredients for germ agents.	Iraq admits the document exists.	The document cannot be found.
List of ingredients for germ agents stored at Iraq's main germ facility.	Iraq admits the document exists.	The document cannot be found.
The total amount of germ agents Iraq produced (anthrax, botulinum, gas gangrene, aflatoxin).	Production capacity far exceeds the amount Iraq admits producing.	Iraq did not use full capacity.

Nuclear Weapons

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Components for three to four implosion-type nuclear weapons, lacking only uranium fuel.	Intelligence gathered by the former U.N. inspector Scott Ritter.	Such weapons do not exist.
Drawings showing the latest stage of Iraq's nuclear weapon design.	Inspectors determined the drawings must exist.	Cannot explain why the drawings are missing.
Design drawings of individual nuclear weapon components, including the precise dimensions of explosive lenses.	Other drawings show that these drawings exist.	Iraq no longer has these drawings.
Drawings of how to mate a nuclear warhead to a missile.	Other drawings show that these drawings exist.	Iraq no longer has these drawings.
Documents detailing cooperation among various Iraqi nuclear weapon and missile groups.	The cooperation must have generated a paper trail.	No response.
Documents revealing how far Iraq got in developing centrifuges to process uranium to weapons grade.	Iraq tested one or two prototypes.	The documents were secretly destroyed.
170 technical reports explaining how to produce and operate these centrifuges.	Iraq admits a German supplier provided them, and a few were found.	The documents were secretly destroyed.
Materials and equipment belonging to Iraq's most advanced nuclear weapon design team.	Inspectors have determined that important items are still missing.	Iraq has provided everything it can find.
Materials and equipment belonging to the group trying to process uranium to nuclear weapons grade.	Inspectors have determined that important items are still missing.	Iraq has provided everything it can find.
The name and whereabouts of a foreign national who offered to help Iraq's nuclear program.	Inspectors were informed that the offer was made.	Inspectors should consult an Iraqi expatriate who might provide a lead. (They did; it was a dead end.)
Documents proving Iraq's claim that it abandoned its secret nuclear-bomb program.	Inspectors determined that such a step must have been recorded.	No records can be found.

Ballistic Missiles

UNACCOUNTED FOR	HOW INSPECTORS KNOW	WHAT IRAQ SAYS
Seven, locally-produced ballistic missiles.	Iraq admits it had them.	They were secretly destroyed in 1991.
Two operational missiles that Iraq imported.	Iraq admits it had them.	They were secretly destroyed in 1991.
Components for missile guidance that Iraq imported.	Iraq supplied an inventory but it was incomplete.	They were secretly destroyed.
Up to 150 tons of material for missile production.	Iraq admits it had it; destruction could not be verified.	It was secretly melted or dumped into rivers and canals.
Liquid fuel for long-range missiles.	Iraq admits it had them.	It was secretly destroyed and will not be discussed further.
Up to 50 Scud-type missile warheads, presumably for high explosives.	Iraq admits it had them.	They were secretly destroyed.
Drawings showing how to together a Scud missile.	Iraq needed such drawings to produce these missiles.	All available drawings were provided.



An Iraqi al-Hussein Scud missile awaiting destruction by U.N. weapon inspectors.

Associated Press