

NOTES ON NUCLEAR WORDING

INDEX..... 1

FAQ COMPONENTS

does “nuclear weapons” include testing? YES..... 2

WHAT ABOUT THE FISSILE MATERIAL CUTOFF TREATY? NO. “weapons” does not, by itself, include it. 5

SHOULD WE SAY “NUCLEAR FORCES?” NO - A/T ARNETT’ 6

DEFENSE OF ARNETT’S “FORCES” WORDING: POSSIBLE STRATEGIC AND/OR TACTICAL ADDITION 11

SIDE CONCERN OVER ARNETT’S TREATY COMPONENTS 12

SHOULD WE SAY “NUCLEAR ARSENAL?”: NO, WE SHOULD NOT 13

NUCLEAR ARSENAL CAN BE A *COMPONENT* – IE, THE KUSWA VARIATION 19

SHOULD WE SAY NUCLEAR STOCKPILES? HMMM, PROBABLY NOT 20

should we say NUCLEAR devices? NO, BUT MAYBE NUCLEAR EXPLOSIVE DEVICES..... 25

MORE SOURCE MATERIALS

“nuclear stockpiles” AMBIGUITY 29

“NUCLEAR STOCKPILES” IS CLEAR 30

“NUCLEAR WEAPONS” IS REASONABLY CLEAR 31

“NUCLEAR WEAPONS” IS REASONABLY CLEAR: TLATELOLCO 32

A/T WTF =- TLATELOCO? 36

NUCLEAR WEAPONS IS REASONABLY CLEAR: bRUSSELS TREATY 37

nuclear weapons IS REASONABLY CLEAR: BANGKOK TREATY 38

NUCLEAR WEAPONS IS REASONABLY CLEAR: DEPARTMENT OF DEFENSE 39

A/T “DELIVERY VEHICLES” 40

A/T DEPLETED URANIUM 41

possible ambiguities in nuclear weapons..... 42

NUCLEAR ARSENAL INCLUDES DEPLETED URANIUM..... 43

NUCLEAR ARSENAL GOOD 44

NUCLEAR WEAPONS: POTENTIAL AMBIGUITIES

1. Does it include nuclear materials (ie should nuclear energy be topical)
2. Does it include nuclear-powered weapons (submarines, nuclear power satellites)
3. Does it include the delivery vehicles?
4. Does it include DU?

DOES “NUCLEAR WEAPONS” INCLUDE TESTING? YES

1. CERTAINLY THROUGH EFFECTS – WHICH IS REASONABLY CLEAR. I DON'T SEE THE TOPIC THAT WOULD GAIN BY SAYING ANYTHING ELSE? CAN WE RUN THIS THROUGH A SPECIFIC TOPIC?

2. “NUCLEAR WEAPONS” DOES INCLUDE TESTING ACCORDING TO THE *TLATELOCO* AND *BANGKOK* DEFINITIONS – NUCLEAR TESTING STILL BLOWS SHIT UP WITH BIG WEAPONS, ALBEIT EXPERIMENTAL. THE CRUCIAL COMPONENT IS THIS – IS THERE AN UNCONTROLLED REACTION? THAT'S THE DEFINING COMPONENT. WHILE IT WOULD INCLUDE (DESTRUCTIBLE) DELIVERY SYSTEMS, YOU DON'T HAVE TO *MOUNT IT* TO MAKE IT A NUKE.

NOT COMPLICATED – DOES THE SHIT MAKE A BIG BIG BOOM THROUGH FISSION OR FUSION THAT CAN KILL? YES? IT'S A NUCLEAR WEAPON. DONE. THIS IS IN THE DEFINITION, AND WE'RE PSYCHING OURSELVES OUT. *TESTING GOES BOOM.*

PROOF ON THIS:

NUCLEAR WEAPONS TESTING IS A TERM OF ART: CTBT BANS IT

Ctbto 8

<http://www.ctbto.org/press-centre/press-releases/2008/leading-international-figures-joinforeign-ministers-in-call-for-treatybanning-nuclear-weapons-testing/?textonly=1>

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (henceforth referred to as “the Commission”) was established on 19 November 1996 by a Resolution adopted by the Meeting of States Signatories at the United Nations in New York.

The United Nations Secretary-General opened a conference today, on 24 September 2008, at the U.N. headquarters in New York, to promote **the Comprehensive Nuclear-Test-Ban Treaty (CTBT), which will ban all *nuclear weapons* testing on Earth** when in force.

CTBT STOPS NUCLEAR WEAPONS TESTING

AKAKA 99

HAWAII SENATOR, DEM,

http://akaka.senate.gov/public/index.cfm?FuseAction=speeches.home&month=8&year=1999&release_id=1209

Mr. President, I rise to urge Senate consideration of **the Comprehensive Test Ban Treaty** (CTBT). As Ranking Member of the Governmental Affairs Subcommittee on International Security, Proliferation and Federal Services, I believe that ratification of the CTBT would enhance our nation's security for several reasons.

It **imposes a verifiable ban on all *nuclear weapons* testing**, conducted anywhere, at any time; it takes a pro-active step towards ending the threat of nuclear tests conducted by rogue nations attempting to develop nuclear weapons; and it demonstrates the United States' commitment to a safer and more secure future free from radioactive fallout produced by nuclear explosions.

THE EXPLODING STUFF THE CTBT BANS ARE *NUCLEAR WEAPONS* EXPLOSIONS

JOINT MINISTERIAL STATEMENT ON NUCLEAR WEAPONS 6

<http://www.acronym.org.uk/docs/0609/doc04.htm>

Joint Ministerial Statement on CTBT Presented in New York at the United Nations by Fifty-Nine Foreign Ministers, Co-Chairs Australia, Canada, Finland, Japan, the Netherlands, September 20, 2006.

We, the Foreign Ministers who have issued this statement, reaffirm our Support for the Comprehensive Nuclear- Test-Ban Treaty (CTBT), which would rid the world of *nuclear weapons* test explosions and would contribute to systematic and progressive reduction of *nuclear weapons* and the prevention of nuclear proliferation.

3. CTBT MEETS THE STEM PHRASE: IT'S A MOVE TO ABOLITION AND THIS INCLUDES THE PHRASE NUCLEAR WEAPONS

SCHEINMAN 3

http://www.nti.org/e_research/e3_9a.html

Lawrence Scheinman, Distinguished Professor , Center for Nonproliferation Studies (CNS), Washington, D.C. Office , Monterey Institute of International Studies, April 2003

For decades, states seeking to limit nuclear weapons have called for a CTBT in the conviction that a comprehensive test ban would foreclose the ability to develop new and more powerful types of nuclear arms and would be an important stepping stone to the objective of ultimately *eliminating all nuclear weapons*. Historically, the nuclear powers have depended on nuclear testing to develop new types of nuclear weapons, and to a far lesser extent, to confirm the reliability of their arsenals. The United States and other countries concerned about nuclear proliferation also have supported a CTBT as a means for slowing the spread of advanced nuclear weapon capabilities to additional countries.

4. THE *TEXT* OF THE CTBT USES THIS EXPRESSION:

A. FOR THE STEM

THE CTBT 96

<http://disarmament.un.org/treatystatus.nsf/44e6eeabc9436b78852568770078d9c0/0655d51a30692632852568770079dda2?OpenDocument>

Stressing therefore the need for continued systematic and progressive efforts to reduce *nuclear weapons* globally, with the ultimate goal of eliminating those *weapons*, and of general and complete disarmament under strict and effective international control,

B. ALL OVER THE DAMN PLACE

THE CTBT 96

<http://disarmament.un.org/treatystatus.nsf/44e6eeabc9436b78852568770078d9c0/0655d51a30692632852568770079dda2?OpenDocument>

Recognizing that the cessation of all *nuclear weapon test explosions* and all other nuclear explosions, by constraining the development and qualitative improvement of *nuclear weapons* and ending the development of advanced new types of *nuclear weapons*, constitutes an effective measure of *nuclear disarmament* and non-proliferation in all its aspects,

C. AND YES, THEY ARE NUCLEAR WEAPONS WHEN THEY ARE BLOWING UP IN TESTS

THE CTBT 96

<http://disarmament.un.org/treatystatus.nsf/44e6eeabc9436b78852568770078d9c0/0655d51a30692632852568770079dda2?OpenDocument>

Noting the aspirations expressed by the Parties to the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water **to seek to achieve the discontinuance of all *test explosions of nuclear weapons* for all time,**

SIDE NOTE: THE TEXT OF THE CTBT MENTIONS ARSENAL. ARSENAL IS BIGGER, BUT IT IS NOT NECESSARY TO INCLUDE THE CTBT

REZ BY REZ EVALUATION:

1. stables: sure
2. Arnett: stem – clearly
Subtopic – yes, sir!
3. Kuswa/Galloway – the variations make it unclear. “Posture” most likely, infrastructure, certainly.
Arsenal, probably not
4. Mancuso – maybe not, but I don’t think that we really have a good solution to this because the definite operative term of art – “missions” – clearly refers to assigned functions of warheads, not materials. If this topic excludes CTBT, it’s for reasons other than the choice of the noun phrase

**WHAT ABOUT THE FISSILE MATERIAL CUTOFF TREATY? NO. "WEAPONS"
DOES NOT, BY ITSELF, INCLUDE IT.**

1. I DON'T CARE. NO ONE VOTED FOR THIS ONE TREATY. JUST LET IT GO

2. NO – IT IS NOT A COMPONENT OF NUCLEAR WEAPONS

FISSILE MATERIAL IS THE PRECURSOR MATERIAL

Atomic archive 98

<http://www.atomicarchive.com/Glossary/Glossary4.shtml>

This site was built by AJ Software & Multimedia, the team that runs atomicarchive.com, a leading website on the science, history and consequences of the atomic age.

Fissile Material

Nuclear material, containing a high proportion of fissile isotopes, **which is essential for making nuclear explosives. High-enriched uranium (HEU) and weapons-grade plutonium are examples of fissile material.**

3. IT WOULD MEET ANYTHING TOWARD A GOAL OF ELIMINATING NUCLEAR WEAPONS – IT APPLIES ONLY TO THE **CONSTRUCTION OF NUCLEAR WEAPONS**

FEDERATION OF AMERICAN SCIENTISTS, NO LISTED DATE

<http://www.fas.org/nuke/control/fmct/>

A Fissile Material Cut-off Treaty [FMCT] would strengthen nuclear non-proliferation norms by adding a binding international commitment to existing constraints on nuclear weapons-usable fissile material. The proposed treaty would ban the production of fissile material for nuclear weapons or other nuclear explosive devices. It would not apply to plutonium and HEU for non-explosive purposes.

ALL NEGOTIATED DRAFTS USE THE TERM "NUCLEAR WEAPONS" – ALTHOUGH SUCH TREATIES WOULD INCLUDE "OTHER EXPLOSIVE DEVICES" AS WELL

NUCLEAR THREAT INITIATIVE 3

<http://www.nti.org/db/china/fmctorg.htm>

A Fissile Material Cutoff Treaty (FMCT) has not yet been negotiated, but such an agreement **might prohibit the production of fissile material for nuclear explosives** and the production of such material outside of international safeguards. An FMCT might extend verification measures to fissile material production facilities (i.e. enrichment and reprocessing) that are not currently subject to international monitoring. An FMCT's ban on unsafeguarded production of fissile material would place a quantitative constraint on the amount of fissile material available for use in nuclear weapons.

In December 1993, **the UN General Assembly passed a consensus resolution (48/75L) on cut-off, calling for the negotiation of a "nondiscriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for *nuclear weapons or other nuclear explosive devices.*"**

WHAT WORDING EXCLUDES THIS BY USING "NUCLEAR WEAPONS"? IF WE INCLUDE PRECURSOR MATERIALS, WE MAKE THIS A NUCLEAR ENERGY TOPIC AS WELL, AND THROW IN IFRS?

SHOULD WE SAY “NUCLEAR FORCES?” NO - A/T ARNETT

1. THE SILLY BUT REAL DISAD – PHYSICS BULLSHIT

NUCLEAR FORCES IS ALSO A TERM OF ART IN PHYSICS

SCI TECH DICTIONARY NO DATE

<http://www.answers.com/topic/nuclear-force>

(*nuclear physics*) That part of the force between nucleons which is not electromagnetic; it is much stronger than electromagnetic forces, but drops off very rapidly at distances greater than about 10^{-13} centimeter; it is responsible for holding the nucleus together.

MORE ANNOYING EVIDENCE

ENCARTA 9

http://encarta.msn.com/dictionary_701708190/nuclear_force.html

nu-cle-ar force

noun

Definition:

physics

Same as strong interaction

MORE

DICTIONARY.COM 9

<http://dictionary.reference.com/browse/nuclear+force?qsrc=2446>

nuclear force

–noun

strong force (def. 1).

WIKIGASMS

WIKIPEDIA RIGHT NOW!

http://en.wikipedia.org/wiki/Nuclear_forces

The nuclear force (or nucleon-nucleon interaction or residual strong force) is the force between two or more nucleons. It is responsible for binding of protons and neutrons into atomic nuclei. To a large extent, this force can be understood in terms of the exchange of virtual light [mesons](#), such as the [pions](#). Sometimes the nuclear force is called the **residual strong force**, in contrast to the [strong interactions](#) which are now understood to arise from [quantum chromodynamics](#) (QCD). This phrasing arose during the 1970s when QCD was being established. Before that time, the *strong nuclear force* referred to the inter-nucleon potential. After the verification of the [quark model](#), *strong interaction* has come to mean QCD.

MORE FUN WITH PHYSICS

ZIMMER 4

<http://www.e18.physik.tu-muenchen.de/zimmer/NuclPartPhys/NuclPartPhys12Ch12.pdf>

PHYSICS PROFESSOR, technische Universität München

The term nuclear forces denotes the interactions between nucleons. Like other hadrons (strongly interacting particles with internal structure), nucleons are composite systems of quarks bound together by the strong force, which is mediated by gluons. Similar to the van-der-Waals interaction, which is a residual electromagnetic interaction between atoms (i.e. composite objects held together by electromagnetic forces), the nucleon-nucleon (NN) interaction is a residual strong interaction between two nucleons. From the weak dependence of the nuclear binding energy per nucleon as a function of mass number A we know already that nuclear interactions have a range much shorter than the extension of medium size nuclei (see section 2.4). In earlier sections we have seen that nuclear properties like magnetic moments and nuclear level schemes may be described rather successfully by nuclear models involving an effective potential, without referring explicitly to the NN potential. Indeed, the exact form of the NN potential can be obtained only in studying the most simple systems and situations available. These are the the deuteron and nucleon-nucleon scattering experiments. Symmetry properties of nuclear forces, like conservation of electric charge and conservation of isospin, treated in the present chapter, can also be derived, respectively, tested in more complex nuclei.

TIME CUBE OR SOMETHING, YAY?

VAN LINDEN 3

<http://www.euclideanrelativity.com/idea/section5.asp>

My physics study began at the technical university of Eindhoven in the Netherlands but was broken off in favor of a career as a professional musician. After five years of music, I decided to take up studying again. That revived study was finished with a bachelor's degree in electrotechnics after which I accepted a job as an ICT project leader and consultant at a global chemicals company which has been my work since 1986.

The nuclear forces consist of a 2 or 3 dimensional subset of our 4D space-time. They may however *rotate* in 4D and thus occupy any of the 4 dimensions at a given moment.

2. DISAD: NUCLEAR FORCES INCLUDES NOT ONLY THE WARHEADS, BUT THE ASSOCIATED MILITARY UNITS

NON PROLIFERATION REVIEW 94

<http://cns.miis.edu/npr/pdfs/mis12.pdf>

Douglas Clarke, RFE/RL Research Report, 1/18/ 93, p. 5 (2898). Andrey Naryshev and Oleg Falichev, Krasnaya Zvezda (Moscow), 1/23/93, p. 1; in FBIS-SOV-93-015, 1/26/93, pp. 12-13 (3291). Umit Enginsoy and George Leopold, Defense News, 1/25/93, pp. 3, 27 (3254). Mednews, 1/25/93, pp. 5-6; Interfax (Moscow), 1/22/93; in FBIS-SOV-93-013, p. 12 (3290).

During a summit meeting, Belarus, Kazakhstan Russia, and Ukraine again fail to agree on the transfer of all ex-Soviet nuclear weapons to Russia. Russia's demands for control over nuclear warheads, ballistic missiles, nuclear weapons on strategic bombers, early warning systems, antimissiles and anti-aircraft systems were rebuffed by Belarus, Kazakhstan, and Ukraine. Kazakhstan supports the supreme command of the **United Forces of the CIS, which maintains that the term "nuclear forces" include military formations, installations, and maintenance units which have strategic nuclear weapons in their arsenals.**

ASSOCIATED MILITARY FORCES SUPPORTED BY US DEFINITIONS AS WELL

CONGRESSIONAL BUDGET OFFICE 78

<http://www.cbo.gov/doc.cfm?index=6710>.

“RETALIATORY ISSUES FOR THE U.S. STRATEGIC NUCLEAR FORCES”

I/ U.S. military forces are usually divided into two broad categories: strategic nuclear and general purpose. **The strategic nuclear forces include** intercontinental ballistic missiles (**ICBMs**), submarine-launched ballistic missiles (**SLBMs**), **B-52 and FB-111 bombers, air defense missiles and interceptors defending North America, and the associated units and facilities required to control and support these forces.**

FORCES INCLUDE ASSOCIATED NUCLEAR-CAPABLE BUT NOT DEFINITIONALLY NUCLEAR ARMED ASSETS

RUSSIAN FEDERATION 9

<http://premier.gov.ru/eng/countries/275.html>

The strategic nuclear forces, which are still central to the country's military security, have a marine component and **include a squadron of nuclear missile carrying submarines**, one L'Inflexible-type and three new-generation Le Triomphant-type. **Tactical nuclear forces include three squadrons of fighter bombers** (60 Mirage 2000N planes) **and two assault aviation flotillas** (24 Super Etendard planes of naval aircraft carriers).

BATTLEFIELD SUPPORT SYSTEMS

SCHELSINGER 75

http://www.dod.gov/pubs/foi/reading_room/237.pdf.

NATO forward-deployed nuclear forces consist of battlefield support systems (artillery, short range surface-to-surface missiles (SSM's) and atomic demolition munitions (ADM's)), nuclear air defense systems (Nike Hercules) and longer range systems (air delivered bombs, long range SSM's and submarine launched ballistic missiles (SLBM's)).

SUBMARINES

Ptichkin 95

http://www.globalsecurity.org/wmd/library/news/russia/1995/drssov099_b_95021.htm

Moscow ROSSIYSKAYA GAZETA, 19 May 95 First Edition pp 1-2

by Sergey Ptichkin

“Typhoon in a Teacup: Undervaluing Naval Strategic Forces Poses Threat of Russia Losing Most Important Priorities, and Not Only Military Ones”

The most important properties of the naval strategic nuclear forces include high mobility -- our nuclear submarines are capable of changing their location by 350-500 miles in 24 hours (700-900 km), and their missile weaponry is in a constant state of combat readiness. The time from receiving a signal to launching a missile is a matter of a few minutes.

3. DISAD: FORCES INCLUDE DELIVERY VEHICLES

Office of the Deputy Assistant to the Secretary of Defense 8

<http://www.acq.osd.mil/ncbdp/nm/nmbook/chapters/ch3.htm>

The Office of the Deputy Assistant to the Secretary of Defense for Nuclear Matters (ODATSD(NM)) is pleased to present the 2008 edition of *Nuclear Matters: A Practical Guide*. This CD offers an overview of the U.S. Nuclear Weapons Program and a description of how the United States maintains an effective nuclear deterrent.

The U.S. nuclear force structure associated with the U.S. Nuclear Weapons Program is composed of both U.S. nuclear weapons and the delivery systems associated with them.

THAT INCLUDES C3I ASSETS AND DELIVERY VEHICLES AND BALLISTIC MISSILE DEFENSES

Office of the Deputy Assistant to the Secretary of Defense 8

<http://www.acq.osd.mil/ncbdp/nm/nmbook/chapters/ch3.htm>

The Office of the Deputy Assistant to the Secretary of Defense for Nuclear Matters (ODATSD(NM)) is pleased to present the 2008 edition of *Nuclear Matters: A Practical Guide*. This CD offers an overview of the U.S. Nuclear Weapons Program and a description of how the United States maintains an effective nuclear deterrent.

The New Triad of capabilities was developed during the 2001 Nuclear Posture Review. The traditional *Nuclear Triad* is just one key element of the New Triad. **The *force capabilities* of the New Triad include a wider range of non-kinetic and *conventional strike* capabilities while maintaining a robust nuclear deterrent. Also, force capabilities include integrated ballistic and cruise missile defenses and a responsive infrastructure. These capabilities are supported by a robust and responsive national Command and Control (C2) system, advanced intelligence, adaptive planning systems, and an ability to maintain access to validated, high-quality information for timely situational awareness.**

**4. LACK OF DEFINITION: SEARCH OF INF TREATY DOESN'T REVEAL ANYTHING *DEFINITIONAL*:
ALL ITS DEFINITIONS ARE OF SPECIFIC WEAPON TYPES**

INTERMEDIATE NUCLEAR FORCES TREATY 87

<http://www.state.gov/www/global/arms/treaties/inf2.html>

Article I

In accordance with the provisions of this Treaty which includes the Memorandum of Understanding and Protocols which form an integral part thereof, each Party shall eliminate its intermediate-range and shorter-range missiles, not have such systems thereafter, and carry out the other obligations set forth in this Treaty.

Article II

For the purposes of this Treaty:

1. The term "ballistic missile" means a missile that has a ballistic trajectory over most of its flight path. The term "ground-launched ballistic missile (GLBM)" means a ground-launched ballistic missile that is a weapon-delivery vehicle.
2. The term "cruise missile" means an unmanned, self-propelled vehicle that sustains flight through the use of aerodynamic lift over most of its flight path. The term "ground-launched cruise missile (GLCM)" means a ground-launched cruise missile that is a weapon-delivery vehicle.
3. The term "GLBM launcher" means a fixed launcher or a mobile land-based transporter-erector-launcher mechanism for launching a GLBM.
4. The term "GLCM launcher" means a fixed launcher or a mobile land-based transporter-erector-launcher mechanism for launching a GLCM.
5. The term "intermediate-range missile" means a GLBM or a GLCM having a range capability in excess of 1000 kilometers but not in excess of 5500 kilometers.
6. The term "shorter-range missile" means a GLBM or a GLCM having a range capability equal to or in excess of 500 kilometers but not in excess of 1000 kilometers.
7. The term "deployment area" means a designated area within which intermediate-range missiles and launchers of such missiles may operate and within which one or more missile operating bases are located.
8. The term "missile operating base" means:
 - (a) in the case of intermediate-range missiles, a complex of facilities, located within a deployment area, at which intermediate-range missiles and launchers of such missiles normally operate, in which support structures associated with such missiles and launchers are also located and in which support equipment associated with such missiles and launchers is normally located; and
 - (b) in the case of shorter-range missiles, a complex of facilities, located any place, at which shorter-range missiles and launchers of such missiles normally operate and in which support equipment associated with such missiles and launchers is normally located.
9. The term "missile support facility," as regards intermediate-range or shorter-range missiles and launchers of such missiles, means a missile production facility or a launcher production facility, a missile repair facility or a launcher repair facility, a training facility, a missile storage facility or a launcher storage facility, a test range, or an elimination facility as those terms are defined in the Memorandum of Understanding.
10. The term "transit" means movement, notified in accordance with paragraph 5(f) of Article IX of this Treaty, of an intermediate-range missile or a launcher of such a missile between missile support facilities, between such a facility and a deployment area or between deployment areas, or of a shorter-range missile or a launcher of such a missile from a missile support facility or a missile operating base to an elimination facility.
11. The term "deployed missile" means an intermediate-range missile located within a deployment area or a shorter-range missile located at a missile operating base.
12. The term "non-deployed missile" means an intermediate-range missile located outside a deployment area or a shorter-range missile located outside a missile operating base.
13. The term "deployed launcher" means a launcher of an intermediate-range missile located within a deployment area or a launcher of a shorter-range missile located at a missile operating base.
14. The term "non-deployed launcher" means a launcher of an intermediate-range missile located outside a deployment area or a launcher of a shorter-range missile located outside a missile operating base.
15. The term "basing country" means a country other than the United States of America or the Union of Soviet Socialist Republics on whose territory intermediate-range or shorter-range missiles of the Parties, launchers of such missiles or support structures associated with such missiles and launchers were located at any time after November 1, 1987. Missiles or launchers in transit are not considered to be "located"

DEFENSE OF ARNETT'S "FORCES" WORDING: POSSIBLE STRATEGIC AND/OR TACTICAL ADDITION

STRATEGIC FORCES ARE CLEARLY DEFINED

CONGRESSIONAL BUDGET OFFICE 78

<http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA451527>

U.S. strategic nuclear forces consist of three parts: land-based intercontinental ballistic missiles (ICBMs), long-range bombers, and submarine-launched ballistic missiles (SLBMs). Together these three parts are known as the TRIAD.

STRATEGIC FORCES INCLUDE THE TRIAD

CONGRESSIONAL BUDGET OFFICE 78

<http://www.cbo.gov/doc.cfm?index=6710>.

U.S. strategic nuclear forces consist of three components: land-based intercontinental ballistic missiles (iCBMs), long-range bombers, and submarine-launched ballistic missiles (SLBKs).

STRATEGIC NUCLEAR FORCES CLEAR

ROBERTSON 2

A dictionary of modern politics

In terms of nuclear warfare there is a slightly different distinction. Strategic nuclear forces consist of major intercontinental missile systems intended to massively destroy the homeland of the enemy. Tactical weapons (sometimes

SIDE CONCERN OVER ARNETT'S TREATY COMPONENTS

Negotiating and implementing substantial and verifiable bilateral restrictions on the use and/or deployment of nuclear forces

WE DON'T HAVE TO REDUCE OUR FORCES – THERE'S NO ITS. THIS LETS IN FACILITATION OF BILATERAL CONCERNS

SHOULD WE SAY “NUCLEAR ARSENAL?”: NO, WE SHOULD NOT

1. LACK OF LEGAL DEFINITION – SEE BELOW. USING A *METAPHOR* IN THE RESOLUTION LEAVES US VULNERABLE TO *METAPHORICAL* INTERPRETATIONS, LIKE THE SWEET BALLET OF THE NUKES

2. CONCRETE IMPACT: DEPLETED URANIUM – [REPLICATED FROM BELOW]

A. FIELD CONTEXT PROVES NUCLEAR ARSENAL INCLUDES DU

AHMED 3

Nafeez Mosaddeq Ahmed is a human rights activist and political analyst specializing in the study of conflicts. The executive director of the Institute for Policy Research & Development, he is the author of a variety of reports on human rights practices, as well as the best-selling book, *The War on Freedom: How and Why America was Attacked*, S

“Behind the war on terror”

DU weapons have also been used in Kosovo despite prior warnings from DU experts including Rokke himself. ‘In April of this year [1999], myself and a few other individuals were called up to Washington DC to discuss the use of this in Kosovo,’ he stated. ‘We sat with members of the Cabinet, the President of the United States and others from the Department of State and warned them. We got to the end of the meeting and the head guys in charge promised “don’t worry about it, we won’t use it”.’³⁴⁹ NATO nevertheless proceeded to use its **nuclear arsenal** in Kosovo to devastating effect. The UN Environment Program has already found traces of radiation at eight sites in Kosovo hit by NATO DU shells.³⁵⁰ As British journalist John Pilger thus concludes in the *New Statesman*:

The truth about the effects of **depleted uranium** in shells fired in the 1991 Gulf War and Nato’s 1999 attack on Yugoslavia is that the Americans and British waged a form of nuclear warfare on civilian populations, disregarding the health and safety of their own troops.³⁵¹

DEPLETED URANIUM ISN'T A NUCLEAR WEAPON

MCDONALD 8

<http://www.unidir.org/pdf/articles/pdf-art2757.pdf>.

Avril McDonald is currently a Research Associate of the TMC Asser Instituut, The Hague, and a Lecturer in International Humanitarian Law at the University of Groningen.

"Depleted uranium weapons: the next target for disarmament?"

It has been posited that DU weapons are already prohibited by international law, despite the absence of a discrete disarmament treaty. 21 DU weapons do share some properties of weapons (both conventional and weapons of mass destruction) already addressed by arms control law. However, **even if DU weapons can be toxic and radioactive**, or can have incendiary or poisonous effects, **that does not mean that they meet the legal definitions of nuclear**, radiological, toxin, chemical, poison or incendiary **weapons**. Generally speaking, under international law, **the defining feature of all of these types of weapons is that they are specifically designed** (and/or used) **to kill or injure by means of their particular characteristic property, and this is not the case for DU weapons**. **DU weapons are not nuclear weapons**. As there is no international convention prohibiting nuclear weapons, there is no universally agreed definition. However, it seems from existing controls on the manufacture and use of nuclear weapons that **depleted uranium armaments cannot be considered as nuclear weapons**. **Protocol III to the Modified Brussels Treaty of 1954 on the Control of Armaments defines an atomic weapon** as "any weapon which contains, or is designed to contain or utilise nuclear fuel or radioactive isotopes and which, by explosion or other uncontrolled nuclear transformation of the nuclear fuel, or by radioactivity of the nuclear fuel or radioactive isotopes, is capable of mass destruction, mass injury or mass poisoning". 22 **Article 1(c) of the Treaty on the Southeast Asia Nuclear Weapon-Free Zone defines a nuclear weapon** as "any explosive device capable of releasing nuclear energy in an uncontrolled manner but does not include the means of transport or delivery of such device if separable from and not an indivisible part thereof". 23 **DU weapons are not explosive devices. Nor are they used with the purpose of killing by radiation**. It is unsettled whether they are capable of mass destruction, mass injury or mass poisoning.

3. NO OFFENSIVE ADVANTAGE – AT BEST, WE GET TO WARHEADS, WHICH APPARENTLY EXCLUDE THE TRULY AWESOME FISSILE MATERIAL CUTOFF TREATY

ARSENAL IS WEAPONS

CBO 78

<http://www.cbo.gov/doc.cfm?index=6710>.

The U.S. nuclear arsenal consists of thousands of nuclear weapons, and there are thousands of possible targets in the Soviet Union.

IT'S WARHEADS

SNEIDER 3

<http://www.commondreams.org/views03/1224-05.htm>.

Daniel Sneider is foreign-affairs columnist for The San Jose Mercury News.

The U.S. nuclear arsenal consists mainly of warheads powerful enough to wipe out a city, mounted on missiles and aimed at Russia and China

WARHEADS: PAKISTAN

THE NATION 5/28/9

<http://www.nation.com.pk/pakistan-news-newspaper-daily-english-online/Politics/28-May-2009/Pak-has-60-nukes-building-more-US-Congress-report>

Pakistan's nuclear arsenal consists of approximately 60 nuclear warheads.

WARHEADS: RUSSIA

GREENPEACE 6

<http://archive.greenpeace.org/comms/nukes/ctbt/read10.html>

Russia's nuclear arsenal consists of more than 10,400 nuclear warheads, of which 7,235 are strategic (deployed on nuclear- powered ballistic missile submarines, ICBMs, and bombers), and approximately 3,200 are non-strategic warheads.

WARHEADS: CHINA

LIEBER AND PRESS 6

<http://www.ituassu.com.br/theriseofusnuclearprimacy.pdf>.

Keir A. Lieber, the author of War and the Engineers: The Primacy of Politics Over Technology, is Assistant Professor of Political Science at the University of Notre Dame. Daryl G. Press, the author of Calculating Credibility: How Leaders Assess Military Threats, is Associate Professor of Political Science at the University of Pennsylvania

According to unclassified U.S. government assessments, **China's entire intercontinental nuclear arsenal consists of 18 stationary single-warhead ICBMs.**

4. EVEN THOUGH LABS MAINTAIN THE ARSENAL, THE SIZE OR NUMBERS OF THE ARSENALS ARE COUNTING WARHEADS

OECD NUCLEAR ENERGY AGENCY 7

<http://www.gen-4.org/PDFs/TechAddndm.pdf>.

Addendum to the Evaluation Methodology for Proliferation Resistance and Physical Protection of Generation IV Nuclear Energy Systems Technical Addendum to Revision 5 January 31, 2007 GIF Review Draft – Not for Further Distribution Revised April 13, 2007 Prepared by: The Proliferation Resistance and Physical Protection Evaluation Methodology Expert Group Of the Generation IV International Forum

How a proliferant Host State may choose to abuse the civilian nuclear fuel cycle depends in part on the objectives the Host State has for **an eventual nuclear weapons arsenal**. These objectives **may be described in a number of ways, including:**

- **size of the arsenal (i.e., the number of devices)**,
- technical performance requirements for the weapons in the arsenal (e.g., reliability)
- —stockpile-ability|| (e.g., shelf-life and handling safety)
- deliverability (e.g., size and weight)
- production rate and schedule for deployment of the arsenal.

5. CONTEXTUAL USAGE PROVES THIS: WE DON'T KNOW WHAT THE ARSENAL IS BUT AVAILABLE MEASURES ARE WARHEAD COUNTS – AND LOOK, A DIAGRAM

KRISTENSEN 6

Director, Nuclear Information Project, Federation of American Scientists, Washington, D.C.
<http://www.fas.org/nuke/guide/china/nuke/index.html>

The DOD table followed a fact sheet published by the Chinese Ministry of Foreign Affairs in April 2004, which stated: "Among the nuclear-weapon states, China...possesses the smallest nuclear arsenal." Since Britain has declared that it has less than 200 operationally available warheads, and the United States, Russia, and France have more, the Chinese statement could be interpreted to mean that China's nuclear arsenal is smaller than Britain's. **Not surprisingly the devil is in the details; does the word 'arsenal' refer to the entire stockpile or just the portion of it that is operationally deployed?**

Based on these, and numerous other declassified and unclassified documents, FAS and NRDC in 2006 estimated the composition of the Chinese nuclear arsenal as follows:

Estimated Chinese Nuclear Forces 2006						
China Designation	U.S./NATO designation	Year deployed	Range (kilometers)	Warhead x yield	Missiles deployed	Warheads deployed
<i>Land-based missiles*</i>						
DF-3A	CSS-2	1971	3,100 ^a	1 x 3.3 Mt	16	16
DF-4	CSS-3	1980 ^b	5,500	1 x 3.3 Mt	22	22
DF-5A	CSS-4 Mod 2	1981	13,000	1 x 4-5 Mt ^c	20	20
DF-21A	CSS-5 Mod 1/2	1991	2,150	1 x 200-300 kt	35	35
DF-31	(CSS-X-10)	2006 ?	7,250+	1 x ?	n.a.	n.a.
DF-31A	n.a.	2007-2009 ?	11,270+	1 x ?	n.a.	n.a.
Subtotal					93	93
<i>Submarine-launched ballistic missiles (SLBMs)**</i>						
JL-1	CSS-NX-3	1986	1,770+	1 x 200-300 kt	12	12
JL-2	CSS-NX-4	2008-2010 ?	8,000+ ^d	1 x ?	n.a.	n.a.
Subtotal					12	12
Total strategic ballistic missiles					105	105
<i>Aircraft***</i>						
Hong-6	B-6	1965	3,100	1-3 x bomb	100	20
Attack	(Q-5, others?)			1 x bomb		20
Subtotal						40
<i>Short-range tactical weapons</i>						
DF-15 ^e	CSS-6	1990	600	1 x low	~300	?
DH-10?	(LACM) ^f	2006-2007 ?	?	1 x low ?	n.a.	n.a.

6. USING "ARSENAL" MEANS ACTUAL POSSESSION OF WEAPONS, AND THUS CAN BE DISTINGUISHED FROM "PROGRAM" – THIS ISN'T A WAY TO LET IN WEAPONS COMPLEX REYNOLDS 3

http://news.bbc.co.uk/2/hi/middle_east/3051916.stm
BBC News Online world affairs correspondent

Note the word "programme." It implies an aim, perhaps a capability, but *not necessarily the possession* of these weapons.

Back in September, **when the IISS issued its own influential report on Iraq** just ahead of similar ones from the British Government and the CIA, **its assessment was *more definite. The word "arsenal" was used:***

"This Strategic Dossier does not attempt to make a case, either way, as to whether Saddam Hussein's WMD arsenal is a casus belli per se."

7. ARSENAL DOESN'T INCLUDE WEAPONS LABS – THEY SAY THEY DEAL WITH THE ARSENAL, WHICH MEANS THEY CAN'T BE THE ARSENAL

SANDIA CORPORATION 9

<http://www.sandia.gov/mission/nuclear/>.

Sandia is a [government-owned/contractor operated](#) (GOCO) facility. Sandia Corporation, a Lockheed Martin company, manages Sandia for the U.S. Department of Energy's National Nuclear Security Administration. We seek collaborative partnerships on emerging technologies that support our mission.

World-class scientists and engineers are drawn to **Sandia** by opportunities to conduct breakthrough research. Sandia designs and integrates over 6,300 parts of a modern nuclear weapon's 6,500 components. And our state-of-the-art **laboratories** facilitate large-scale testing and computational simulation, supporting our efforts to:

- * Enhance weapon and surveillance technology
- * Create new technologies to safeguard our nuclear production complex
- * **Evaluate the nuclear arsenal for safety, security, and reliability**
- * Develop new defense options
- * Update weapons systems to maintain their capabilities

8. SOME SUPPORT FOR CTBT OR THE WEAPONS COMPLEX IS POTENTIALLY IN THE WORD “ARSENAL” ITSELF – LIKE...ITS ETYMOLOGY? HOWEVER, THIS ISN'T REALLY APPLICABLE TO NUCLEAR ARSENALS

QUINLAN 00

<http://www.worldwidewords.org/topicalwords/tw-ars1.htm>

After Cambridge University, where he studied physical sciences, he joined BBC radio as a studio manager. “The job was a fascinating blend of techie and creative artist,” he says. “Though at times you were dogsbody, equipment operator and referee rolled into one”. After that, he helped to start local radio in Britain, at BBC Radio Brighton, where he produced programmes about the countryside, books, consumer affairs, religion, student life and the local and general elections. He then moved to Plymouth, where he helped to start a breakfast-time two-hour sequence of news and local features.

Along the wires the electric message came, a story from the Press Association: “**Nuclear powers promise to eliminate their arsenals**”, reporting the agreement by the 187 signatories to the Nuclear Non-proliferation Treaty (though the unspecific timescale reminded me of a wayside pulpit sign I once saw outside a chapel in Wales: “The promises of God are signed and sealed, but not dated”).

The word arsenal has a complicated history. It started in Arabic as dar-as-sina, meaning “house of industry” or “house of construction”. In the fifteenth century the word was taken over by several Mediterranean nations; both Spanish and Italian borrowed it as darsena, a word for a dock. The citizens of Venice acquired it in a different form, losing the first letter and adding al to the end, as the name of their naval dockyard, a substantial base as befitted the leading maritime power in the Mediterranean at the time; to this day it's called the Arzenale.

The English may have got the word from French but it is more likely that it came directly from Venetian Italian, since early uses are in descriptions of the dockyard. For example, William Thomas wrote in a History of Italy in 1549 — definitely the book to read at the time if you wanted to know about the main Italian states: “The Arsenale in myne eye exceedeth all the rest: For there they haue well neere two hundred galeys” (“In my eyes the Arsenale is greater than all the others; they have almost two hundred galleys there”).

Later in the sixteenth century the word's meaning began to shift in English towards naming one part of a dockyard, a warehouse for naval stores and weapons; later still it referred specifically to a place of storage for weapons of all kinds, not just naval ones (a famous examples was the Federal arsenal at Harper's Ferry which John Brown stormed in 1859) and also for a place where weapons were made and repaired. That remained its principal meaning in English until comparatively recently. A famous example was the Royal Arsenal on the Thames east of London, which stretched for a mile along the river next to the Woolwich dockyard, and which gave its name to the football club.

It was only a step further to use it for the whole collection of weapons and other military equipment available to a group or country, a meaning that appeared less than a century ago. **Hence the phrase nuclear arsenal. It's a long way from an Arabian factory.**

NUCLEAR ARSENAL CAN BE A COMPONENT – IE, THE KUSWA VARIATION

STOCKPILE/ARSENAL REFERS TO WEAPONS

LOS ALAMOS NATIONAL LABORATORY 8

<http://www.lanl.gov/natlsecurity/nuclear/stockpile/>.

The stockpile, also called the nuclear arsenal, refers to a country's supply of readily available nuclear weapons.

SHOULD WE SAY NUCLEAR STOCKPILES? HMMM, PROBABLY NOT

A. IT'S A MECHANISM TO LET IN MATERIALS, MAYBE

BUNN AND WEIR 6

http://www.nti.org/e_research/stb06webfull.pdf

Matthew Bunn is a Senior Research Associate in the Project on Managing the Atom at Harvard University's John F. Kennedy School of Government. His current research interests include security for weapons-usable nuclear material in the former Soviet Union and world-wide; nuclear theft and terrorism; verification of nuclear stockpiles and of nuclear warhead dismantlement; disposition of excess plutonium; conversion in Russia's nuclear cities; and nuclear waste storage, disposal, and reprocessing. From 1994 to 1996, Bunn served as an adviser to the White House Office of Science and Technology Policy, where he took part in a wide range of U.S.-Russian negotiations relating to security, monitoring, and disposition of weapons-usable nuclear materials, and directed a secret study of security for nuclear stockpiles for President Clinton. The author or co-author of a dozen books or book-length technical reports and dozens of articles, Bunn directed the study *Management and Disposition of Excess Weapons Plutonium*, by the U.S. National Academy of Sciences' Committee on International Security and Arms Control, and served as editor of the journal *Arms Control Today*. **Anthony Wier** is a Research Associate in the Project on Managing the Atom. His research interests focus on the U.S. legislative and budget policy response to the threat of nuclear terrorism. Prior to coming to Harvard, he was a Program Examiner in the International Affairs Division of the Office of Management and Budget. He has a Master of Public Affairs and a Master of Arts in Russian, East European, and Eurasian Studies from the LBJ School of Public Affairs at the University of Texas at Austin, and a Bachelor of Arts *summa cum laude* from Trinity University in San Antonio. "Securing the Bomb 2006"

In this report, we use the phrase "nuclear stockpiles" to refer both to stockpiles of nuclear weapons and to stockpiles of weapons-usable nuclear materials. Where we wish to refer to one type of stockpile or another, we specify that we are referring to weapons or to materials.

ADVANTAGE: FISSILE MATERIAL CUTOFF TREATY

DISADVANTAGE: ANYTHING THAT DISPOSES OF URANIUM OR PLUTONIUM (MOX, VITRIFICATION, INTEGRAL FAST REACTORS)

**B. HOWEVER, THIS IS NOT ENTIRELY CLEAR – IT IS ALSO OFTEN USED TO REFER TO
WARHEAD COUNTS EXCLUSIVELY**

ARMS CONTROL ASSOCIATION 7

<http://www.armscontrol.org/print/3204>

The U.S. **nuclear stockpile consists** of approximately 10,000 strategic and tactical warheads. This stockpile includes warheads deployed and those stored in reserve, but it does not include retired warheads that are awaiting dismantlement. In a July 2007 report, the United States claimed that 3,696 strategic warheads were “operationally deployed,” meaning warheads loaded onto ICBMs, SLBMs, and heavy bombers, as well as some warheads stored at heavy bomber bases.

THE STOCKPILE REFERS TO WEAPONS (REPRODUCED ELSEWHERE)

LOS ALAMOS NATIONAL LABORATORY 8

<http://www.lanl.gov/natlsecurity/nuclear/stockpile/>.

The stockpile, also called the nuclear arsenal, refers to a country's supply of readily available nuclear weapons.

MORE EVIDENCE

FEDERATION OF AMERICAN SCIENTISTS 00

<http://www.fas.org/nuke/guide/israel/doctrine/>.

The total Israeli **nuclear stockpile consists** of several hundred weapons of various types, including boosted fission and enhanced radiation weapons ("neutron bombs"), as well as nuclear artillery shells.

YEP, WARHEADS

SIPRI 2

<http://editors.sipri.se/pubs/yb02/highlights.html>.

Established in 1966, SIPRI is an independent research institute focusing on international security, arms control, and disarmament. SIPRI has built its reputation on authoritative, balanced research, including its flagship publication, the SIPRI Yearbook. SIPRI was recently named as one of the world's leading think tanks in the 'Think Tank Index' issued by the journal Foreign Policy.

The total world **nuclear stockpile consists** of over 36 800 warheads. In addition to deployed nuclear warheads, thousands more are held in reserve and are not counted in official declarations.

WARHEADS – THIS IS A TOTAL COUNT

BULLETIN OF ATOMIC SCIENTISTS 95

<http://www.newser.com/archive-us-news/1G1-17279678/us-nuclear-weapons-stockpile-july-1995.html>.

The US **nuclear stockpile includes** approximately 8,750 warheads in Jul 1995.

**CIRCIONE – A KEY TOPIC EXPERT – COUNTS WARHEADS FOR HIS “WORLD NUCLEAR
STOCKPILE” REPORT:**

<http://www.ploughshares.org/news-analysis/world-nuclear-stockpile-report>

MATERIALS AND STOCKPILE ARE DISTINCT

BUNN 3

http://www.nti.org/e_research/cnwm/monitoring/declarations.asp.

The [Securing the Bomb](#) section of the NTI website is produced by the [Project on Managing the Atom \(MTA\)](#) for NTI, and does not necessarily reflect the opinions of and has not been independently verified by NTI or its directors, officers, employees, agents.

Matthew Bunn is an Associate Professor at Harvard University's John F. Kennedy School of Government. His research interests include nuclear theft and terrorism; nuclear proliferation and measures to control it; and the future of nuclear energy and its fuel cycle.

With the end of the STI talks in late 1995, the issue of formally negotiated **nuclear stockpile** data exchanges lay dormant for a time. At their Helsinki summit in March, 1997, Clinton and Yeltsin agreed that a third Strategic Arms Reductions Treaty (START III) should include "measures relating to the transparency of strategic nuclear warhead inventories," as well as transparency measures for the dismantlement of such warheads and they agreed that, as a separate issue, negotiators should "consider the issues related to transparency in **nuclear materials**."

:

C. THERE'S AN AMBIGUOUS DISTICNTION MAINTAINED IN PROGRAM TITLE: **NUCLEAR MATERIALS AND STOCKPILE MANAGEMENT**

LOS ALAMOS NATIONAL LABORATORY STATEMENT OF WORK 5

http://www.doeal.gov/LASO/NewLANLContractDocs/SecJ_AppB_StatementofWork05192005.doc.

The Contractor shall conduct a **Nuclear Materials and Stockpile Management** Program that has four strategic thrusts: nuclear materials; manufacturing and surveillance; materials and process technologies; and stabilization technologies. The Program includes: ensuring, through a nuclear-materials-based approach, stockpile evaluation; weapons dismantlement and component disassembly; nuclear materials storage, processing, and disposition; residue elimination, waste minimization, and environmental and mixed-waste management; test-component remanufacture; materials characterization; site cleanup and materials stabilization; contamination control; health and safety issues; managing and operating highly specialized facilities that are key to Laboratory efforts in this program; and, providing support to DOE/NNSA for stabilizing nuclear materials and overseeing a core technology program that will improve the understanding of underlying material interactions.

D. "NUCLEAR MATERIALS STOCKPILE" IS A DISTINCT TERM OF ART

TIMM 01

<http://www.fas.org/sgp/news/2001/02/timm.html>.

NUCELAR PROTECTION PROFESSIONAL
LETTER TO DEPARTMENT OF ENERGY

"Subject: Risk to Special Nuclear Materials in the Department of Energy's Sites and Transportation"

The clear possibility of a nuclear detonation or explosion with the spread of radioactive contamination has been documented in numerous studies and from numerous sources. The risk of abrupt theft of Special Nuclear Materials (SNM) has also been demonstrated, particularly during transit. However, time has show that the existing bureaucracy at DOE has not adequately acted upon the issue of risk to the public other than in ineffective and reactive ways. I am writing this letter to bring this to your immediate attention. When the country's Special **Nuclear Materials stockpile** is at risk, the health and safety of American citizens is at risk. The primary mission of the DOE is the safeguard[ing] and security of the nation's nuclear inventory. This mission was a key point in your testimony in your confirmation hearing which I attended when I was in Washington for the inauguration.

MATERIALS STOCKPILE

INTERNATIONAL PANEL ON FISSILE MATERIALS, NO DATE

http://www.fissilematerials.org/ipfm/pages_us_en/fissile/inventories/inventories.php.

Most of the global fissile materials stockpile has been produced for nuclear-weapon purposes. HEU and plutonium are also used to fuel some reactors however. This has resulted in the production of additional fissile materials and, in some cases, has prevented disposition of excess weapons-materials.

WEAPONS AND MATERIALS STOCKPILE ARE DISTINCT ETERMS

NUCELAR THREAT REDUCTION CAMPAIGN 2002

<http://www.veteransforamerica.org/wp-content/uploads/2008/01/5-inventory.pdf>

While the United States and Russia have instituted numerous programs to address the proliferation threat from Russia, neither state has absolute confidence in the weapons and **materials stockpile** of the other.

FISSILE MATERIALS STOCKPILE IS A DISTINCT TERM REFERRING TO AVAILABLE PLUTONIUM STOCKS

PRESTON 9

From Lambs to Lions, GOOGLE BOOKS

Professor of International Relations, Department of Political Science, Washington State University.

Israel will also undoubtedly continue to work on improving its ability to launch and deploy military surveillance satellites, enhance its missile and guidance system technologies, and proceed with efforts to improve the design (and yield) of its **nuclear** weapons arsenal. It is highly likely Israel will continue production of weapons-grade fissile materials (mostly plutonium, but possibly also highly enriched uranium)—a step necessary to ensure the

development of a fissile **materials stockpile** large enough to allow Israel to respond (if necessary) to any new strategic developments or threats in the region.

E. RECOMMENDATION: IF YOU WANT TO INCLUDE BOTH MATERIALS AND WEAPONS STOCKPILES – JUST SAY SO!

(I FEEL THE DAS OUTWEIGH, BECAUSE IT'S A GOOD TOPIC BY ITSELF...BUT THAT'S A NORMATIVE QUESTION AND I JUST REPORT THE FACTS)

SHOULD WE SAY NUCLEAR DEVICES? NO, BUT MAYBE NUCLEAR EXPLOSIVE DEVICES

1. I DON'T REALLY SEE THE COMPARATIVE ADVANTAGE – IT DOESN'T LET IT FMCT, AND CTBT IS ALREADY AS IN AS IT CAN GET WITH NUCLEAR WEAPONS

2. ABOUT THE SAME AS WEAPONS:

Defence Environment and Safety Management, uk, 9

http://www.mod.uk/NR/rdonlyres/1360F009-3E0D-4C85-8FE7-A70607673145/0/32_20090228_JSP815_AnnexMB.pdf.

The term nuclear 'device' is taken to mean all those devices whose design intent is to be able to produce an uncontrolled nuclear reaction.

3. IT'S BRITISH AND A EUPHEMISM

B-29S OVER KOREA, SOURCE ROYAL AIR FORCE 7

http://www.b-29s-over-korea.com/Christmas_Island/ChristmasIsland.html

Britain used the term "nuclear device" in describing the bomb, leading Scientists to believe it was not a fully developed bomb.

OHZ NOZ THE EUPHEMISM K

BALLANTYNE 8

<http://pogue.blogs.nytimes.com/2008/01/23/six-syllables-when-three-would-do/>

Robert Ballantyne is a Toronto-based graphic designer and journalist

I really worry when the language changes for no reason. What is someone hiding? I am old enough to remember when we had a-bombs and h-bombs. They were terrible, but at least I knew what they were. Suddenly the military, the politicians, and the reporters referred to all of these things as nuclear devices. Shortly after that there were rumors of n-bombs and other horrors. My point is that the the term "nuclear device" became a way of hiding parts of the truth — not explaining it.

4. STUPID STUFF

A. CONSTRUCTION EQUIPMENT IS A NUCLEAR DEVICE

GOTHAMIST 7

http://gothamist.com/2007/04/28/hot_wheels_1.php

Yesterday, the lieutenant pointed his RadEye Pager this way and that, and determined that the radiation was coming from the silver Mercedes beside him. He alerted highway officers, who pulled the Mercedes over.

The driver, Syed M. Haider, popped the trunk, and inside was a small rectangular device known as a Troxler Gauge. The gauge, a legal construction device, measures asphalt, concrete and soil density using low-level radioactive isotopes, which happened to set off the pager's alarm. To be legally transported, though, a Troxler must be inside a shielded container, and Mr. Haider's Troxler was not.

Jack Bauer never gets that lucky. He has to run around cutting off people's fingers before anyone will tell him where the nukes are. In the end, the penalty for transporting an unshielded nuclear device in the trunk of your car is six summonses.

B. NUCLEAR POWER PLANTS ARE A NUCLEAR DEVICE

RADIOLOGICAL PROTECTION INSTITUTE OF IRELAND 9

<http://www.rpii.ie/Site/Education/Glossary.aspx>.

Nuclear device

Any equipment, the operation of which involves the use of a radioactive substance, or any irradiating apparatus. Under S.I. No. 125 of 2000, a nuclear reactor is also defined as a nuclear device.

C. SUITCASE NUKES

US NAVY, NO DATE

https://www.cnrc.navy.mil/navycni/groups/public/documents/document/cnip_026459.pdf.

Depending on how sophisticated the terrorist or terrorist organization **is, a nuclear device** can be either detonated—resulting in an explosion creating intense heat, light, radiation, pressure and spread of radioactive material—or, if the attempted detonation is unsuccessful, the conventional high-explosives portion of the nuclear device could still explode—spreading the radioactive nuclear material.

OR DIRTY BOMBS

MILITARY FACTORY 3

http://www.militaryfactory.com/dictionary/military-terms-defined.asp?term_id=2571

PRIVATELY MAINTAINED MILITARY HISTORY SITE

improvised nuclear device - A device incorporating radioactive materials designed to result in the dispersal of radioactive material or in the formation of nuclear-yield reaction. Such devices may be fabricated in a completely improvised manner or may be an improvised modification to a US or foreign nuclear weapon. Also called IND.

D. THE SUN!

CLEGG 2

<http://tomclegg.net/conservation>.

SOFTWARE ENGINEER

It turns out that the reason the Sun is able to emit so much energy, without absorbing energy from anywhere else, is that it **is a nuclear device**.

E. ITER

SAWAN 6

<http://www.nndc.bnl.gov/proceedings/2006csewgusndp/Tuesday/CSEWG/ITER-Sawan-CSEWG.pdf>.

Page 1 1 Status of the ITER Project and Neutronics Activities Mohamed Sawan Fusion Technology

Institute The University of Wisconsin-Madison CSEWG Meeting, BNL November 6-7, 2006

ITER is a nuclear device.

OR OTHER FUSION DEVICES

HAMACHER AND BRADSHAW 01

Max-Planck-Institut für Plasmaphysik

Garching/Greifswald, Germany

http://fire.pppl.gov/energy_eu_wec01.pdf

A fusion power plant is a nuclear device with large inventories of radioactive materials.

MORE EV

RUBEL 3

http://www.carolusmagnus.net/papers/2003/docs/SF_3_Rubel.pdf.

Alfvén Laboratory, Royal Institute of Technology

However, a **reactor is a nuclear device** and radioactive aspects of fusion will undergo intense public scrutiny. For that reason, proper testing and validation of material and component performance is essential. Based on the best of our present knowledge²⁷ and future experience we have to use and to develop tools, methods and materials best fitted for the steady-steady reactor operation. International co-operation established around ITER and IFMIF is a very important step on the track towards commercial fusion

9. NUCLEAR EXPLOSIVE DEVICE IS POTENTIALLY BETTER – IT HAS A STATUTORY BASIS

US CODE 7

[TITLE 22](#) > [CHAPTER 72](#) > [SUBCHAPTER I](#) > § 6305

http://www4.law.cornell.edu/uscode/uscode22/usc_sec_22_00006305----000-.html#4

(4) the term “nuclear explosive device” means any device, whether assembled or disassembled, that is designed to produce an instantaneous release of an amount of nuclear energy from special nuclear material that is greater than the amount of energy that would be released from the detonation of one pound of trinitrotoluene (TNT);

THIS TERM DOES INCLUDE PARTIAL ASSEMBLY, AND THUS MAY INCLUDE FISSILE MATERIALS

CTBTO GLOSSARY 8

<http://www.ctbto.org/glossary/?letter=n&cHash=e9063b15fe>.

The Preparatory Commission for the [Comprehensive Nuclear-Test-Ban Treaty Organization](#) (henceforth referred to as “the Commission”) was established on 19 November 1996 by a Resolution adopted by the Meeting of States Signatories at the United Nations in New York.

Nuclear explosive device

Nuclear explosive device means any nuclear weapon or other explosive device capable of releasing nuclear energy, irrespective of the purpose for which it could be used. The term includes such a weapon or device in unassembled and partly assembled forms, but does not include the means of transport or delivery of such a weapon or device if separable from and not an indivisible part of it.

THIS TERM ALSO HAS SOME INTERNATIONAL LEGAL CLARITY

Committee on International Security and Arms Control, 5

http://books.nap.edu/catalog.php?record_id=11265

The most complete definition is given in the 1985 South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga) and the 1996 African Nuclear-Weapon-Free Zone Treaty (Treaty of Pelindaba): “‘nuclear explosive device’ means any nuclear weapon or other explosive device capable of releasing nuclear energy, irrespective of the purpose for which it could be used. The term includes such a weapon or device in unassembled and partly assembled forms, but does not include the means of transport or delivery of such a weapon or device if separable from and not an indivisible part of it.” This definition is not entirely satisfactory, inasmuch as “capable of releasing nuclear energy” remains undefined, but it under-scores the importance of understanding at what point a weapon is considered dismantled and no longer counted as a “nuclear weapon.”

MORE EVIDENCE: NUCLEAR WEAPONS FREE ZONE IN CENTRAL ASIA

Treaty on a Nuclear-Weapon-Free Zone in Central Asia, 9

<http://disarmament.un.org/TreatyStatus.nsf/44e6eeabc9436b78852568770078d9c0/c851f154c73c8837852572f8005597f1?OpenDocument>

(b) "Nuclear weapon or other nuclear explosive device" means any weapon or other explosive device capable of releasing nuclear energy, irrespective of the military or civilian purpose for which the weapon or device could be used. The term includes such a weapon or device in unassembled or partly assembled forms, but does not include the means of transport or delivery of such a weapon or device if separable from and not an indivisible part of it;

“NUCLEAR STOCKPILES” AMBIGUITY

NUCLEAR STOCKPILES REFERS TO BOTH MATERIALS AND WEAPONS – IT WOULD LEGITIMIZE MOX

BUNN AND WEIR 6

http://www.nti.org/e_research/stb06webfull.pdf

Matthew Bunn is a Senior Research Associate in the Project on Managing the Atom at Harvard University's John F. Kennedy School of Government. His current research interests include security for weapons-usable nuclear material in the former Soviet Union and world-wide; nuclear theft and terrorism; verification of nuclear stockpiles and of nuclear warhead dismantlement; disposition of excess plutonium; conversion in Russia's nuclear cities; and nuclear waste storage, disposal, and reprocessing. From 1994 to 1996, Bunn served as an adviser to the White House Office of Science and Technology Policy, where he took part in a wide range of U.S.-Russian negotiations relating to security, monitoring, and disposition of weapons-usable nuclear materials, and directed a secret study of security for nuclear stockpiles for President Clinton. The author or co-author of a dozen books or book-length technical reports and dozens of articles, Bunn directed the study *Management and Disposition of Excess Weapons Plutonium*, by the U.S. National Academy of Sciences' Committee on International Security and Arms Control, and served as editor of the journal *Arms Control Today*. **Anthony Wier** is a Research Associate in the Project on Managing the Atom. His research interests focus on the U.S. legislative and budget policy response to the threat of nuclear terrorism. Prior to coming to Harvard, he was a Program Examiner in the International Affairs Division of the Office of Management and Budget. He has a Master of Public Affairs and a Master of Arts in Russian, East European, and Eurasian Studies from the LBJ School of Public Affairs at the University of Texas at Austin, and a Bachelor of Arts *summa cum laude* from Trinity University in San Antonio. "Securing the Bomb 2006"

In this report, we use the phrase "nuclear stockpiles" to refer both to stockpiles of nuclear weapons and to stockpiles of weapons-usable nuclear materials. Where we wish to refer to one type of stockpile or another, we specify that we are referring to weapons or to materials.

“NUCLEAR STOCKPILES” IS CLEAR

THE STOCKPILE REFERS TO WEAPONS

LOS ALAMOS NATIONAL LABORATORY 8

<http://www.lanl.gov/natlsecurity/nuclear/stockpile/>.

The stockpile, also called the nuclear arsenal, refers to a country's supply of readily available nuclear weapons.

“NUCLEAR WEAPONS” IS REASONABLY CLEAR

NUCLEAR WEAPONS MEANS WARHEADS, BOMBS AND MISSILES

LOS ALAMOS NATIONAL LABORATORY 8

<http://www.lanl.gov/natlsecurity/nuclear/stockpile/>.

The term nuclear weapons refers to the explosive warheads and the bombs and missiles that can deliver them to enemy targets.

“NUCLEAR WEAPONS” IS REASONABLY CLEAR: TLATELOLCO

NUCLEAR WEAPONS IS CLEARLY DEFINED UNDER THE TREATY OF TLATELOCO

ROMAN-MOREY 4

<http://www.unidir.ch/pdf/articles/pdf-art2236.pdf>.

Published in V. Cserveny et al., Building a Weapons of Mass Destruction Free Zone in the Middle East: Global Non-Proliferation Regimes and Regional Experiences, United Nations Institute for Disarmament Research (UNIDIR), 2004.

CHARACTERISTICS OF THE TREATY OF TLATELOLCO

The Treaty has some special characteristics and introduced some innovations that have definitely enriched international law as a whole and the Law of Treaties in particular. For example: Article 1 is a total prohibition on nuclear weapons; • Though ‘the zone of application’ which was established by Article 4 is not universally adopted, it refers to “the whole of the territories for which the Treaty is in force”. The achievement of paragraph 1 of Article 26 means that the Treaty now covers the entire region.

Article 5 defines nuclear weapons as any device which is capable of releasing nuclear energy in an uncontrolled manner and which has a group of characteristics that are appropriate for use for warlike purposes. An instrument that may be used for the transport or propulsion of the device is not included in this definition if it is separable from the device and not an indivisible part thereof

TLATELOCO ONLY COVERS UNCONTROLLED EXPLOSIONS

TREATY OF TLATELOCO 68

REPRODUCED IN Weapons of mass destruction, By Eric Croddy, James J. Wirtz, Jeffrey A. Larsen, 2005, GOOGLE BOOKS

Article 5

For the purposes of this Treaty, a nuclear weapon is any device which is capable of releasing nuclear energy in an uncontrolled manner and which has a group of characteristics that are appropriate for use for warlike purposes. An instrument that may be used for the transport or propulsion of the device is not included in this definition if it is separable from the device and not an indivisible part thereof.

NUCLEAR WEAPONS MUST BE UNCONTROLLED AND MASSIVE WMDS – THIS TRUMPS ARGUMENTS FROM THE US, BECAUSE OF THE LEGAL OBLIGATIONS OF THE TREATY OF TLATELOCO

INTERNATIONAL COURT OF JUSTICE 95

<http://www.icj-cij.org/docket/files/95/5945.pdf>.

President Bedjaoui presiding in the case in Legality of the Use by a State of Nuclear Weapons in Armed Conflict (Request for Advisory Opinion Submitted by the World Health Organization) and in Legality of the Threat or Use of Nuclear Weapons (Request for Advisory Opinion Submitted by the General Assembly of the United Nations)

Furthermore, under the Treaty of Tlatelolco, nuclear States agree that nuclear weapons are weapons of mass destruction. The United States, in its written statement, argued that "nuclear weapons can be directed at a military target and thus can be used in a discriminate manner". The United Kingdom in its written statement supported this view by stating that "nuclear weapons are capable of precise targeting and many are designed for use against military objectives of quite small size". However, by signing Protocol II of the Treaty of Tlatelolco, under which they agree not to use or threaten to use nuclear weapons against parties to the Treaty, the nuclear States accepted the definition of nuclear weapons provided for in the Treaty, which reads: "a nuclear weapon is any device which is capable of releasing energy in an uncontrolled manner". The Preamble of the Treaty emphasizes that the effects of nuclear

weapons are indiscriminate. The nuclear-weapon States' acceptance of the Treaty's definition and description of nuclear weapons takes precedence over their contrary declaration before this Court

**DOE DEFINES NUCLEAR WEAPONS AS THAQT WHICH RELEASES, NOT THAT WHICH
CONTAINS AND EMPLOYS**

TERRORISM INCIDENT ANNEX 99

<http://www.lewiscountyny.org/content/EmergencyManagement/Home/:field=documents:/content/Documents/File/457.pdf>.

signatory Agencies: Department of Defense Department of Energy Department of Health and Human Services Department of Justice Federal Bureau of Investigation Environmental Protection Agency Federal Emergency Management Agency

The Effects of Nuclear Weapons (DOE, 1977) **defines nuclear weapons** as weapons that release nuclear energy in an explosive manner as the result of nuclear chain reactions involving fission and/or fusion of atomic nuclei.

A/T WTF =- TLATELOCO?

The Treaty of Tlatelolco is the conventional name given to the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean. It is embodied in the OPANAL (el Organismo para la Proscripción de las Armas Nucleares en la América Latina y el Caribe, which is Spanish for the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean).

Meeting in the Tlatelolco district of Mexico City on 14 February 1967, the nations of Latin America and the Caribbean drafted this treaty to keep their region of the world free of nuclear weapons. Whereas Antarctica had earlier been declared a nuclear-weapon-free zone under the 1961 Antarctic Treaty, this was the first time such a ban was put in place over such a vast, populated area.

The treaty came into force on 25 April 1969, and has since been signed and ratified by all 33 nations of Latin America and the Caribbean. (Cuba was the last country to ratify, on 23 October 2002.)

Under the treaty, the states' parties agree to prohibit and prevent the "testing, use, manufacture, production or acquisition by any means whatsoever of any nuclear weapons" and the "receipt, storage, installation, deployment and any form of possession of any nuclear weapons."

There are two additional protocols to the treaty: Protocol I binds those overseas countries with territories in the region (the United States, the United Kingdom, France, and the Netherlands) to the terms of the treaty. Protocol II requires the world's declared nuclear weapons states to refrain from undermining in any way the nuclear-free status of the region; it has been signed and ratified by the USA, the UK, France, China, and Russia.

The treaty also provides for a comprehensive control and verification mechanism, overseen by the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL), based in Mexico City.

Alfonso García Robles received the Nobel Peace Prize in 1982 for his efforts in promoting the treaty.

NUCLEAR WEAPONS IS REASONABLY CLEAR: BRUSSELS TREATY

BRUSSELS TREATY DEFINES NUCLEAR WEAPONS: EXCLUDES DEPLETED URANIUM, WOULD INCLUDE ALL COMPONENTS

BRUSSELS TREATY 54

http://germanhistorydocs.ghi-dc.org/docpage.cfm?docpage_id=3328

“Protocol Modifying and Completing the Brussels Treaty (Paris, October 23, 1954)”

I. Atomic Weapons

a. An atomic weapon is defined as any weapon which contains, or is designed to contain or utilise nuclear fuel or radioactive isotopes and which, by explosion or other uncontrolled nuclear transformation of the nuclear fuel, or by radioactivity of the nuclear fuel or radioactive isotopes, is capable of mass destruction, mass injury or mass poisoning.

b. Furthermore, any part, device, assembly or material especially designed for, or primarily useful in, any weapon as set forth under paragraph (a), shall be deemed to be an atomic weapon.

NUCLEAR WEAPONS IS REASONABLY CLEAR: BANGKOK TREATY

NUCLEAR WEAPONS IS DEFINED BY THE TREATY ON THE SOUTHEAST ASIA NUCLEAR WEAPON-FREE ZONE

BANGKOK TREATY 95

Treaty on the Southeast Asia Nuclear Weapon-Free Zone

The Southeast Asian Nuclear-Weapon-Free Zone Treaty (SEANWFZ) of 1995, or Bangkok Treaty, is a nuclear weapons moratorium treaty between 10 Asian member-states under the auspices of the ASEAN: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam. It entered into force on March 28, 1997 and obliges its members not to develop, manufacture or otherwise acquire, possess or have control over nuclear weapons.

Article 1

USE OF TERMS

For the purposes of this Treaty and its Protocol :

(a) "Southeast Asia Nuclear Weapon-Free Zone", hereinafter referred to as the "Zone", means the area comprising the territories of all States in Southeast Asia, namely, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam, and their respective continental shelves and Exclusive Economic Zones (EEZ);

(b) "territory" means the land territory, internal waters, territorial sea, archipelagic waters, the seabed and the sub-soil thereof and the airspace above them;

(c) "nuclear weapon" means any explosive device capable of releasing nuclear energy in an uncontrolled manner but does not include the means of transport or delivery of such device if separable from and not an indivisible part thereof;

(d) "station" means to deploy, emplace, implant, install, stockpile or store;

(e) "radioactive material" means material that contains radionuclides above clearance or exemption levels recommended by the International Atomic Energy Agency (IAEA);

(f) "radioactive wastes" means material that contains or is contaminated with radionuclides at concentrations or activities greater than clearance levels recommended by the IAEA and for which no use is foreseen; and

(g) "dumping" means

(i) any deliberate disposal at sea, including seabed and subsoil insertion, of radioactive wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea, and

(ii) any deliberate disposal at sea, including seabed and subsoil insertion, of vessels, aircraft, platforms or other man-made structures at sea, containing radioactive material, but does not include the disposal of wastes or other matter incidental to, or derived from the normal operations of vessels, aircraft, platforms or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or structures.

NUCLEAR WEAPONS IS REASONABLY CLEAR: DEPARTMENT OF DEFENSE

NUCLEAR WEAPON HAS A PRECISE DEFINITION

OFFICE OF THE DEPUTY ASSISTANT TO THE SECRETARY OF DEFENSE FOR NUCLEAR
MATTERS, NO DATE

<http://www.acq.osd.mil/ncbdp/nm/USNuclearDeterrence.html>

Nuclear Weapon

A complete assembly (i.e., implosion, gun, or thermonuclear), in its intended ultimate configuration which, upon completion of the prescribed arming, fusing, and firing sequence, is capable of producing the intended nuclear reaction and release of energy.

A/T “DELIVERY VEHICLES”

NUCLEAR WEAPONS DOESN'T REFER TO THE DELIVERY VEHICLES

GENERAL ACCOUNTING OFFICE 93

<http://archive.gao.gov/d37t11/148721.pdf>

NATIONAL SECURITY AND INTERNATIONAL AFFAIRS DIVISION

“ SOVIET NUCLEAR WEAPONS Priorities and Costs Associated With U.S. Dismantlement Assistance”

This report uses the term “nuclear weapons” to describe nuclear warheads and bombs as opposed to vehicles (such as missiles and bombers) designed to deliver such weapons.

“NUCLEAR WEAPONS” INCLUDES DELIVERY VEHICLES IF AND ONLY IF THESE ARE DESTROYED IN DELIVERY. THAT EXCLUDES SUBMARINES

BERKELEY MUNICIPAL CODE NO DATE

http://www.cityofberkeley.info/uploadedFiles/Online_Service_Center/Level_3_-_General/NuclearFreeForm.pdf.

"Nuclear weapon" is any device, the intended explosion of which results from the energy released by reactions involving atomic nuclei, either fission or fusion or both. This definition of nuclear weapons includes the means of transporting, guiding, propelling or triggering the weapon if and only if such means is destroyed or rendered useless in the normal propelling, triggering, or detonation of the weapon.

MORE EVIDENCE

PUGET SOUND NUCLEAR WEAPON FREE ZONE DECLARATION 8

<http://tomkarlin36.googlepages.com/2008PS-NWFZResolution.pdf>.

6.0 Definitions 6.1.1 "Nuclear weapon" is any device, the intended explosion of which results from the energy released by reactions involving atomic nuclei, either fission or fusion, or both. This **definition of nuclear weapons** includes the means of transporting, guiding, propelling or triggering the weapon if and only if such means is destroyed or rendered useless in the normal propelling, triggering, or detonation of the weapon

A/T DEPLETED URANIUM

DEPELETED URANIUM ISN'T A NUCLEAR WEAPON

MCDONALD 8

<http://www.unidir.org/pdf/articles/pdf-art2757.pdf>.

Avril McDonald is currently a Research Associate of the TMC Asser Instituut, The Hague, and a Lecturer in International Humanitarian Law at the University of Groningen.

“Depleted uranium weapons: the next target for disarmament?”

It has been posited that DU weapons are already prohibited by international law, despite the absence of a discrete disarmament treaty. 21 DU weapons do share some properties of weapons (both conventional and weapons of mass destruction) already addressed by arms control law. However, even if DU weapons can be toxic and radioactive, or can have incendiary or poisonous effects, that does not mean that they meet the legal definitions of nuclear, radiological, toxin, chemical, poison or incendiary weapons. Generally speaking, under international law, the defining feature of all of these types of weapons is that they are specifically designed (and/or used) to kill or injure by means of their particular characteristic property, and this is not the case for DU weapons. DU weapons are not nUclear weapons As there is no international convention prohibiting nuclear weapons, there is no universally agreed definition. However, it seems from existing controls on the manufacture and use of nuclear weapons that depleted uranium armaments cannot be considered as nuclear weapons. Protocol III to the Modified Brussels Treaty of 1954 on the Control of Armaments defines an atomic weapon as "any weapon which contains, or is designed to contain or utilise nuclear fuel or radioactive isotopes and which, by explosion or other uncontrolled nuclear transformation of the nuclear fuel, or by radioactivity of the nuclear fuel or radioactive isotopes, is capable of mass destruction, mass injury or mass poisoning". 22 Article 1(c) of the Treaty on the Southeast Asia Nuclear Weapon-Free Zone defines a nuclear weapon as "any explosive device capable of releasing nuclear energy in an uncontrolled manner but does not include the means of transport or delivery of such device if separable from and not an indivisible part thereof". 23 DU weapons are not explosive devices. Nor are they used with the purpose of killing by radiation. It is unsettled whether they are capable of mass destruction, mass injury or mass poisoning.

POSSIBLE AMBIGUITIES IN NUCLEAR WEAPONS

NUCLEAR WEAPONS ALSO MEANS NUCLEAR ARMED WEAPONRY

WIKIPEDIA

http://en.wikipedia.org/wiki/No_first_use

Additionally, the wording of China's "no first use" policy is rather ambiguous in that there are different interpretations of the term "nuclear weapons". Such a weapons category would also include nuclear reactor-powered submarines, aircraft carriers and other such vehicles, so that through the "no first use" policy, retaliation by nuclear strike is an available option in the predicament where another party attacks using such weaponry.

NUCLEAR X-RAY WEAPONS MAY QUALIFY AS NUCLEAR WEAPONRY

RAIMEY 00

Major Ramey (B.A., Wheaton College; J.D., Seattle University; LL.M., McGill University) is an instructor, International and Operations Law Division, The Air Force Judge Advocate General School, Maxwell AFB, Alabama. He is a member of the Bar in the state of Washington.

48 A.F. L. Rev. 1, "Armed Conflict on the Final Frontier: The Law of War in Space"

Because the Outer Space Treaty does not define nuclear weapon its prohibition has stimulated debate over newer technologies such as the X-ray laser which is powered by a nuclear explosion. Whether a nuclear-powered laser is a nuclear weapon will mean the difference between its lawful orbiting of earth or not. P. Jankowitsch, Legal Aspects of Military Space Activities, in SPACE LAW: DEVELOPMENT AND SCOPE 147 (N. Jasentuliyana, ed., 1992). Given its destructive power, the military significance of such a laser will be tremendous. For example, the intense X-rays emitted as a result of the initial nuclear blast lead some to speculate that one X-ray laser no larger than a packing crate would be able to destroy the entire Russian ICBM arsenal if they were launched at one time in a massive attack. TAYLOR, supra note 97, at 36.

NPT DOESN'T DEFINE NUCLEAR WEAPONS

COHEN 1

http://www.geocities.com/alabasters_archive/nuclear_opacity.html

The Dynamics of Middle East Nuclear Proliferation 2001 Chapter 9 pages 187-212 edited by Steven L. Spiegel, Jennifer D. Kibbe and Elizabeth G. Matthews Symposium Series, Volume 66 The Edwin Mellen Press ISBN 0-7734-7959-7

Avner Cohen is writer, historian, and professor, and is well known for his works on [nuclear weapons](#).

Cohen received a B.A. in Philosophy from [Tel Aviv University](#) in 1975. He went on to study at [York University](#) where he received a M.A. in Philosophy in 1977 and four years later earned a Ph.D. from the [University of Chicago](#) in the History of Culture. After these studies he embarked on an academic career, returning to Tel Aviv University in 1983 to join the department of philosophy. He went on to hold positions at [M.I.T.](#), [Harvard](#) and is presently affiliated with the [University of Maryland, College Park](#).

The NPT requires non-nuclear weapon signatories "not to manufacture...nuclear weapons or other nuclear explosive devices" (Article II). The NPT itself contains no definition as to what constitutes a "nuclear weapon" apart from a broad reference to all "nuclear explosive devices" (which includes "peaceful nuclear explosion").

NUCLEAR ARSENAL INCLUDES DEPLETED URANIUM

FIELD CONTEXT PROVES NUCLEAR ARSENAL INCLUDES DU

AHMED 3

Nafeez Mosaddeq Ahmed is a human rights activist and political analyst specializing in the study of conflicts. The executive director of the Institute for Policy Research & Development, he is the author of a variety of reports on human rights practices, as well as the best-selling book, *The War on Freedom: How and Why America was Attacked*, S
"Behind the war on terror"

DU weapons have also been used in Kosovo despite prior warnings from DU experts including Rokke himself. 'In April of this year [1999], myself and a few other individuals were called up to Washington DC to discuss the use of this in Kosovo,' he stated. 'We sat with members of the Cabinet, the President of the United States and others from the Department of State and warned them. We got to the end of the meeting and the head guys in charge promised "don't worry about it, we won't use it".'³⁴⁹ NATO nevertheless proceeded to use its **nuclear arsenal** in Kosovo to devastating effect. The UN Environment Program has already found traces of radiation at eight sites in Kosovo hit by NATO DU shells.³⁵⁰ As British journalist John Pilger thus concludes in the *New Statesman*:

The truth about the effects of **depleted uranium** in shells fired in the 1991 Gulf War and Nato's 1999 attack on Yugoslavia is that the Americans and British waged a form of nuclear warfare on civilian populations, disregarding the health and safety of their own troops.³⁵¹

NUCLEAR ARSENAL GOOD

NUCLEAR ARSENAL IS TECHNICALLY DEFINED AS A NUMBER OF WEAPONS

OFFICE OF THE DEPUTY ASSISTANT TO THE SECRETARY OF DEFENSE FOR NUCLEAR
MATTERS, NO DATE

<http://www.acq.osd.mil/ncbdp/nm/USNuclearDeterrence.html>

The U.S. nuclear arsenal includes: gravity bombs deliverable by Dual Capable Aircraft (DCA) and long-range bombers; Tomahawk Land Attack Cruise Missiles/Nuclear (TLAM/N), deliverable by attack submarines (SSN); Air-Launched Cruise Missiles (ALCMs) deliverable by long-range bombers; Submarine-Launched Ballistic Missiles (SLBM); and Intercontinental Ballistic Missiles (ICBM).