

DOCUMENT ON WORLD NUCLEAR DISARMAMENT

Prepared by the Commission on "Nuclear Disarmament" to be proposed for approval by the
Assembly of the Humanist Movement

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"The unleashed power of the atom has changed everything save our modes of thinking,
and thus we drift toward unparalleled catastrophe." — Albert Einstein

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INTRODUCTION

From the beginning of the last century, international financial capital has spread rapidly tending to concentrate disproportionately in the hands of less and less people.

"Technology and growing economic power are becoming concentrated in businesses that are ever more powerful".¹

Their resources are vastly disproportionate to the interests they represent, and these resources are dedicated to the consolidation and amplification of their profits. To consolidate and to increase such economic monopoly, international financial capital also needs to control organisational and ideological monopolies. It applies itself in this way to the direct or indirect control of formal democracies that provide a legal framework to such a monopoly. This dictates the obsolescence of the power of the nation state.

"As the regional and world power of multinational companies continues to grow, as international finance capital continues to concentrate, political systems lose autonomy and their legislation must adapt to the dictates of these new powers"²

"Today, we are no longer dealing with feudal economies, national industries, or even regional interests. Today, the question is how the surviving economic forms will accommodate to the new dictates of international finance capital"³

Formal democracies, in turn, have the monopoly of the use of force. This is the case of armies that act, according to each case, opening roads for the advance of international financial capital or defending their global interests when the resources of the formal democracy or the "legal ways" have failed in such purpose.

"As education, health care, and the means of communication are privatized along with goods and services, natural resources, and even significant areas of public safety, this continues to erode the importance of the traditional State. It follows that if the administration and resources of a nation are removed from the sphere of public control, that the legal and judicial system will follow suit, reducing the armed forces to the role of a mere private militia assigned to defending only parochial or multinational financial interests" ⁴

"In the traditional conception of these issues, the armed forces are assigned the function of safeguarding the nation's sovereignty and security and granted the authority to use force in accordance with the mandate of the duly constituted powers. In this way, the State's monopoly on violence is transferred to the military services.

But this brings us to a key point in the discussion of what should be understood by the terms sovereignty and security. If a nation's sovereignty and security or, in more modern terms, its "progress" are said to require extraterritorial sources of raw materials, indisputable rights of maritime passage to protect the flow of commerce, and the control of strategic points or the occupation of foreign territory with these same objectives, then what we are faced with is the theory and practice of colonialism or neocolonialism"⁵.

¹ Characteristic of the crisis. Second Letter to My Friends. Letters to My Friends. Silo. Collected Works. Volume I. December 5 1991.

² Characteristic of the crisis. Second Letter to My Friends. Letters to My Friends. Silo. Collected Works. Volume I. December 5 1991.

³ Global Capital. Sixth Letter to My Friends. Letters to My Friends. Silo. Collected Works. Volume I. April 5 1993

⁴ The Need to Redefine the Role of the Armed Forces. Eighth Letter to My Friends. Letters to My Friends. Silo. Collected Works. Volume I. August 10 1993.

⁵ A Review of the Concepts of Sovereignty and Security. Eighth Letter to My Friends. Letters to My Friends. Silo. Collected Works. Volume I. August 10 1993.

This is the substratum of the "defence of strategic interests" (that today no longer recognise borders), "preventive wars", "humanitarian wars", the "reestablishment of democracy", "free trade", "stability", and other bogus justifications for the use of military power.

The interests of international financial capital require – as colonial empires did in the past – energy sources, raw materials, markets, etc. with growing advantageous conditions for their benefit.

In the measure that the interests of international financial capital become global, the need for proportional military resources also increases in order to defend and enlarge such interests. Conventional weapons no longer suffice, arriving thus to the nuclear threat which provides the last line of defence of the economic monopoly. This nuclear threat works by the simple statement of the will to use it if other resources fail. This also explains the interest of some to maintain the monopoly of nuclear weapons. And international financial capital consolidates itself in this way and advances thanks to the opportune use of coercive agreements imposed by its monopolies and the crudest military action when this is not possible.

All this finds a paradigm in the aspirations and imperial actions of the foreign policy of the biggest nuclear power, the US. It may disagree with its allies occasionally on the tactics to be used, but not on the basic strategy that benefits them.

It is necessary here to introduce an apparent digression, relevant though to the situation and the tendencies we are dealing with:

"It should be noted that it is precisely in those nations and regions that are taking on an imperial character that both revolutions and military influence are increasingly making their presence felt. Sooner or later, as the forces of money become ever more concentrated, they will confront the majority, and in this situation bank and military will end up being antithetical terms".⁶

Obviously such monopolic power of international financial capital that concentrates itself into fewer and fewer hands leaves out progressively more dissenters. Some of these will not hesitate in appealing to the same tools they have been trampled by. Others will also appeal to the same instruments, but to aspire to their own share in the power inside the global framework, thereby competing with others as regional allies of the powers that defend international financial capital.

So, the arms race arises, involving also the defence of national, ethnic, regional, local interests, etc.

*"By now big capital has exhausted the stage of market economies, and has begun to discipline society to accept the chaos it has itself produced. Yet in the presence of this growing irrationality, it is not the voices of reason that we hear raised in dialectical opposition. Rather, it is the darkest forms of racism, fundamentalism, and fanaticism that are on the rise."*⁷

An organisational paradox: in a closed system, the bigger the attempt to impose a certain "order" (e.g., *pax romana*) the more disorder (as in entropy) will grow. Everything becomes complicated in a confused and volatile world situation where there is an increasing number of players of different types: industrially and militarily powerful countries; industrially and militarily weak countries which possess, however, enough energy reserves to create world uncertainty; **paramilitary** organisations (IRA, ETA, Al Qaeda, the Chechnyans etc.) with the

⁶ Considerations on the Military and Revolution. Eighth Letter to My Friends. Letters to My Friends. Silo. Collected Works. Volume I. August 10 1993.

⁷ Global Capital. Sixth Letter to My Friends. Letters to My Friends. Silo. Collected Works. Volume I. August 10 1993.

capacity to destabilise through attacks on human groups or important infrastructure; and all these players have the possibility to gain access to different types of nuclear weapons and can also count on the will to use them.

Lastly, "the phenomenon of terrorism presents a danger of some magnitude, considering the firepower to which these relatively specialized individuals and groups now have access. This threat could take the form of high explosives and even nuclear devices or chemical and biological weapons, all of which continue to become less expensive and easier to produce."⁸

In this disorder of things, where nobody controls anything, the probabilities of accidental or intentional detonation of all types of nuclear devices are too high. The tragic events that this could release are unforeseeable and beyond the control of any of the main protagonists of the nuclear threat.

1. THE CONCEPT OF ALL OUT WAR

Nuclear terrorism exercised by countries in possession of these weapons was developed from the modern tradition of making "all out war" that consists of developing powerful war industries and military training that endow a country with powerful warfare technology, well trained men and the ideological justification for: 1) Destroying the economic, technological and cultural bases of the opponent's national power, 2) Exterminating, as much as possible, their available human resource (people and communities) and 3) Destroying the maximum of their infrastructure. *All the above-mentioned in the shortest possible time.*

This concept began with the American civil war; it matured in Europe during the First World War and became the way of making war in the Second World War. First, Hitler bombed the main cities of Great Britain. Then, Great Britain and the US responded by attacking Germany's industrial infrastructure. The incendiary bombing of Dresden became the inspiration for the incendiary bombing of Japanese cities, the worst of which happened on the night of March 9th 1945, when 100 thousand ordinary Tokyo people were consumed in a storm of NAPALM and white phosphorus that devastated 40 square kilometres of Tokyo and left 1.5 million people without a home.

It was this disintegration of human morality, this lust for blood that made the development of nuclear weapons possible and the decision of most of the high officials of the US government that the targets of the Atomic bombs would be cities with military facilities and "densely populated workers' hometowns". Civilians were thus a deliberate target. We should remember that the war between Japan and the US was not only a war for the empire, *but that it started as a war over oil.*

2. THE COLD WAR

In July 1945 in Alamo Gordo, New Mexico, the army tested the results of the scientific collaboration that made possible the construction of the A Bomb whilst President Harry Truman went to Potsdam to meet with his two war-time allies, the British Prime Minister, Winston Churchill and the chief of the Soviet Communist Party, Josef Stalin. The war allies were finishing the post-war period planning that President Roosevelt had begun in the summit of Yalta in January, but Roosevelt had died soon after Yalta, where he had agreed to divide Europe into East and West. *By that time, North American politics considered that the Soviets would play the part of containing the German might in a post-war Europe, so that they could not threaten world stability ever again, as it had done twice in 25 years.* However, during the discussion of Potsdam an assistant whispered into Truman's ear that the North American atomic test had been successful. With such weapons at their disposal, Truman no longer needed the Soviets to contain Germany.

⁸ Internal Security and Military Restructuring. Eighth Letter to My Friends. Letters to My Friends. Silo. Collected Works. Volume I. August 10 1993.

Japan surrendered five days after the bombing of Nagasaki, but months before that massacre the key factors that decided the result of the war had already taken place, however Truman's most important advisers convinced him of using not one, but two atomic bombs in Japan. *Political post-war reason, not military ones, demanded such a decision.* The crew of the bombers (that took the A bombs to Japan) were following orders from North American politicians *who saw in the bomb a form of imposing the new "North American order"*. The Secretary of State, James Byrnes, was terrified by the thought that the Soviets would have an important role in the reconstruction of Europe in terms of what that could mean for North American investments and trade. Stalin, remained firm in Potsdam about the demands agreed in Yalta for compensations that Germany should pay and also about the Soviet influence in Eastern Europe. Whoever may have been the Soviet leader in those circumstances he had to make sure that Germany would NOT repeat what it had done twice in 25 years: killing 50 million Soviet citizens and destroying the country.

In terms of "all out war", the attacks with A bombs were unnecessary and they met with the opposition of almost all the high ranking military officers of the US: General Eisenhower, Admiral Leahy, General Marshall and, even, General LeMay. Truman was well aware that Emperor Hirohito and everybody else, save for the leaders of the Japanese army, understood that Japan had lost the war. Starting in April 1945 - something that Truman knew, thanks to intercepted diplomatic correspondence - high ranking Japanese officers worked to organise a rendition under conditions that were accepted by Truman after the atomic bombings. US academics agree now that there were essentially 4 reasons to go ahead with the bombings:

- 1) To put an end to the war before the Soviet Union entered the fight, thereby gaining geopolitical strategic advantages for the Cold War, as well as limiting Soviet influence in the north of China, Manchuria, Korea and even Japan.
- 2) To send a message to Stalin that demonstrated the apocalyptic power of nuclear weapons and the US's will to use them, even against civilians.
- 3) To help ensure Truman's re-election as president in 1948
- 4) As an act of vengeance.

In the course of the two years following the end of the war, high officials in Washington and London designed what became the Cold War; they used the media and rhetoric in a very ingenious way *to transform the true image of a mutilated USSR (The Soviet armed forces had defeated the Nazis at a cost of more than 20 millions dead and other 20 million wounded, 200 important Soviet cities destroyed, hundreds of burnt towns and razed fields during the German retreat, a Soviet army lacking in clothing and food) into an Evil Empire USSR, planning immediate aggression against Western Europe to later conquer the rest of the world.*

3. IMPERIAL ASPIRATIONS, GEOGRAPHY AND POWER OF INTIMIDATION

Geography had a decisive role in the way that some powerful countries disciplined and implemented their empires. The Russian empire, under the Czars, commissars and now presidents, has been relatively compact and accessible for the deadly power of Moscow's "conventional" military forces. The same thing applies in great measure to China. The US, instead, with an imperial aspiration that extends from Mexico to the Middle East and from Berlin to Bangkok, deploying an overwhelming conventional force in remote domains of the empire has implied significant challenges, just as we see today in the Iraqi war. Therefore, Washington has frequently seen the need to threaten a nuclear attack to maintain the control of their domains or to expand them. The fact that the US has used them, gives it a lot of power and credibility in its capacity to do so again.

Noam Chomsky explains how this policy works: "Our system of strategic nuclear weapons provides us with a kind of umbrella within which we can carry out conventional actions,

that is, aggression and subversion, without any concern that they may be somehow hampered... Harold Brown who was Carter's defence secretary... said that this was the heart of our security system. He said that, once this system is in position, our conventional forces became 'significant instruments of military and political power'. This means that, under this umbrella of strategic nuclear weapons... we have been successful at intimidating enough anyone who could help protect people we have decided to attack. So... if we want to overthrow the government of Guatemala... or to send a Rapid Deployment Force to the Middle East or if we want to support a military coup in Indonesia... if we want to invade a certain country... we can do it without too much concern that we may be discouraged, because we have this intimidating power able to threaten anyone who could obstruct our way".

President Eisenhower was more succinct: "It would be impossible for the United States to maintain the military commitments that it now has around the world... if it did not possess nuclear weapons and the will to use them when necessary."

4. THE INDUSTRIAL MILITARY COMPLEX

During the first decade of the Cold War, the US held almost a complete monopoly in what concerns nuclear weapons. In the decade of the 50's and 60's, the US Air force and its political allies constantly exaggerated the nuclear threat represented by the Soviet Union *to justify a bigger military expenditure and the acquisition of new systems of weapons.*

The nuclear framework of "peaceful coexistence between the US and USSR" served as an argument to develop confrontation for "areas of influence" between the US and the USSR during the Cold War that facilitated the development of the "war industry" (conventional and nuclear) that fed the contracts and the earnings of the consortia grouped within this monster called the **North American Industrial Military Complex.**

The United States expenditure in nuclear weapons has increased by 84% since 1995, reaching 40,000 million dollars. This budget maintains about 10,000 nuclear missiles, 2,000 of which are in a state of maximum alert. The goal of the new programmes is the production of new prototypes of nuclear warheads and missiles over the next decade. Nonetheless, Bush dares please himself by telling North Korea (supposedly in possession of two nuclear warheads) that its nuclear program "puts humanity in danger."

At the present time three big arms corporations (Lockheed Martin, Boeing, and Northrop Grumman), by means of their influence in all the offices of federal contracting, manage to get the juiciest contracts in the so-called "Global War Against Terrorism" (GWOT) that include sales of systems and weapons of security that cover the whole of US territory and their mobile units abroad. They also obtain juicy contracts and earnings from Bush's space project to colonise the Moon and to send a manned mission to Mars that will spearhead a new arms race in space.

Rooted formally inside NATO, (the great State military-imperial locomotive of the US and its partners), they protect the conquering strategies of their multinational's spread through the whole dependent geography of Asia, Africa and Latin America.

For that reason, the Europeans, minor partners of Bush, in their quality of "select club", protect their own arms race and their nuclear arsenals following the imprint of the powering locomotive, and of the clan's boss who happens to sit in the armchair of the White House, in Washington, for the time being, Bush. China, the United States, France, Great Britain and Russia, were until 1998 the only declared nuclear powers. In 1970, they signed the Non Proliferation Treaty, to legitimise the "club" as a democratic and pacifist entity. *All the countries of the North Atlantic Treaty Organisation (NATO) that have American nuclear missiles in their territory voted in favour of a UN resolution that demands the "reduction of non-strategic nuclear weapons".* This system in reality does not have power over the strangers to the "club", that is, the countries that want to develop their own dissuasive power outside the US and its partners' control, the so called "axis of evil". Among those "demons" there exist some with nuclear teeth, like North Korea, **Iran** and

Pakistan whose nuclear developments are "monitored" with attention by the fat partners of the nuclear club.

Experts in this topic maintain that "an institutional argument circulates around NATO: that (nuclear) weapons contribute to the bond between Europe and United States". A report reveals for the first time how many nuclear bombs the US could give to NATO allies who do not possess those weapons in case of a war: there would be 180, heading for Germany, Belgium, Holland, Italy and Turkey.

Exploitative European capitalism, with its remnants of slavery and furtive rebellions, needs to associate with "big capitalism" in Washington and benefits from the arms race and from the impunity of Bush's military invasions. *We have nothing to do, say the Chiracs or the Schroeders, Bush is the "militarist" and we are the "pacifists", Bush kills with missiles and threatens with nuclear might, while we only pick up the capitalist profits of the conquest with our banks and multinationals associated to the "booty of war."*

The rest is pure formality, the "opposition" in the UN, the "international condemnations" in minor issues, the diplomatic pressures against the military expansion of US, are tools of pressure that the Europeans use to seize a bigger quota in the business of the Empire locomotive. Europe is the minor partner in the pillage, with nuclear missiles as a frightening background pane.

5. US: THE TERRORIST STATE

On December 31st 2002, the American War Department published a document called *Nuclear Posture Review* that claimed the need to produce "an effective device to penetrate the earth to allow underground objectives to be attacked". After this the Senate repealed the prohibition to produce nuclear weapons in the US.

The idea of the Pentagon is to manufacture "small" nuclear weapons, with a power between 5% and 10% of that of Hiroshima's, designed to penetrate deeply into the earth and to blow up bunkers. The *Nuclear Posture Review* explained that there are a total of 1,400 bunkers in 70 countries susceptible to becoming nuclear objectives. Those bombs would have great explosive power and a relatively low radiation, although they would be able to cause "massive civilians deaths" if they were used in urban areas, as pointed out by a spokesperson of the Federation of American Scientists. US strategists want to have those smart weapons for a possible aggression against e.g. Iran or North Korea if relationships continue to deteriorate.

The Pentagon has a new nuclear doctrine that represents a direct threat to a large part of the world. The "Nuclear Posture Review" document maintains that the United States will use nuclear weapons first against a country that represents a serious threat, even if that country does not have nuclear weapons. The document recommends the development of new nuclear weapons that can be integrated into the warfare strategy of the country, and not exclusively with the aim to dissuade. The new doctrine recommends the enlargement of the variety of battlefield nuclear weapons and to create a new generation of small weapons. The Pentagon - one of the main owners of this violence - understands that it should have the possibility to prepare and to use by hand, if considered necessary, small nuclear bombs against certain objectives, such as underground refuges, underground weapons factories or bunkers that protect "terrorists" (or Government chiefs). The characterizations of these objectives depend on the "ethics" of the empire, of course.

The objective is to integrate nuclear weapons into the arsenal of the armed forces. Now the Pentagon is exploring new nuclear weapons to kill Heads of States. The new doctrine says: It is "necessary to develop new capacities to defeat emergent threats such as hard and deeply buried targets".

The document refers to seven nations as potential targets: North Korea, China, Iran, Iraq, Libya, Russia and Syria. In this way and in one sweep, the United States threatens two thirds of humanity and the two biggest countries in the world: China and Russia. (The document says that they could consider a nuclear attack in a confrontation over Taiwan). It

seems the Pentagon did not consider that those two countries are officially part of its "war on terror". The Chinese government showed itself "deeply alarmed" by the document. But the circles of power in Washington remain unperturbed in front of world opinion or these reflections.

Besides naming countries, the new doctrine points out three situations worthy of nuclear weapons: 1) *cases where other weapons do not provide results*; 2) *reprisals for nuclear, biological or chemical attacks*; 3) *"in the event of surprise military twists"*. Translation: *We will use nuclear weapons when it is not possible to reach our objectives by other means or if somebody gives us or our allies a "surprise" military blow.*

Historically, Washington sustained the principle of the last resort for the use of nuclear weapons against other nuclear powers, although in the last decade several officials pointed out that these weapons could be used against enemies that attacked with other weapons of mass destruction, such as chemical or biological weapons. The document says that if Israel were to be attacked, the Pentagon would consider a nuclear response. Needless to say that Israel has plenty of nuclear weapons and that for decades it has been a threat to Iraq and other neighbours. The White House removed Libya from the official list of "countries that support terrorism" due to its support for the current war. That is, however, not enough to protect the Libyan population from the nuclear threat.

Washington promoted the Non Proliferation Treaty and the treaty of prohibition of nuclear tests for decades because they helped preserve the monopoly of nuclear weapons in the hands of a few imperialistic countries. Now those agreements are no longer convenient: it doesn't want any limitation and believes that brute force is the best way to keep other countries in line.

Washington has declared that "its hands will not be tied" by international treaties. It has withdrawn from the Kyoto global warming treaty. Then it announced it has suspended the 1972 Antiballistic Missiles Treaty, elaborated to stop the arms race. This new military doctrine hits hard on two other treaties: the one on prohibition of nuclear tests and the 1974 Non Proliferation Treaty. It is said that United States has plans to again carry out nuclear tests to refine the new generation of weapons. This, it is believed, would re-start a new global race of tests and development of nuclear weapons because other countries would follow suit.

A central point of the United States' position of "non proliferation" was the promise to not use nuclear weapons against countries that did not have them and that had signed the Nuclear Non Proliferation Treaty (unless they were "allied to a nuclear state"). Now the United States is discarding that promise and proposing nuclear attacks on non nuclear countries that signed the treaty, such as Iran, Libya, Syria and North Korea. The United States government has always said that its wars and military expansion are purely "defensive", and that its enormous nuclear arsenal "serves as a break" to nuclear war. But now it says that it is willing to throw nuclear weapons here and there to impose its will over the entire world. What a "defence" and "break"! A nuclear attack, even a first nuclear attack against poor countries of the third world, is no longer considered "unthinkable."

An Iranian "attack against Israel or its neighbours, or a North Korean attack against South Korea or a military confrontation over the Taiwan situation" could happen in such a way that the United States may decide to resort to the use of nuclear weapons, the document affirms. The use of nuclear weapons to eliminate supposed arsenals with capacity for mass destruction in the hands of "renegade" states, hostile to Washington is also suggested.

This plan has weakened the non proliferation system, encouraging other states to acquire nuclear weapons and widening the circumstances for their use. The document blurs the distinction between deterrence and warfare use by suggesting the development of new nuclear weapons. This strategy also contravenes the 1970 Nuclear Non Proliferation Treaty (NPT) that committed nuclear powers to the objective of final nuclear disarmament. The National Security adviser, Condoleezza Rice, has insisted that the document is coherent with Washington's traditional policies on nuclear deterrence. "All we want is to reduce the

possibility of the use of weapons of mass destruction. The way of doing this is to send a clear sign to anyone who may try to use those weapons against the United States, that it will receive a devastating response", maintained Rice.

As a result of this policy the radical sectors of threatened countries have begun to look for ways to produce nuclear weapons and to strengthen themselves to respond to the US plan. By seeing enemies everywhere the United States confirms the beliefs of those who want to create such dangers everywhere and by threatening them it creates and/or strengthens enemies everywhere. All this has set in motion Iran and North Korea's wheel of paranoia and it has fed China's fears regarding the United States' intentions. This posture has unleashed a new nuclear arms race in a dozen countries.

As many countries on the list are poor and do not have nuclear weapons, the US nuclear doctrine will no longer be "mutually assured destruction" to become "unilateral assured destruction", that is to say, a nuclear attack to a country that does not march in step like it is told. The decision of George W. Bush's government has, as a goal, to confront all the countries it has named as the "axis of evil" or any other country that Washington considers that is protecting terrorism. These tactical nuclear weapons will be easier to carry than existing ones. The American Defence department considers that due to their more limited character, they will give its enemies the certainty that it will use them.

The United States has demonstrated clearly with the invasion of Iraq that it is openly in defiance of international law. Nor does it recognise the United Nations Charter, international treaties and agreements, the sovereignty of nations - going back beyond the 1648 Peace of Westphalia - and furthermore, with its Fascist doctrine of preventative war they have reserved for themselves the right to declare who can have weapons of mass destruction and who should not have them. For example Pakistan and Israel can have those weapons, as long as North Korea and Iran do not.

Clearly speaking, the big powers can possess - for example - nuclear weapons, whilst the less powerful or poorer countries cannot. If a country is not among the big powers, but it is a Washington ally, it can have them without declaring them. That is not considered a violation by US rules.

The document points out at the beginning: "Weapons of mass destruction - nuclear, biological and chemical - possessed by hostile states and terrorists represent one of the biggest challenges faced by US security". Notice that the text points out that these weapons represent a danger in hands of "hostile states and terrorists". Washington - as we already observed - reserves the right to decide on the benevolence or wickedness of each State, as well as who are the "good" terrorists and who are the "bad" terrorists.

6. INTERNATIONAL SECURITY AND OUTER SPACE.

Considerations on certain measures that have been adopted to regulate the practice of the use of nuclear weapons, Treaties, Bilateral Agreements on partial prohibition of tests.

a. Consequences

The threat to security and to outer space is increased with the growth of Nuclear Weapons and the Arms Race. To demand strict compliance with the Non Proliferation Treaty to preserve "social and international order" is a right proclaimed in the Universal Declaration of Human Rights. Art.28

According to the Dictionary of New Humanism: Security (From secure and this from L. securum, free from danger and risk). Broadly, the whole system of guarantees that protects human rights, above all the right to life; maintenance of social stability; prevention of social disasters and violent disturbances; defence of national sovereignty; fulfilment of international obligations.

Security is, indeed, a legitimate concern of the State, because it affects its independence, its sovereignty and its autonomy.

A malfunction of space weapons would affect not only security but it could also translate into a nuclear catastrophe. In the current nuclear age, the only possible security is that of the whole of humanity, not via the road of Technological and Military resources, but through political efforts that allow the maintenance of weapons outside space and to carry out Nuclear Disarmament.

Today about 433 nuclear reactors generate 17% of the world's electricity, and in 8 countries more than 40% of the electric power comes from nuclear sources. Due to this the International Atomic Energy Agency (IAEA) promotes the use of atomic energy with peaceful ends and it establishes norms of nuclear security and environmental protection.

There exist offensive space weapons, ASAT, and defensive, against ballistic missiles (BMD). Although the basic principles for the use of these weapons are similar, their characteristics can differ considerably according to their applications. The reason to consider both types of weapons in the same category is that there is a close relationship between the technologies ASAT and BMD, as well as similar technical, political and diplomatic measures.

Kinetic energy weapons - (electromagnetic weapons) produce actions on electrical and magnetic fields where certain materials, such as iron, are mutually attracted. Kinetic energy and directed energy weapons - are space weapons. Among kinetics weapons we can find rockets, electromagnetic weapons (railguns) and weapons of directed energy; lasers: chemical, excimer, free electrons, x rays; radiofrequency weapons: gyrotrons; weapons of rays of particles: rays of charged particles and rays of neutral particles.

It would be necessary to guarantee that the use of these weapons in laboratories do not have a noxious effect on the security and the well-being of society. The IAEA creates basic norms for protection against radiation and it publishes regulations and codes of practices for different types of operations, the security in the transportation of radio-active materials included.

The Scientific Committee on Problems of the Environment (SCOPE), Organisation of the Council of Scientific Unions, in a project on the "Environmental Consequences of Nuclear War", reached the conclusion that the combination of climate interference, other physical disruptions of the Environment, and the bewilderment of the interdependent World Infrastructure of society that a large scale nuclear war would cause, could significantly inhibit agricultural production and food distribution, thereby putting most of the human population that survived in principle at risk of hunger.

Important risks exist for the population - mostly those exposed to a nuclear attack, but the conditions would more plausibly resemble those experienced by mankind in the past, with widespread famines, similar to the ones experienced in Hiroshima and Nagasaki.

b. Satellite Communications - Conference on Nuclear Disarmament

The increase in nuclear weapons represents a serious threat for international security. The radius of action of a projectile controlled by a system of satellite communications violates the agreements regarding prohibition of nuclear weapons.

That is to say, to attack a space craft or to hinder its operation it would not be absolutely necessary to use weapons specially conceived to be used in outer space. In general the space systems, civilian as well as military, depend on radio communications with terrestrial stations.

Also, the condition of armed attack would not be completed if the attack on a satellite took place simultaneously with the initiation of hostilities. Regarding military systems, some of them, the surveillance satellites used for the verification of agreements on weapons limitation, are protected as national technical means of verification by virtue of the agreements on the limitation of weapons.

The existing norms of international law do not obstruct attacks against space craft belonging to the parties in conflict once hostilities have begun.

There exist multilateral treaties which contain concrete statutes pertinent to different aspects of the security of space activities.

The Limited Test Ban Treaty forbids all explosions that test nuclear weapons "or any other nuclear explosion" in, among other places, outer space. This means that nuclear explosions that are not specific weapons tests, for example explosions used in order to create energy with X-ray lasers, are also prohibited in outer space.

No restrictions exist for other types of weapons, for example conventional ones, or for military space systems. That is to say there is no statute that forbids the development, testing or deployment, be in on earth, in the air or in the outer space, of anti-satellite weapons ASAT or of space mines. This omission turns out to be especially disturbing when focusing on the development of the ASAT weapons.

The 1971 Agreement on the prevention of accidents, and the 1973 Agreement on the prevention of nuclear war commit Russia and the United States to abstain from interfering with early alert systems of either side and of attacking these systems. In this respect they include the satellites that are part of such detection systems.

The Agreement deals with the modernisation of the hotline and the United States and Russia's commitment to maintaining two direct lines at all times, by means of communication via satellite.

Some independent and criminal groups, together with the arms industry, are spread out sectors not contemplated in the agreements – not included in weapons control, which do not collaborate with the cessation of hostilities.

Socialist and developing countries, although they coincide in that a Conference for Disarmament is the appropriate place to negotiate formal agreements, insist that it is a political question and that it should be discussed in pertinent organisations – such as the United Nations, the Organisation of American States, international Courts etc.

Among the recommendations made by Hans Blix to preserve security we can find:

1. That USA ratifies the treaty on nuclear tests,
2. That a verifiable Treaty to end the production of highly enriched uranium and plutonium, key components to manufacture nuclear weapons, should be completed,
3. That a high level meeting of all States is called to improve the mechanisms of Disarmament, of non proliferation and to prevent the terrorist use of weapons of mass destruction.

c. Rules to maintain Security

(From the Magazine of the United Nations)

Rule 1: Unilateral initiatives should not reduce the capacity of any of the parts to deliver, in reprisal, an unacceptable nuclear attack in the event of being attacked at that level.

The nuclear capacity can be useful for a rational foreign policy: a. If it is considered to be not only dissuasive, but also the basis for security that allows for limited risks to be run with a view to reducing tensions; b. If the retaliatory character of a second strike attack of the capacity is made explicit; c. If only the minimum capacity required for an effective deterrence is maintained and the arms race is reduced. That is to say that none of these conditions has been satisfied so far by any nuclear Superpower. Not only is there ambiguity in relation to nuclear weapons initial use or reprisal, but also strategic and tactical weapons have been distributed in a redundant way and in excessive numbers regarding the capacity for a graded response to an aggression. Consequently, at some stage of the process gradual and reciprocal reductions of nuclear weapons should be undertaken, as well as of the manpower assigned to them.

Rule 2: Unilateral initiatives should not affect their own capacity to confront a conventional aggression with an appropriately graded conventional response.

Conventional forces constitute the first line of deterrence and they should remain at an approximate level of parity in the regions in conflict. But the absolute level of this balance is variable. The general rule would be to begin unilateral measures in the regions with low level tension and extend them gradually to those regions with a higher level tension.

Rule 3: The degree of risk of unilateral initiatives should correspond to the degree of reciprocity obtained from the opponent.

This is the regulatory characteristic of GRIT that maintains the process within reasonable limits of security. If measures of reciprocity are achieved, in good faith and of appropriate magnitude, the magnitude and importance of further initiatives can be increased; otherwise, the process continues with a diversity of measures that involve risks of the same magnitude. This way the relative risk stays approximately constant along the process.

Rule 4: Unilateral initiatives should have a diverse character, regarding both the field of action and the geographical place of application.

The reason for diversification is twofold. Firstly, when maintaining security, diversification minimizes the weakening of one's own position in any sphere (like in the case of combat troops) or in any geographical place. Secondly, when inducing reciprocity diversification continues to put pressure with initiatives that have the common purpose of reducing the tensions (and, hopefully, the effect also), but do not "threaten" the opponent constantly putting pressure always on the same field or in the same place and, limiting in this way their options of reciprocity.

d. Nuclear Weapons Non Proliferation Treaty and Agreements

The cornerstone of the "regime of non-proliferation of nuclear weapons", is the Nuclear Non-Proliferation Treaty [NPT]. It is an international treaty whose objective is to impede dissemination of nuclear weapons and technologies, to promote cooperation in the peaceful use of nuclear energy and to achieve nuclear disarmament and total general disarmament. It is a binding instrument in the form of a multilateral treaty whose objective is the disarmament of States in possession of nuclear weapons. The Treaty was adopted by the United Nations in 1968 and became official in 1970. From that moment it has been the main element of the global system for nuclear non-proliferation. 188 States have adhered to the Treaty, included five owners of nuclear weapons (China, the United States, France, the United Kingdom and Russia). Only three countries of the 191 States that form, at present, the international community remain outside the treaty, being at the same time the only countries that have nuclear weapons that are not part of the NPT. These countries are India, Israel and Pakistan.

For the countries that have them, the treaty does not establish the maximum quantity of nuclear weapons with which to guarantee their own security, neither does it demand from them a concrete timescale to proceed with the destruction of all their nuclear arsenal, to fulfil article VI of the NPT. However, to compensate for being able to provisionally enjoy the privilege of possessing nuclear weapons, this treaty does request that they begin negotiations in good faith to approve a plan for the destruction of all the nuclear weapons in their possession, as well as of their means for carrying or delivering them, but without fixing a date for the beginning of these negotiations, or a deadline to carry this out. To the countries which do not have nuclear weapons there are parts in the NPT that forbid their ownership of any type of nuclear weapon and they are forced, also, to put under international supervision all their nuclear programme, which should be exclusively for peaceful ends. Clearly two groups of countries exist with different rights and duties, a situation that is considered by many countries to be discriminatory and unacceptable.

The main treaties and international agreements adopted by nations until March 2005 related to the non-proliferation of nuclear weapons are as follows:

1. The Nuclear Non-Proliferation Treaty (NPT).
2. The Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco).
3. The South Pacific Nuclear Free Zone (SPNFZ) Treaty (Treaty of Rarotonga).
4. The Southeast Asian Nuclear-Weapon-Free Zone Treaty (Treaty of Bangkok).
5. The African Nuclear Weapons Free Zone Treaty (ANWFZ) (Treaty of Pelindaba).
6. The Partial Test-Ban Treaty.
7. The Comprehensive Test-Ban Treaty (CTBT Treaty)
8. The Antarctic Treaty.
9. The Outer Space Treaty.
10. The Ocean Floor Treaty.
11. The Intermediate-Range Nuclear Forces (INF) Treaty.
12. The START I and II Treaties. (Strategic Arms Reduction Treaty)

Besides the international treaties and agreements mentioned above, other measures have been adopted in the framework of the International Atomic Energy Agency and of the Security Council that have contributed in some way to the strengthening of the current "system of non-proliferation of nuclear weapons ", such as the approval in 1997 of an Additional Protocol to complement those that protect the validity of the existing agreements between the IAEA and its Member States, part of the NPT, with the objective of widening the scope of the above-mentioned agreements and be able to detect any nuclear activity undeclared by a member country of the IAEA or part of the NPT, and the adoption of resolution 1540 by the Security Council in April 2004 , which urges the international community to adopt national laws that criminalise illicit activities related to the trade or transfer of materials, teams and nuclear technology considered to be sensitive from the point of view of nuclear weapons proliferation.

Many have also adopted other initiatives with the objective of strengthening the "system of non-proliferation of nuclear weapons ", such as the "Security Initiative against Proliferation" proposed by the United States, the declarations adopted by the European Union and the Movement of Non-aligned Countries in relation to the proliferation of weapons of mass destruction, among others, which basically reflect the specific interests of countries, or groups of countries, on this important topic. However, some of these initiatives do not facilitate the true reinforcement of the mentioned system, since they promote the application of unilateral measures generally directed against a certain group of countries with an independent international position, different from the positions adopted by some of the main nuclear powers with regard to the topic of proliferation of nuclear weapons.

By February 2005, 63 signatories to the non-proliferation Treaty had ratified the Additional Protocols and the respective agreements on Safeguards with the IAEA. At present 152 States have safeguard agreements with the IAEA.

The status per country and the texts of the treaties, agreements and protocols can be found in: <http://disarmament2.un.org/TreatyStatus.nsf>

http://www.iaea.org/OurWork/SV/Safeguards/sg_protocol.html

Each treaty should be signed and also ratified by the participating countries.

e. Extracts from the Eighth Letter to my Friends by Silo⁹

⁹ Related to security, political power and society – based on the International Conference on Humanisation of Military Activities, sponsored by the Ministry of Defence of the CIE - Moscow, May 24/28, 1993

"The phenomenon of terrorism presents a danger of some magnitude, considering the firepower to which these relatively specialized individuals and groups now have access. This threat could take the form of high explosives and even nuclear devices or chemical and biological weapons, all of which continue to become less expensive and easier to produce.

In the unstable panorama of today's world, the concerns of the armed forces are many and varied. In addition to the strategic and political problems they face, there are internal issues of restructuring, large-scale troop reductions, recruiting and training methods, replacement of equipment, technological modernization and, of primary importance, declining budgets. However, while the armed forces must thoroughly comprehend these factors in the context of their own sphere of activity, it must be added that none of these problems can be fully resolved until the primary function that the military is to fulfill in society and the world is made clear. It is, after all, political power that gives orientation to the armed forces, which must act in accordance with that orientation.

A Review of the Concepts of Sovereignty and Security

In the traditional conception of these issues, the armed forces are assigned the function of safeguarding the nation's sovereignty and security and granted the authority to use force in accordance with the mandate of the duly constituted powers. In this way, the State's monopoly on violence is transferred to the military services.

But this brings us to a key point in the discussion of what should be understood by the terms sovereignty and security. If a nation's sovereignty and security or, in more modern terms, its "progress" are said to require extraterritorial sources of raw materials, indisputable rights of maritime passage to protect the flow of commerce, and the control of strategic points or the occupation of foreign territory with these same objectives, then what we are faced with is the theory and practice of colonialism or neocolonialism.

The function of the military during colonial times consisted principally of facilitating the interests of the crowns of the period, and later on the interests of the private companies that obtained special concessions of political power in exchange for suitable compensation. The illegality of that system was justified by the supposed barbarism of the subjugated peoples, who were characterized as incapable of adequately governing themselves. The ideology corresponding to this stage affirmed colonialism as a "civilizing" system par excellence."

"Armamentism is but one particular case of the threat of physical violence under the direction of the power established by that minority of people which manipulates the State." Humanise the Earth: Ch. IX, Violence

"During the age of Napoleonic imperialism, the function of the army, which also held political power, consisted of expanding the borders with the declared objective of redeeming through military action peoples who were oppressed by tyrannies, and installing a legal and administrative system enshrining liberty, equality, and fraternity in its legal codes. The corresponding ideology justified this imperial expansion by the claim of "necessity" on the part of a power constituted by the democratic revolution against illegal monarchies that were based on inequality and that moreover formed a united front to suppress the revolution."

"The issue of disarmament is of utmost importance, and it is all to the good that pacifism raises this urgent question. However, even were it successful in its demands it would not thereby be able to modify the context of this violence or, except in the most artificial fashion, to extend its proposals to include modifying the social structure itself". Humanise the Earth: Ch. IX, Violence

"If the trials following World War II taught us anything, it is that every person in the military has responsibilities as a human being, even in the extreme situation of armed conflict."

7. GLOBAL SITUATION OF NUCLEAR WEAPONS

Nuclear weapons are warfare devices that liberate great amounts of energy and have a high destructive and pollutant power over the environment and people.

The emergence of the first atomic bomb marked a turning point in human history. From there onwards the human race had the possibility for the first time in all its history to totally self-destruct.

From a technical point of view, non-nuclear bombs are based on physiochemical reactions or processes. Essentially they obtain their destructive power through the decomposition or combustion of chemical compounds at high speeds. These bombs work with the most external part of the materials and atoms.

On the other hand, nuclear bombs obtain their power from causing a chain reaction that releases the energy contained in the heart of matter: the atoms.

The current situation by country is as follows:

Countries that manufacture nuclear weapons, continue with their development and store them: 10,500 in **the USA**, 20,000 in **Russia**, 185 in the **United Kingdom**, 450 in **France**, 200 in **Israel**, 30-50 in **Pakistan**, 30-40 in **India** and 400 in **China**.

Countries that are unofficially considered to be working to be able to manufacture a nuclear weapon: **Libya, Egypt, Syria, Iran, North Korea**.

Countries that possess the capacity to enrich uranium (one of the main elements to produce atomic weapons): **USA, Russia, China, Holland, United Kingdom, Germany, France, Brazil** and **Japan**. Recently **Argentina** announced its readiness to enrich uranium again in its nuclear plants.

To these countries it is necessary to add all NATO members that at the moment have North American nuclear weapons in their territory, former members of the Soviet Union, etc.

That is to say, that today 13 countries have technical conditions to produce nuclear weapons and to launch them (because they also possess the capacity to manufacture missiles).

It is necessary to highlight that these countries at point "a" also have submarines and other ships with nuclear weapons deployed around the world.

That is to say, that today any human being in any point of the world is exposed to an attack with a nuclear weapon.

8. CONSEQUENCES OF THE USE OF NUCLEAR WEAPONS IN THE PAST.

From the creation of the "A" Bomb and the first hydrogen bomb, also called Bomb Mike, some countries began to carry out tests with atomic explosions to be able to regulate and standardise their nuclear weapons.

Initially these tests were carried out at ground level, but this brought unwanted consequences (acid rain, contamination, exposure to radioactivity, etc.)

This led to carrying out tests underground in an attempt to avoid these consequences.

It is considered that the explosions of Hiroshima and Nagasaki were also used as field tests to be able to study the effects of radiation in the civilian population as well as to measure its effects in the battle field.

In 1958 the United States continued investigating fission and fusion nuclear explosions but this time they decided to carry out tests in the atmosphere to study their effects.

They carried out 3 fission explosions in the atmosphere at a height of 480 km in the South Atlantic and 2 fusion explosions at a height of 160 km, within in the *Project Argus*.

In 1962 Project Starfish continued atmospheric nuclear explosions to study the way they could affect communications and the ionosphere (see EMP effect).

Of course, other nations also carried out tests of this type. All these atmospheric tests reached the point of causing artificial northern lights (given the ionization of the atmosphere that took place), besides producing interruptions in radio and television communications.

Today academic environments discuss in a whisper the possible influence of these nuclear tests on global warming.

The present un-official data on nuclear tests is as follows:

United States: 1,054 nuclear tests (Nevada, Marshall Islands, Alaska, Colorado, Mississippi, New Mexico, etc.) and two nuclear attacks (Hiroshima and Nagasaki).

Soviet Union: between 715 and 969 detonations (Semipalatinsk, Novaya Zemlya, Kazajstan, Turkmenistan and Ukraine).

France: 210 detonations (mainly in Algeria and in Polynesia).

Great Britain: 45 nuclear explosions (21 in Australian territory, etc.).

China: 45 detonations (23 atmospheric and 22 underground, in Lop Nur, Malan, Xinjiang).

India: 5 or 6 detonations (Pokhran).

Pakistan: 3 or 6 detonations (Chagai Hills).

The last "official" tests carried out recently were those of India and Pakistan in 1998.

9. PROJECTION ON THE CONSEQUENCES THAT THE USE OF NUCLEAR WEAPONS WOULD HAVE AT THE PRESENT HISTORICAL MOMENT ON WORLD POPULATION

a. Social Effects.

The holders of nuclear weapons say they have protective systems to prevent automatic responses in the event of receiving a nuclear attack.

According to them the final decision of responding to an attack will be in a person's or a group of qualified people's hands.

Even if this were true, that level of decision-making by people who permanently cause wars throughout the world does not constitute a guarantee for anybody.

The decision of returning an attack or not it should happen in the first 10 minutes after receiving the first attack, since not to decide in that period would practically imply the loss of all capacity for a military response.

If to this pressure in response time, we add the psychological impact caused by an attack, the characteristic confusion of any critical moment and the political and personal pressures (everybody has a family living somewhere), the possibilities that somebody may decide with common sense decreases almost to zero.

These conditions can cause a chain reaction in all countries with nuclear weapons and produce "reciprocal attacks" where every one attacks every one else.

Surely it is not necessary to highlight that this would produce an almost total destruction of the human race.

Those who survive an attack of these proportions would have serious difficulties getting food and water.

b. Effects of a nuclear explosion on objects

As with any other bomb, what produces the biggest damage is the shock wave. In the case of nuclear bombs the height at which they are detonated is an important factor.

If exploded at a low height they produce a great crater but little damage to the place they are dropped on.

If exploded at a level higher than necessary they produce big winds and the EMP effect but do not destroy buildings for which the damage is much smaller. For example: The bombs of Hiroshima and Nagasaki were programmed to explode at a height of 550 meters since that was the distance at which they would produce total devastation.

The winds produced by an atomic bomb are equivalent to those of a hurricane and they usually produce damage to a minimum radius of 25 to 30 kilometres (for a 10 megaton bomb).

As if the hurricane-force winds produced by the shock wave were not enough, the mass of hot gas created by the bomb vaporises all that exists in the same radius.

A millionth of a second after a nuclear explosion the temperature inside the bomb reaches about 10,000,000° C.

However, the majority of fires happen because of other factors, for example: broken gas pipes, burnt wood and papers, short circuits, etc.

Residual radioactivity (later on) and instantaneous radioactivity (immediate) created by the explosion spread around a very wide area of several kilometres.

Residual radioactivity produces radioactive rain and it usually also affects areas that were not directly hit by the explosion.

According to the height of the explosion residual radiation can vary (also influenced by local climate and winds).

All the water, the soil and all the food affected by the explosion or the radioactive rain remain contaminated for a long time.

There is little experience regarding radioactive rain so the true duration of the contamination produced cannot be determined with accuracy.

Instantaneous radioactivity is produced by gamma rays and the neutrons liberated at the moment of the explosion. Today people who suffer from the physical effects of the explosions in Japan still exist (including the descendants of those that witnessed the explosion).

To these effects should be added the so-called Electromagnetic Pulse (EMP). It is necessary to highlight that today everything that keeps a country working has electronic or magnetic equipment at some point of their circuit (water, gas, electricity, communications, etc.).

As this pulse produces high voltages, these are then discharged through the existing lines of TV, electricity, telephones, etc. for which they can affect many more kilometres than the actual bomb.

c. Effects on the food chain

"A large scale nuclear war could damage the agricultural production by means of a series of mechanisms: a. Brief episodes of cold or icy temperatures during the development of plants, associated with the sharp initial climatic interference or with extreme phenomena taking place during long term chronic climatic dysfunction; b. Insufficient duration of the period of development of vegetable maturation for grain crops in middle latitudes, as a result of lingering reductions of mean temperatures of a few degrees (1 to 3 degrees C for some crops, 3 to 5 for most, and 5 to 7 for almost all the important nutritious crops); c. An insufficiently integrated thermal period (integration of the temperature during cultivation time) resulting from lingering reductions of a few degrees; d. A period of insufficient hours of sun light resulting in reductions of a few tenths of 1% in sun light, if they persist during the season of vegetable growth; and, reductions in seasonal rains; f. Other possible physical disruptions, among them, ionizing radiation, the contamination of the air (especially in the areas of low ground), local acid deposits, the increase in adverse UV-B radiations; g. Interactions with ecological effects, such as letting loose plagues or illnesses; h. Interference with energy and technological agricultural supplies, such as reductions in

the supply of fertilizers, plague-killers, herbicides, fuels and lubricants for agricultural machinery, spare parts for those machines, seeds, manpower, economic incentives and agricultural and meteorological forecasts". United Nations Journal.

d. Effects of a nuclear explosion on people

It should be considered that it is almost impossible when the streets and avenues are blocked that a wounded person may receive immediate urgently-needed help, for which most of deaths occur basically due to not having received opportune assistance.

A large toll of dead and wounded is due to indirect effects, mainly the impact of objects that have been hurled by the wind.

Human beings exposed to the explosion up to a radius of 13 km will receive important burns over more than 25% of the body. The direct observation of the initial fire ball causes permanent blindness in people up a distance of 25 km.

However, any opaque material may help in the moment of the explosion. People hidden or with thick clothes may still receive burns but these are not likely to be lethal.

Any living being receives a tenth of a "Rad" per year which is normal and it does not generate risk. In general 400 Rads are lethal for a human being.

A nuclear bomb can generate millions of Rads where the explosion begins although this radiation vanishes quickly into the air.

Generally if a person receives more than 400 Rads it is because they are in an area already destroyed by the shock wave and has few possibilities to survive.

If death does not happen in the first 30 days of exposure to radiation, any **mature** person has many possibilities to contract cancer up to several years after the explosion. Permanent genetic alterations that may affect several later generations not exposed to the explosion also take place.

Another way that affects people directly is the lung damage caused by the abrupt increase in atmospheric pressure that takes place.

There is also high risk from the *radioactive rain* since radioactive nuclei become absorbed into the food chain. This can be so for the foods ingested by people and by animals.

The serious psychological damage taking place in the populations should be added to all this.

10. STRATEGY AND POSSIBLE ACTIONS TO BE DEVELOPED BY THE ORGANISMS AND ACTION FRONTS OF THE HUMANIST MOVEMENT.

Placing the nuclear issue, the arms race and wars as the main world conflicts of these times is of importance for the Humanist Movement. The use of a small percentage of the existing nuclear arsenal power would produce a huge setback in the development of life in the planet (... even its extinction).

It seems possible and necessary that, as the Humanist Movement, we put our intention in generating **a great world movement in favour of disarmament and peace.**

The central demands we outline for this great movement we want to set in motion are the following three:

1. Total nuclear disarmament now

2. That all invading armies abandon occupied territories, and,

3. Progressive and proportional disarmament of conventional weapons of mass destruction in all the regions. (including biological and chemical ones.)

A relevant point regarding this conflict is the lack of knowledge that exists about this situation, on the part of "ordinary" people, due to the disinformation promoted by governments, the banking system and the interests of the industrial military complex.

Contrary to what happened in the decade of the 80's - that culminated with the unilateral disarmament of the USSR - during which there was information and the populations were aware of the danger, today, although the threat is much bigger than it was then, the ignorance and indifference about the issue are abysmal.

Just as it is possible to see in the preceding chapters, at present the existing nuclear arsenal is much larger; there are more countries that possess it; it is within reach of groups more or less organised; and also of individuals.

Because of this, we think that the work of dissemination and clarification takes significant importance and therefore part of our efforts should be directed to the production of materials that present, explain and develop information on the issue. Materials that reflect the real dimension of the danger, that explain also the absurdity of the attached expenditure, in terms that are easily understood by the population as a whole (there is more than enough experience about this in the materials of the decade of the 80's, comparing prices with the cost of hospitals, schools, food, etc.).

No doubt, **publicity on TV and the actions that can be disseminated through it will be of utmost importance, achievement and repercussion.**

Finally, it will be useful to promote formats - such as, for example, virtual Forums and web pages, for example - that allow an interchange about the actions set in motion, clarification materials, responses from the environment, etc.

11. GLOSSARY

- Critical mass

5. Physics. The conditions from where a nuclear chain reaction begins.

- Electromagnetic Pulse Effect (EMP)

This is an exclusive effect of nuclear weapons, particularly those that explode at high altitude. It is also called "rainbow effect" or "rainbow bomb" because of the colours it produced in the sky due to the artificial ionization of the atmosphere.

In general terms this effect destroys any electronic equipment (whether in use or not). It was discovered accidentally when performing tests of nuclear explosions in the ionosphere and later it was devised as a non conventional weapon to destroy the organisation of a country or continent (since there is no way of repairing the equipment).

- Fissile Material

Any substance able to maintain a fission chain reaction.

- Kiloton

1. Unit of destructive power of an explosive, equivalent to 1000 tons of trinitrotoluene.

- Megaton

1. Unit of destructive power of an explosive, equivalent to a million tons of trinitrotoluene.

- Mike Bomb

First hydrogen bomb tested in the Marshall Islands, November 1st 1952.

- Neutron Bomb

1. Thermonuclear low power device able to destroy, basically due to emitted neutrons. It usually lacks fulminating fission and it is lethal, although its destructive capacity is limited.

- Nuclear fission

1. Physics. Break up of the atom's nucleus, with energy release, just as happens when bombarding the nucleus with neutrons.

- Nuclear fusion

1. Physics. Nuclear reaction, taking place by the union of two light nuclei that produces a heavier nucleus, with great energy release. Solar energy is generated by the nuclear fusion of hydrogen in the Sun.

- Rad

1. Unit of absorbed dose of ionizing radiation equal to the energy of 100 ergs/gram of irradiated matter.

- Radioactive rain

Gamma Rays emitted by the activated material. This radiation is very penetrating and it can go through the human body leaving behind part of its energy. Alpha and beta particles are also emitted, but they are not very penetrating, thick clothes or the skin can stop them, and they would cause burns only if they were deposited directly on the skin.

- Thermonuclear

1. Physics. Any process of fusion of light atomic nuclei, at temperatures of millions of degrees centigrade, with energy liberation.

- TNT.

Trinitrotoluene, in chemistry, refers to any of the different compounds obtained by the substitution of three atoms of hydrogen in toluene by three nitrates.

By having a low melting point, it can be melted and poured inside an artillery shell and other explosive devices. It burns outdoors at 295°C, but it can explode if it is compressed. It is quite a stable substance if not accompanied by a detonator, and it does not attack metals, it does not absorb humidity, and it is practically insoluble in water. TNT dissolves in benzene and in nail polish remover and, as anything made up of nitrogen, reacts quickly with substances that give electrons, that is to say, with reducing chemical agents. High-speed detonators, such as mercury fulminate, cause their violent decomposition and explosion. TNT can be absorbed through the skin, causing headache, anaemia and skin irritation.

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