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LANDMINE POLICY WHITE PAPER

On Friday, February 27, 2004, the Administration announced a new United States policy on landmines. This policy is a significant departure from past approaches to landmines. It will ensure protection for both military forces and civilians alike, and will continue U.S. leadership in humanitarian mine action – those activities that contribute most directly toward eliminating the landmine problem.

Background - The Humanitarian Landmine Problem

Landmines have been a major humanitarian problem around the world for two reasons:

- First, their persistence. Mines are the only conventional weapons which, when functioning as designed, are lethal for a period of time after activation. This is their military purpose: to hinder or influence adversary movement or maneuver for a period of time. But if their lethality persists after the combat has ended, they become not military assets but humanitarian liabilities. Most landmine types in use around the world remain lethal for an indefinite period of time.
- Second, many have been hard to detect because of their nonmetallic or low-metallic construction. The primary tool for mine detection has long been a metal detector similar to that used by beachcombers. If a mine is made with less than about 8 grams of iron or the equivalent, it is magnetically indistinguishable from the soil in which it is emplaced and so is not detectable by these devices. Non-detectability immensely compounds the post-combat landmine hazard to civilians, and it renders mine clearance far more expensive, time-consuming, and dangerous.

Complicating the hazards posed by persistent, non-detectable landmines has been their employment by unprofessional, untrained and undisciplined militant groups that have often used landmines not as a weapon of war, but as a weapon of terror. Professional militaries operating in accordance with customary international practice and/or generally accepted tenets of the laws of war (e.g., the Amended Mines Protocol of the Convention on

Conventional Weapons - CCW) are required to record the locations of those areas in which they emplace persistent mines and must also clearly mark and monitor these areas in the field. This practice drastically reduces the risk posed to civilians. Sadly, in the last thirty years rebel groups, terrorists, and unscrupulous governments have deliberately used mines against civilian populations. This new U.S. policy continues the process of stigmatizing such abhorrent practices and calls for more stringent restrictions on the trade in persistent landmines than any found in any existing treaties today.

The argument that only so-called "anti-personnel" mines pose a humanitarian problem is incomplete and fails to take into account the tremendous secondary impacts caused by persistent anti-vehicle mines. Persistent anti-vehicle mines are primarily designed for use against armored military vehicles, such as tanks or personnel carriers. However, they also destroy automobiles, trucks, buses, tractors, and the people in them, creating unique (or additional) socio-economic impacts beyond those associated with persistent anti-personnel mines. By blocking civilian use of certain roads, these devices prevent refugees from returning to their homes, food from coming to market and humanitarian assistance from being delivered to those who urgently need it. This policy directly addresses the pressing humanitarian problems created by persistent anti-vehicle mines.

Elements of the new policy

To reduce these humanitarian hazards to the lowest possible level, while at the same time protecting our ground forces and the civilians they may be sent to defend, the United States will now implement the following policy:

- Persistence: After the year 2010 the United States will no longer use persistent landmines of any type, anti-personnel or anti-vehicle. Every landmine we use will meet or exceed the specifications for self-destruction and self-deactivation of the Amended Mines Protocol to the Convention on Conventional Weapons (AMP/CCW).

- Alternatives to Persistent Landmines: The U.S. will develop alternatives to current persistent landmines, both anti-personnel and anti-vehicle, that incorporate enhanced self-destructing/self-deactivating (SD/SDA) technologies.

- Non-detectable mines: After one year the United States will no longer use non-metallic or low-metallic landmines of any type, anti-vehicle or anti-personnel. This completes a process the United States started years earlier, by converting non-detectable anti-personnel landmines into detectable ones. Every landmine we use will meet or exceed the specifications for detectability in the CCW's Amended Mines Protocol.

- Increase funding for Humanitarian Mine Action: The new policy will increase the funds available to support the State Department's portion of the U.S. Humanitarian Mine Action Program by an additional 50% to $70 million annually.

- Sale or export: In implementing this policy, the United States will seek an international agreement that prohibits the sale or export of landmines that do not self-destruct. Consistent with existing U.S. obligations, we will seek appropriate limited exceptions for training personnel engaged in demining or countermining operations. This initiative complements existing provisions in the Amended Mines Protocol that already prohibit the transfer of non-detectable anti-personnel mines as well as remotely delivered mines that do not self-destruct and self-deactivate. In a separate effort, we are pursuing a protocol in the CCW that would, among other things, ban the use of non-detectable anti-vehicle landmines.

Significance of the New Policy

- These commitments do not depend on any future contingencies. This policy recognizes that persistent anti-vehicle mines as well as persistent anti-personnel mines can cause humanitarian problems. Therefore it treats anti-personnel (APL) and anti-vehicle mines equally. It is not merely an "APL" policy. It is a comprehensive landmine policy.

- The new policy applies to all U.S. stockpiled landmines wherever they may be used. After full implementation, it carries no special exemptions for Korea or any other geographic area.

- The United States is the first major military power to apply these humanitarian standards to its entire landmine inventory. Other countries are welcome to apply these standards as well.

Ending use of persistent landmines

Ending the use of persistent landmines of all types is the most significant component of the new policy. The humanitarian danger posed by any landmine is directly proportional to its persistence. Mines that remain active long after their military use is finished pose an unnecessary risk to civilians – and the longer they linger, the greater the risk. Persistency, not size or weight, is what creates humanitarian risk. This new policy ensures that the United States addresses this issue directly and comprehensively.

Although persistent landmines fulfill a unique military requirement on the battlefield, self-destructing landmines provide the valuable capability of allowing our own forces greater freedom of maneuver. Also, unlike persistent mines, self-destructing landmines defeat enemy attempts to recover these mines to use against us, or to recover mine explosives and fuses to employ in improvised explosive devices.

U.S. forces already take extensive measures to ensure their use of landmines does not contribute to the global landmine problem. This policy will provide further safeguards to ensure that this will continue to be the case.

To achieve this, U.S. landmines rely on the combination of two features:

1) Self-destruction (SD) uses a timing device to explode the mine after a period of time. This time can be a fixed time period incorporated into the design of the mine itself or it can be set **to** any of several options before the mines are emplaced. Current U.S. SD mines self-destruct between four hours and fifteen days, well within the specified limits set by the CCW's Amended Mines Protocol. Future U.S. systems will continue to meet or exceed this standard.

Self-destruction of U.S. landmines is extremely reliable. 100% of the electronics of every mine are non-destructively tested before it is accepted. More than 67,000 SD/SDA mines have been tested under a wide range of conditions including shock, vibration, high and low humidity, high and low temperature, and exposure to chemicals including salt and sulfuric acid. Throughout these tests, the self-destruct mechanism has not failed. Thus, unreliability of self-destruction of activated U.S. mines is statistically too low to measure. Note that the United Nations standard for humanitarian

mine clearance is 99.6%. U.S. SD reliability alone - without the additional self-deactivation capability - exceeds this standard.

2) Self-deactivation (SDA) is a backup process that would occur in the unlikely event that an activated mine failed to self-destruct. Unlike SD, it is not a specific mechanism. Rather, it is an inevitable and deliberate result of the design of the batteries' electric charge. All U.S. SD/SDA mines contain batteries that have been designed with a limited life span of 90 days. So as a back-up to the self-destruct feature of U.S. SD mines, 90 days after emplacement the mines' batteries are completely exhausted, rendering them incapable of detonation. This 90-day limit is well within the 120-day requirement specified by the CCW's Amended Mines Protocol. It is impossible that an activated U.S. SDA mine would not self-deactivate, since the battery will die.

The vast majority of US landmines already incorporate both SD and SDA. After 2010 all U.S. landmines will incorporate both features.

Ending use of non-detectable mines

It is possible to make a mine of wood, plastic, and other nonmetallic materials so that standard metal-sensing detectors cannot reliably detect it. Many mines around the world are so constructed.

Such mines pose special challenges for humanitarian mine clearance. While techniques do exist to find so-called minimum metal mines, these methods are difficult and costly. Humanitarian mine clearance is inherently time-consuming, expensive, and hazardous. It becomes much more so if the mines are essentially invisible to standard metal detectors.

The key point with respect to detectability is that the new policy represents a permanent commitment on the part of the U.S. to end the use of non-detectable landmines of all types within one year.

The CCW Amended Mines Protocol already prohibits use of non-detectable mines. A proposal to extend this to cover anti-vehicle mines is under discussion in CCW meetings, and has been endorsed by fifteen nations. The U.S. is working hard to gain worldwide acceptance of the existing CCW treaty and the new proposal.

What Practical Effect Would This Policy Have

Imagine that the United States were to emplace a minefield using only the SD/SDA technologies currently available today. Next, imagine that a short distance away another country emplaced a minefield using persistent mines that are compliant with the Ottawa Convention.

The U.S. minefield might include both anti-personnel and anti-vehicle landmines, but these mines would be designed, using SD/SDA technologies, to remove themselves from the battlefield after a given time. These mines would therefore be emplaced only as the opposing force was approaching or entering the area in question to ensure the limited duration minefield was effective while the enemy force was in the vicinity. The anti-personnel and anti-vehicle landmines within the field would begin to self-destruct in as little as four hours or within a current maximum of fifteen days after being emplaced. In the unlikely chance one failed to self-destruct, its battery would die within ninety days, rendering the device incapable of operating. At that time, without any further U.S. operator interaction with the field, the area would then have no landmines remaining that could kill or injure civilians.

The minefield emplaced by the other country would include only anti-vehicle mines. Although this field would not contain anti-personnel mines, the anti-vehicle mines could be fitted with anti-handling devices. These devices are designed to detonate the mine when it is moved, lifted or otherwise tampered with, making it harmful to individuals as well as vehicles. This minefield would not self-destruct and would remain in place until the mines eventually decayed over a period of decades. The clearing of this minefield would require the expenditure of significant manpower and resources. It would place those personnel involved in the clearing operations at significant risk.

Thirty years after both minefields were established, no one would have cause to remember that the U.S. SD/SDA minefield ever existed, yet the other minefield would be as dangerous and deadly as the day it was first put down (unless a concerted and costly effort had been made to clear the area).

Future Concepts

This policy recognizes that our future military will require new material solutions to accomplish the missions of tomorrow's conflicts; including new tactical barrier systems. These future tactical barriers may include a new generation of landmines or alternative systems, most likely incorporating improvements to our current SD/SDA technology to provide more flexibility and control of the devices once emplaced. Remotely controllable modes, to include command detonation of emplaced mines, will enable a deployed field of munitions to be eliminated at will by our forces without having to wait for pre-determined times to elapse. Further, the ability to "turn on" and "turn off" munitions within a field will allow safe recovery and in-field maintenance, and will improve the military utility of these systems. Other technological enhancements are possible, but those described above are the ones most likely to be included among improvements to current systems.

Humanitarian Mine Action

This policy calls for an increase of 50% to the U.S. Department of State's Humanitarian Mine Action funding. This highly successful program is but one component of the U.S. Government's already robust Humanitarian Mine Action Program. The Department of Defense, USAID and Centers for Disease Control and Prevention also work to alleviate the humanitarian harm caused by the indiscriminate and illicit use of landmines. The U.S. was one of the first countries to support humanitarian mine action efforts beginning in 1988 in Afghanistan. Since then, the U.S. has consistently been the world's strongest financial supporter of humanitarian mine action, providing almost $800 million dollars to 46 countries or territories. U.S. efforts include support for mine clearance operations, mine risk education, survivors assistance, research and development, training and a public-private partnership program. More information can be found at:

1. U.S. Department of State, Office of Weapons Removal and Abatement: **www.state.gov/t/pm/wra**.
2. U.S. Department of Defense Humanitarian Demining Training Center: **www.wood.army.mil/hdtc**.
3. U.S. Department of Defense Humanitarian Demining Research and Development Program: **www.humanitarian-demining.org**.
4. U.S. Agency for International Development Patrick J. Leahy War Victims Fund: **www.leahywarvictimsfund.org**.