MEMORANDUM FOR MR. HENRY A. KISSINGER
THE WHITE HOUSE

Subject: NSSM 112, US Post-Vietnam Policy on Use of Riot Control Agents and Herbicides in War

On January 7, 1971, NSSM 112 directed a study of US policy options with regard to the future use of riot control agents (RCAs) and chemical herbicides in war, including the position which the US would take concerning its understanding as to the 1925 Geneva Protocol under each policy option.

Shortly after the issuance of NSSM 112, the Chairman of the Senate Foreign Relations Committee requested the President to reconsider the Administration's position that the 1925 Geneva Protocol does not prohibit the first use in war of RCAs and herbicides, indicating that unless there were some change no further action would be taken by the SFRC at least until the Administration's announced study on the post-Vietnam military utility of RCAs and herbicides (NSSM 112) was completed and its results made available.

In response to your memorandum of June 28, the IPMG prepared and, on August 26, 1971, forwarded for the President's consideration its review of the Geneva Protocol situation and alternative responses with their advantages and disadvantages. Agency views were subsequently forwarded under separate cover.
Although this review was directed specifically at an examination of the US interpretation of the Geneva Protocol, the basic issue -- that is, whether or not at this time we wish to continue to preserve the option to initiate the use of RCAs and herbicides in war -- and the options, evaluations and judgments are substantially the same as in NSSM 112.

The Geneva Protocol study recognized the military utility of RCAs and herbicides in various types of military situations. However, the IPMG did not at that time have the benefit of DOD's more detailed analyses which were in preparation for the NSSM 112 study. DOD has now provided their analyses of the military utility of these agents which document more fully the types of uses based on experience in Southeast Asia and a projection of possible uses in the future. DOD's analyses substantiate the judgments on military utility as contained in the Protocol study. Although the Geneva Protocol study indicated possible political costs within Vietnam, the Saigon Embassy was unable to either confirm or deny any non-military effects of the use of these agents, stating that this question has not been the subject of any systematic study.

The DOD studies do not purport to reflect the views of other agencies but all agencies do concur with the statement of military utility as contained in the Geneva Protocol study and approved by the IPMG. Most important, all agencies agree that DOD's current analyses do not generate a need to modify the judgments and evaluations contained in the Protocol study.

DOD's continuing study of the military utility of herbicides in Vietnam is expected to be completed in December. The study on the ecological and physiological aspects of military herbicide use in Vietnam, conducted by the National Academy of Sciences, will not be completed before mid-1973. The National Academy plans to forward a preliminary report to DOD in January of 1972. All these
studies will be unclassified and will be presented to the Congress. It is expected that these studies will not lead to any changes in the judgments and evaluations contained in the Protocol study. Thus, the basis for making a decision on the RCA and herbicide issue will not be changed from the present. (DOD has requested that should the decision be to retain the option to initiate the use of RCAs and herbicides in war, a follow-on, longer-range study be undertaken concerning whether or not current restrictions on their use should be continued.)

The IPMG concludes that the Protocol study, along with the respective agency views, and the attached DOD studies (summaries enclosed), fulfill the requirements of NSSM 112.

Ronald I. Spiers, Chairman
NSC Interdepartmental Political-Military Group

Enclosures:
1. DOD Study on Military Utility of Herbicides
2. DOD Study on Riot Control Agents
3. Selected Examples of RCA Use in Southeast Asia
DOD STUDY ON MILITARY UTILITY OF HERBICIDES

Summary

The military utility of herbicides has been conclusively established. Use of herbicides exposed enemy supply, storage, training and staging sites. This deprivation of concealment facilitated defense of fixed US and allied installations, reduced the number and effectiveness of enemy ambushes, and generally made it more difficult for the enemy to accomplish his tactical mission. Use of herbicides has saved many US and allied lives.

1. A study of the military utility of herbicides in Southeast Asia is currently being conducted by the Engineer Strategic Studies Group (ESSG). Although the study will not be completed until December, 1971, ESSG has provided an interim report covering their field study conducted in Vietnam during June/July 1971. The study discusses the chronology of herbicide use in Vietnam, the controls imposed on its use, and the military utility of such use.

2. The preliminary study recognized the difficulty in defining an appropriate index for measuring military utility and limits itself to data reported and collected in the data files of the National Military Command System Support Center.

3. The study identified the following broad range of purposes served by the use of herbicides:

   a. Observe enemy activity, including movement of troops and supplies, storage and staging areas.

   b. Expose interdiction targets.
c. Expose enemy to close air support (by removing cover in areas where contact with enemy troops is likely).

d. Reduce enemy capability to ambush.

e. Mark targets (create readily visible reference points in otherwise uniform jungle terrain).

f. Canalizing enemy movement.

g. Route an enemy force from long-established base areas.

h. Controlling regrowth in Rome-plowed areas.

i. Clear fields of fire for defense of friendly installations.

j. Clear river banks to inhibit attacks on shipping and patrol boats.

k. Control vegetation in depot areas.

l. Clear areas around isolated inhabited areas.

4. Conclusions of DOD Study:

Use of herbicides facilitates movement to engage the enemy and enhances the effectiveness of direct fire weapons. Defensively, the security of a force or installation is aided by improving visibility around its perimeter.
DOD STUDY ON RIOT CONTROL AGENTS

Summary

The option to employ RCAs provides the United States an alternative of graduated application of force, permitting mission accomplishment while significantly limiting loss of life and property.

1. The utility of RCAs in the conflict in Southeast Asia has been thoroughly demonstrated. It has been clearly established that use of these agents in Vietnam made it possible to accomplish military missions with fewer US and allied casualties, military and civilian, than would otherwise have been incurred. RCAs proved to be of unique value in special circumstances where other types of conventional ordnance were ineffective. In neutralizing enemy fortified positions, for example, RCA munitions have proven to be far more humane than the alternative major expenditure of conventional munitions.

2. The Services were required to evaluate the utility of RCAs in furtherance of their missions in Southeast Asia. All Services noted that since the use of RCAs was not specifically documented, quantitative evaluation was difficult. Without exception, however, the Services stated that use of RCAs contributed to the accomplishment of their missions and in several individual cases it was stated that use of RCAs was decisive. (Selected examples in Enclosure 3.)

3. Most uses of RCAs can be categorized as follows:

   a. Use involving area denial to unprotected personnel.

      1. Denying use of section of trail or roadnet.
2. Denying use of base or firing area.

3. Denying subsequent enemy use of fortifications, tunnels, or caves (after initial clearing).

4. Denying use of potential ambush site.

5. Denying use of food cache or food growing area.

6. Disrupt repair of lines of communication.

b. Use for fire suppression or to cause confusion.

1. In defensive fires around fixed installation.

2. In counter-ambush or counter-sniper role.

3. To break contact with an enemy.

4. In timely counter-battery fire.

5. In extractions of individuals or small units.
   (a) Downed aircrew members in SAR operations.
   (b) Reconnaissance teams or long range patrols.
   (c) Casualties, (assistance in medical evacuation).

6. To suppress anti-aircraft fire.

7. To capture prisoners for intelligence purposes.

c. Use to reduce damage or casualties.

1. When noncombatants are intermixed in the area of operations.

2. In cities or built-up areas.

d. Use to increase effectiveness of US operations.

1. In conjunction with conventional weapons.

2. To replace combat units in blocking operations.

e. Use as a search weapon.

1. To detect concealed personnel.

2. To clear fortifications, tunnel complexes and caves.

3. To assist in the assault of a fortified position.

4. A DOD study projecting the Southeast Asia experience to other theatres of operation and intensities of conflict indicates that RCAs can have significant utility in many military situations. The situations investigated in the DOD study were these:

   (1) Combat in the Middle East against a sophisticated force in a warm environment.

   (2) Combat against a semi-sophisticated force in Korea in both cold and warm environments.
(3) Counterinsurgent operations in Latin America.

(4) Urban combat in Western Europe involving both cold and warm environments.

The conclusions of this study have been summarized in the following matrix showing the degree of utility (or disutility) of RCA use in each situation and in each geographic area.

Conclusions:

5. The Joint Chief of Staff, after analyzing the study of RCA use in Southeast Asia and the possibilities for use in other areas and in different levels of conflict, have concluded that:

(1) RCA use in Southeast Asia was effective and significantly augmented the US military capability.

(2) RCA use in Southeast Asia frequently prevented undue friendly casualties and provided an entrenched enemy the option of surrender.

(3) RCA use in Southeast Asia was often the decisive factor in the recovery of downed aircrews which were under enemy attack.

(4) In many situations, use of RCAs uniquely provides the commander with non-lethal options unavailable through any other weapon system.

(5) RCAs provide an excellent non-lethal alternative to reconnaissance by fire.

(6) RCA would be useful in many types of tactical situations in most of the land areas of the world.

(7) RCA use is most effective when employed with surprise against an unprotected enemy.
(8) RCA use provides an effective military option which permits the saving of noncombat, friendly, and enemy lives.
<table>
<thead>
<tr>
<th>MILITARY APPLICATION OF RCA</th>
<th>APPENDIX NUMBER</th>
<th>MIDDLE EAST</th>
<th>KOREA</th>
<th>LATIN AMERICA</th>
<th>WESTERN EUROPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restriction of Areas to Personnel</td>
<td>(2) Trail/Roadnet</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
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<tr>
<td>(2) Base/Firing Area</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>(3) Fortifications/Tunnels/Caves</td>
<td>C</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
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<tr>
<td>(4) Ambush Site</td>
<td>D</td>
<td>B to C</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>(2) Food Cache/Growing Area</td>
<td>E</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td>(6) Line of Communications Repair</td>
<td>F</td>
<td>B</td>
<td>A</td>
<td>B</td>
<td>B</td>
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<tr>
<td>Fire Suppression/Confusion</td>
<td>(2) Defensive - Fixed</td>
<td>G</td>
<td>A</td>
<td>A</td>
<td>B</td>
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<tr>
<td>(2) Counter-Ambush/Sniper</td>
<td>H</td>
<td>A</td>
<td>A</td>
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<tr>
<td>(3) Break Contact</td>
<td>I</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>(4) Counter-Battery Fire</td>
<td>J</td>
<td>B to C</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>(5) Extract Individuals/Units</td>
<td>K</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>B</td>
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<tr>
<td>(6) Suppress AA Fire</td>
<td>L</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>(7) Capture Prisoners</td>
<td>M</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>B</td>
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<td>(8) Prepare Landing Zones</td>
<td>N</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>B</td>
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<tr>
<td>Reduce Damage/Casualties</td>
<td>(1) Intermixed Noncombatants</td>
<td>O</td>
<td>B</td>
<td>A</td>
<td>A</td>
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<tr>
<td>(2) Cities/Built-up Areas</td>
<td>P</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>B</td>
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<tr>
<td>Increase Effectiveness of Cones</td>
<td>(2) With Other Conventional Weapons</td>
<td>Q</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<tr>
<td>(2) Replace Blocking Units</td>
<td>R</td>
<td>C</td>
<td>A to C</td>
<td>A</td>
<td>B</td>
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<tr>
<td>Search Weapon</td>
<td>(1) Detect Concealed Personnel</td>
<td>S</td>
<td>A</td>
<td>B</td>
<td>B</td>
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<tr>
<td>(2) Clear Fortifications/Tunnels/Caves</td>
<td>T</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
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<tr>
<td>(3) Assist Assault Fortified Pos.</td>
<td>U</td>
<td>B</td>
<td>A</td>
<td>B</td>
<td>B</td>
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*Keyed to paragraph 1.

**UTILITY CODES**

<table>
<thead>
<tr>
<th>CODE</th>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>EFFECTIVE</td>
<td>RCA use provides the commander a measured degree of force which would have a marked positive influence on the outcome of the particular military application. Often considerable lives would be saved by its use. Highly recommended.</td>
</tr>
<tr>
<td>B</td>
<td>USEFUL</td>
<td>RCA use provides the commander a measured degree of force which would have a positive influence on the outcome of the particular military application. Recommended.</td>
</tr>
<tr>
<td>C</td>
<td>INEFFECTIVE</td>
<td>RCA use has no significant influence on the outcome. No appreciable saving of lives would be expected. Not recommended.</td>
</tr>
<tr>
<td>D</td>
<td>COUNTERPRODUCTIVE</td>
<td>RCA use has negative influence in the particular military application. Not recommended.</td>
</tr>
</tbody>
</table>
SELECTED EXAMPLES OF RCA USE IN SOUTHEAST ASIA

a. "An NVA regiment resisted conventional assaults for two days resulting in heavy casualties to two companies in spite of air, artillery, and even B-52 attacks. Two helicopter loads of grenades effectively dislodged the enemy and his position was taken in two hours with only two casualties."

b. "Riot control agent CS was used extensively and effectively against an estimated 1000 troops in the vicinity of a survivor. Employment of CS was invaluable to the successful rescue."

c. "CS, combined with smoke, effectively screened an area concentrated with small arms and automatic weapons and allowed the helicopter rescue of two survivors without aircraft damage."

d. "Riot Control Agent in the form of CBU-19, combined with other ordnance, contributed to the successful rescue of a downed pilot in an extremely hostile environment. In such an area, employment of CBU-19 is an automatic requirement just prior to the rescue attempt. In addition to causing temporary incapacitation, the screening properties of CS, along with smoke, are considered very effective."

e. "One example of the use of RCA to clear tunnels and caves took place when 44 enemy who had been pursued in a lively fire fight for nearly a kilometer were finally driven into a cave. Ten CS grenades were thrown into the cave by a pursuing US platoon. All 44 enemy departed, with no firing. Only one VC was even wounded; he refused to follow directions. All VC weapons were captured. The entire platoon was therefore available for interrogation."
f. "A trooper related that he could recall vividly jumping off a helicopter which had put him down within 20 meters of an NVA soldier armed with an AK-47 but who fortunately had been completely incapacitated by CS."

g. "During a 17-day period, 13 helicopters received hits by enemy ground fire while flying over the Hobo Woods in III CTZ. Following each incident airstrike and artillery were placed on suspected enemy positions. The enemy was firing from well-concealed attacks were ineffective. In order to flush the enemy out of these positions, CS was employed. Subsequent flights over the same area during the next three weeks were made without a single incident of enemy ground-to-air fire."

h. "Helicopters had been receiving sporadic ground fire from a village. Leaflets were dropped over the village telling inhabitants to stop firing at aircraft or suffer the consequences. Fire continued from the village and new leaflets were dropped telling the people that they were warned and must be dealt with unless they left the village. Many villagers heeded the advice and left. Nonpersistent CS was then dropped on the village and followed by a ground sweep without a shot being fired. Since this employment, no ground fire has been received from this village."

i. "An armored cavalry troop securing an engineer platoon had been ambushed twice a day for two days in a row. The engineers were removing a Bailey bridge located about five kilometers from the NDP, reached by a single, restricted access route. E158R2 CS canisters were dropped immediately in front of the troops as they proceeded down the road. All ground personnel were masked and the column was driven through the dense agent cloud. Using this technique, not one round was fired at the column in the remaining three days of the operation."

j. "With the increasing frequency of indirect fire attacks, a means was sought whereby rapid counter-battery
fire could be delivered with minimum effect on noncombatants in the launch area. Within the capital military district, 105mm CS was employed in a counter rocket/mortar role as a method for rapid neutralization of actual or suspected rocket or mortar locations in short enough time to prevent a second volley of rockets or prolonged attacks by mortar. In one period, CS rounds were expended during 17 rocket attacks and not once in any of those attacks was a second volley of rockets fired. Agent CS thus allows rapid reaction to enemy initiatives when the launch site is in close proximity to friendly troops or in densely populated areas. It has precluded sustained attack by stand-off means and has made the introduction of standard 122mm or 107mm rocket launchers tactically unsound because of the inability to fire successive volleys and because the rapid response permitted by CS use increases the difficulty in evacuating the launcher before retaliatory measures are taken. Although obviously not quantifiable, CS use in this role saves innumerable civilian lives."

k. "In the period immediately after TET 1968 the Commanding General of an ARVN Unit, in an attempt to curtail the VC resupply effort, decreed that villagers in his area would not be allowed to transport large amounts of foodstuffs at any one time. He received US support in the form of gunship surveillance. Within a few days bicycle and scooter riders with large bags of rice slung across the backs of their bikes were observed. At first a few warning gunship rounds 'across the bow' succeeded in turning them around; but in very short order, the riders were back again, this time in addition to the rice they also carried women and children; knowing the Americans would not shoot to kill, they did not respond to the warning shots. However, one of the gunners had some CS grenades on board; he dropped them in front of bicycles, which when they reached the edge of the cloud, promptly turned around. Word of this new effective technique apparently was rapidly circulated since the traffic of the food transporters immediately declined."
1. "One unit had received heavy fire from a village and the ground commander requested artillery fire. The Division Commander was reluctant to use HE in attacking the village. The enemy was located within a small area in the village and accuracy and time were important. The decision was made to use CS mortar rounds while HE fires were authorized only as a last resort and only on small targets. The mortars were required to register outside the village with HE prior to shifting to the village with CS; four tubes delivered 80 rounds of CS on the village within two and one-half minutes, ground troops then swept the area encountering only minor resistance. The village was taken without casualties or major damage."

m. "Damage to property as well as civilian and military casualties during combat in urban areas can be reduced by the use of RCA. While not the sole means of achieving these goals, CS was employed effectively to drive enemy personnel from buildings and fortified positions. This has lessened the requirement to engage in sustained combat in urban areas. The use of CS from helicopters permits rapid clearance of villages. Because of the haste with which personnel leave the buildings, little time is available for hiding or caching weapons and munitions. Single munitions such as grenades can save lives in reconnoitering caves, tunnels and houses within a village. The number of casualties both to the attacking force and to noncombatants are greatly reduced. In one case, a company attempted to clear a village and in the course of the day sustained 12 casualties. When RCA was employed the village was swept within one hour with no casualties to either side."

n. "Many troops have used single CS grenades in reconnaissance of villages. One grenade very effectively assures that no personnel remain in a house. This has lessened friendly casualties and reduced the danger to noncombatants who are merely hiding. A similar technique has proved effective in tunnels and bunkers in heavily populated areas where civilians may be hiding."