2:12

the 1925 Geneva Protocol. The quoted General Assembly Resolutions show conclusively that the international community is not now taking any more permissive attitude than did that Protocol almost 50 years ago, when it did not allow any exclusions or exceptions from its absolute prohibition of "the military use of all asphyxiating, poisonous or other gases" as well as "of all analogous liquids, materials, or devices." It is true that defoliants and herbicides did not exist in 1925. But it is also true that they exist now and that the General Assembly was well aware of the efforts of the U.S. to justify their uses in Indochina. 9) The fact, therefore, that none of these Resolutions contain any exception or exclusion, or any hint that could in any way be interpreted as an acceptance of any exception or exclusion, is conclusive.

The U.S. Army Field Manual prohibits the herbicide and defoliation programs

The Hague Regulations IV of 1907 state: "It is especially forbidden ... to employ poison or poisoned weapons." (art. 23a).

The United States, as a Party to Hague Convention IV, is bound by this basic rule, and the 1956 Field Manual 27-10 of the U.S. Army acknowledges this. However, the Field Manual, without giving any explanation, comments:

"The foregoing rule ("especially" forbidding poison) does not prohibit ... to destroy, through chemical or bacterial agents harmless to man, crops intended solely for consumption by the armed forces (if that fact can be determined)."

The interpretation of international treaties by individual Governments in field manuals is of course not necessarily declaratory of international law, because if each Government could bindingly "interpret" the law as it sees fit, this would constitute the end of international rules. The above interpretation evidently contradicts not only the 1925 Geneva Protocol but also
the 1907 Hauge Regulations IV which prohibit poison and poisonous weapons unconditionally, absolutely and "especially". Yet, even this "interpretation" in the U.S. Field Manual would allow the use of chemical or bacteriological agents only if "harmless" to humans. It has been proved that the chemicals used by the USA in Indochina are harmful to human health, including pregnant women. The policy is also illegal under that "interpretation" because the "interpretation" only allows destruction of crops intended "solely" for the enemy armed forces. 10)

B. Devastation through bombing and shelling

"[T]he abhorrence of chemical and bacteriological weapons has, paradoxically, diverted attention from other methods of ecological devastation.

Two American authorities on the ecological effects of U.S. war actions in Indochina -- Professor Egbert W. Pfeiffer (University of Montana) and his colleague, Professor Arthur H Westing -- have recently drawn attention to "the effects of the tearing up of the land (of Indochina) by bombing and shelling." 11) Their conclusion is alluded to in the title of their analysis: the bombing and shelling has caused "The Cratering of Indochina" --- has transformed parts of the area into a "crater landscape."

The two scientists had become increasingly aware of these damages during their previous three tours of war zones of Indochina to study the environmental damage caused by herbicides. Therefore, in August 1971, they went again to Vietnam, on behalf of the Scientists' Institute for Public Information, to investigate "the physical alteration of the terrain by bombing". Their analysis of the "crater problem" is based on personal observations on the ground and from helicopter, on numerous interviews, and on publicly available statistical data of the U.S. Department of Defense.

These statistical data show that in seven years (1965 to 1971) "the U.S.
military forces exploded 26 billions pounds (13 million tons) of munitions in Indochina equivalent in "energy to 450 Hiroshima nuclear bombs", or to an average for the whole of Indochina of "142 pounds of explosive per acre of land, and of 584 pounds per person." Since "of the 26 billion pounds, 21 billion were exploded within South Vietnam", the overall average for South Vietnam was "497 pounds per acre and 1,215 pounds per person".

"Craters pock every area of South Vietnam: forests, swamps, fields, paddies, roadsides. Certain areas, notably the 'free fire', or 'specified strike' zones, show severe cratering. We observed large areas that had been subjected to intensive transformation of the landscape..." (p. 21). On the basis of careful calculations and (stated) assumptions, these experts estimate that the number of craters produced in Indochina by the bombardments from 1965 to 1971 totaled some 26 million, covering a total area of 423,000 acres and representing a total displacement of about 3.4 billion cubic yards of earth. The area of missile-fragment spread (the area which contains fragments of the dropped missiles) total 32.6 million acres, if we disregard overlap.

If "overlap" (that is, repeated bombings of the same areas) is not disregarded, the authors estimate that the 21 million craters produced in South Vietnam alone cover "about 345,000 acres" and that "millions of acres (in South Vietnam alone were) contaminated by missile fragments ... The total area of the country is 42.8 million acres" (p. 24).

In view of the evidence from previous wars cited by the authors (example: "even in France's Verdun area many of the World War I craters are still clearly visible and ... some ... to this day devoid of vegetation" (p. 24), "the effects will be long-lasting" in Indochina.

Among the effects discussed are:

"displacement and scattering of soil and subsoil" causing "harmful
physical consequences"; where "the soil is vulnerable to later-
ization (hardening to a bricklike state), the removal of vegetation
and humus may make the area in and around the craters permanently
barren... Furthermore, the deep craters have made many areas al-
most impassable for travel. Many craters... filled with water...
have probably become breeding grounds for mosquitoes, greatly
increasing the hazards of malaria and dengue fever..."

"The impact of cratering on agriculture has been substantial...
Farmers in South Vietnam, notably in the Mekong Delta, have been
reluctant or unable to attempt to reclaim rice paddies or other farm-
lands... "i.e., because of "unexploded munitions buried in the ground.
A number of farmers have been killed... Moreover, the ubiquitous
missile fragments in the ground cut the hooves of the water buffaloes...
causing infection and death of the animals. The unexploded bombs and
shell... number several hundred thousand. Bombing has also disrupted
rice-growing in Indochina by breaking up many of the intricate irriga-
tion systems, and in some areas near the seacoast it has opened the
land to encroachment by salt water."

"The timber industry in South Vietnam... has been particularly hard
hit by the bombing. It has catastrophically slashed the values of the
once prime timberland... The heavy shelling and bombing have damaged
the trees in three ways: outright destruction, riddling of the timber by
missile fragments, and subsequent weakening of the trees through
infection by wood-rotting fungi... Rubber trees are particularly
susceptible to the fungal rot initiated by missile fragment wounds...
A French official of a rubber plantation told us he had lost 80 percent
of his trees within two years after a bombardment..." (p.24-27).

The description, incidentally, shows the combination of damages caused
by different U.S. military techniques. For example, a mountain
forest near Da Nang showed "many craters... and severe accompanying erosion" but also "large areas... burned out, apparently by incendiary attacks with napalm, white phosphorus and flares." (p. 27).

C. Systematic bulldozing of the land (probably more destructive to the environment than are herbicides)

The analysis above draws attention to the fact, often overlooked, that in addition to the two methods of bombardment and defoliation, "the U.S. military in its struggle with vegetation in Indochina" has since the mid-1960's developed a third method of devastation, namely, "a vast program of systematic forest bulldozing. The employment of massed tractors organized into companies for extensive forest clearing had apparently replaced the use of herbicides to deny forest cover and sanctuary to the other side. The effectiveness of the tractors, called Rome plows, is in some ways clearly superior to that of chemicals and is probably more destructive to the environment." (The machine is basically a 20-ton Caterpillar tractor fitted with a massive 11-foot wide, 2,5 ton plow blade and with 14 tons of armor plate." -- photo caption. 2. 27). The caption under a photograph of a Rome plow at work states: "According to information released by the (U.S.) Army, at least three-quarters of a million acres were cleared in this manner though mid-1971, and this total is being added to at the rate of about 1,000 acres per day." (p. 27)

In conclusion, the authors report the finding of "a study by U.S. agents that about 10 percent of the agricultural land of South Vietnam had to be abandoned because of the destruction wrought by bombardment and other weapons used in this war. It has been a war against the land..."

The authors consider it as one of the main U.S. strategies "to disrupt and destroy the social and economic fabric of rural, agricultural Vietnam in order to drive the peasant population into areas under central control
and to deprive the guerilla enemy of a power base." In support of this thesis, they add:

"Only about 5 to 8 percent of the U.S. bombing missions in Indochina have been directed at tactical military targets, that is, direct support of troops. The rest of the bombing missions are describes as ... strategic bombing missions... in the Indochina war the strategic targets are the lands and forests of Indochina... is doubtful that many of the forests and lands of Indochina can be rehabilitated in the foreseeable future." (p. 28)

"...Our brief survey has only suggested some of the grim consequences for the present and future life of the inhabitants... Still to be assessed are the effects of the persisting bombing on the people's habitation, on the animal life and general ecology of the region. The damage caused by the large-scale disorganization of the environment may be felt for centuries." (p. 29)

"Meanwhile the steady bombardment and shattering of the land... goes on with no end in sight." (p. 29)

Is the devastation implied by the term "ecocide" forbidden by the law of war?

Efforts to justify these military policies usually center around the assertion that a war largely fought by guerilla opponents somehow "requires" admittedly "unorthodox" military policies.

In fact, the U.S. has fought an "unorthodox" total war in Indochina for many years. Unorthodox war methods become illegal if they violate the international rules. The limit of permissible war action is not the available technology but, precisely, the applicable rules. The essence of the international law of war is that it is not unilaterally alterable or suspendable by any nation or decision taker of any one nation.
The claim of the uniqueness or novelty of guerilla war in Indochina is factually incorrect. Guerilla techniques were discussed at length at the Hauge Conferences of 1899 and 1907, and the resulting Hauge Convention IV deals with "the laws, rights and duties of war" of "militia and volunteer corps" in the very first article of its Regulations; while its Article 2 (still before dealing with any of the many other topics of war) solemnly reconfirms the historic right of "inhabitants...who on approach of the enemy, spontaneously take up arms to resist the invading troops..."(levée en masse).

Guerilla warfare was a major aspect of World War II. The guerillas, (known as partisans, underground forces, maquis, etc,) created formidable military problems for the nazis (who called them "bandits"); and at the 4-Power and U.S. Nuremberg trials, as well as at numerous other war crimes trials conducted by many nations, atrocities committed against them were condemned and punished. Furthermore, the Geneva Conventions of 1949, adopted in order to prevent repetition of the horrors of World War II, actually increased the legal protection of civilians, tightened the prohibition of wanton destruction and devastation, and distinctly strengthened the legal protection of "irregular combatants" and the population in civil war situations.

It must also be repeated that the law of war never permits either side to violate the rules on the grounds that without such violations, it could not win, or would lose, the war. The Nuremberg Judgment are adamant on this central point.

It is inherent in the concept of war, as an open-ended contest, that the final outcome is uncertain, while the contest continues: hence, until a war is formally ended, the eventual fate of the contested areas must not be pre-empted by measures of the occupant that cannot afterward be
changed. This basic principle of the law of war flows from the very concept of war as a prelude for the eventual decision (normally through a peace treaty). Even if a war lasts for many years, the occupation of territories must always be considered as temporary. Especially significant is the rule that

"The occupying State shall be regarded only as administrator and usufructuary of public buildings, real estate, forests and agricultural estates (exploitations agricoles) belonging to the enemy State... It must safeguard the capital of these properties, and administer them in accordance with the rules of usufruct." (Art 55, Hauge Regulations IV).

Obviously this forbids the systematic destruction by bulldozers or any other wilful damage to public forests and agricultural lands.

Indiscriminate devastation is forbidden also in non-occupied enemy territory. The Hague Regulations IV declare: "It is especially forbidden... to destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war." (art. 23, para. g, incorporated as para. 58 into U.S. Army Field Manual FM 27-10 of 1956.) The fact that the destruction and seizure of enemy property is among the measures which are listed as "especially forbidden" (like, i.e., "to employ poison or poisoned weapons", or "to declare that no quarter will be given", or "to employ arms, projectiles, or material calculated to cause unnecessary suffering") shows that this provision must be strictly interpreted; this is underscored by the fact that exceptions are permitted only if "imperatively" demanded by the necessities of war.

The U.S. Army Field Manual 27-10 puts this provision under its section "Treatment of property during combat", and comments:

"The measure of permissible devastation is found in the strict necess-


Ities of war. Devastation as an end in itself or as a separate measure of war is not sanctioned by the law of war. There must be some reasonably close connection between the destruction or property and the overcoming of the enemy's army."

For example, "real estate may be used for marches, camp sites, construction of field fortifications, etc.". Even if the further comment that "Fences, woods, crops, buildings, etc. may be demolished, cut down, and removed to clear a field of fire, to clear the ground for landing fields, or to furnish buildings materials or fuel if imperatively needed for the army" is considered compatible with the very restrictive art. 23g Hague Regulations IV quoted above, the vast systematic devastations of the Indochina countryside would not be allowed even by those permissive comments.

If and when combatants or civilians of the opposing side violate the laws and customs of war toward the USA, the USA has the right to responses permitted by these rules -- just as the opponents of the USA have the right to make responses permitted by those rules, to violations of the laws and customs of war, by U.S. combatants or civilians. However, the USA is not entitled by those rules to use the techniques of ecocidal destruction and devastation.

Since measures of ecocidal devastation are sometimes being "justified" as "punishment", or warnings ("intimidation"), or "reprisals", the following two provisions of the Geneva Convention IV of 1949 must also be cited:

"Art. 33 (para. 1) ... Collective penalties and likewise all measures of intimidation or of terrorism are prohibited". And "Art. 33 (para. 3): Reprisals against protected persons and their property are prohibited."

The Commentary of the International Committee of the Red Cross explains that Art. 33 (para. 1) prohibits "to inflict penalties of any kind... on persons or entire groups of persons in defiance of the most elementary principles.
of humanity for acts that these persons have not committed"; and explains Art. 33 (para. 3):

"the prohibition of reprisals is a safeguard for all protected (civilian) persons, whether in the territory of a Party to the conflict, or in occupied territory. It is absolute and mandatory in character and thus cannot be interpreted as containing tacit reservations with regard to military necessity. The solemn and unconditional character of (this prohibition) must be emphasized." 13

Ecocidal destruction and devastation constitute extremely grave, indeed unprecedented violations of the basic rules of war. The U.S. Army Field Manual 27-10 correctly states:

"498. Crimes under International Law. Any person, whether a member of the armed forces or a civilian, who commits an act which constitutes a crime under international law is responsible therefore and liable to punishment. Such offenses in connection with war comprise;

a. Crimes against peace.
b. Crimes against humanity.
c. War crimes.

......"

Art. 499 explains: "...Every violation of the law of war is a war crime."

The Geneva Conventions of 1949 subdivided war crimes into a) (lesser) "breaches" and b) the most serious or "grave breaches". "Grave breaches" include

"any of the following acts, if committed against persons or property protected by the present Convention: wilful killing...wilfully causing great suffering or serious injury to body or health...unlawful deportation or transfer or unlawful confinement of a protected person...and extensive destruction...of property not justified by military necessity and carried out with wanton cruelty."
These Conventions also contain detailed provisions concerning "effective penal sanctions for persons committing, or ordering to be committed, any of the grave breaches..." 14)

A people's environment or ecological balance constitutes a highly delicate and complex network of interrelationships, combining the workings of nature and the work of that people. It is a basic and precious part of that people's existence and identity, of its physical but also its spiritual heritage, its cultural patrimony, and its economic assets. The law of war is by no means insensitive to the preservation of all those values. Many of its basic obligations and prohibitions have been dictated by such considerations long before the current world attention has concentrated on the preservation of the ecology.
FOOTNOTES


2) The Genocide Convention 1948 does contain some specific new provisions regarding the punishment, extradition, etc. of persons suspect of having committed genocide during war. It also extends its provisions to genocide committed in peacetime. These matters are not germane to the present paper.


However, Dr. E. W. Pfeiffer, Professor of Zoology, University of Montana -- who in 1969 went to Indochina together with Dr. Gordon H. Orians, professor of Zoology, University of Washington and Chairman, Western Division of the Ecological Society of America, in order to assess the results of the defoliation and crop destruction programs -- informed Mr. McCarthy that he received from chemical operations officers in Saigon the following figures for 1968:

"1,297,244 acres were sprayed with defoliants, and 87,064 acres of crops were destroyed (by chemicals)." These figures are by 30,134 acres and 23,338 acres higher than those reported by the U.S. Air Force to Mr McCarthy for defoliation and crop destruction, respectively, during 1968.

Professor Pfeiffer summarized to Mr McCarthy the impressions he and Professor Orian gained during their inspection tour in March 1969, as follows:

"It is estimated that over 20% of the total forested area of (South) Vietnam has been defoliated at least once. We were informed by American forestry advisors that two applications of spray on a mature hardwood forest in Vietnam kills approximately 50% of the commercially valuable timber. Due to the destruction of the forest canopy, the ecology of these areas is changing such that the forests are now being invaded by grasses and bamboo which are resistant to the defoliants. This may arrest the normal forest succession by preventing re-establishment of tree seedlings for a long time. It will take many decades before a mature forest regrows and in the mangrove areas of the Rung Sat peninsula, there is almost total kill due to defoliation. The destruction of these trees has had a profound effect upon the animal life in the area. We established that bird life has been very severely reduced and we suspect that the effects on invertebrates such as crustacea and mollusks may be very severe."
"Vietnamese experts were concerned about the effects of defoliants on the fresh water fish industry and their concern is supported by studies in England showing that 2, 4-D is toxic to fishes (even) at rates used commercially."

"The rubber industry has been severely affected by accidental drifting of defoliants... Much of the decrease in rubber production (rubber export from South Vietnam having fallen from $48 million in 1960 to $12 million in 1967) can be attributed to accidental defoliation, which results from drifts off targets of the highly volatile Agent Orange. We learned that this has (also) damaged fruit and crops in and around Saigon..."

"... In talks with Vietnamese biologists we learned that the defoliation program is of grave concern to many Vietnamese who understand neither the nature or the chemicals nor the effects..." (Prof. Pfeiffer's letter of 27 May 1969, to Mr McCarthy, M.C. is reproduced in McCarthy, l.c., p. 95-97)


6) As has often been pointed out, the use of poison in war was already prohibited by the St. Petersburg Manifesto of 1868, so that the Hague Regulations IV of 1899 and 1907 merely reconfirmed this when they start the list of measures which are "especially forbidden" by the laws and customs of land warfare: "a. To employ poison or poisoned weapons." (Art. 23 a). See, on this point, for example, Pham Van Bach, in: Nguyen Khac Vien, ed., Chemical Warfare (Vietnamese Studies, No. 29, 1971, Hanoi, p. 27/28).

7) namely, that "chemical and biological methods of warfare have always been viewed with horror and been justly condemned by the international community"; that these methods are "inherently reprehensible"; that successive international instruments have prohibited them; "that the majority of States then (namely, in 1925) in existence, adhered to the Protocol..."; "that since then further States have become Parties to it and "yet other States have declared that they will abide by its principles and objectives"; and "that these principles and objectives have commanded broad respect in the practice of States." (preamble, Res. 2603 (XXIV) of 16 Dec. 1969. -- The Resolution was adopted by a vote of 91 to none, with 4 abstentions.)

8) The general condemnation of chemical and bacteriological warfare is also expressed in General Assembly Res. 2707 (XXV) of 14 Dec. 1970, which "calls upon the Government of Portugal not to use chemical and biological methods of warfare against the peoples of Angola, Mozambique and Guinea (Bissau) contrary to the generally recognized rules of international law embodied in the Geneva Protocol of 17 Juni 1925 and to General Assembly Resolution 2603 (XXIV) of 16 Dec. 1969". (The Resolution of 14 Dec. 1970 was adopted by a vote of 94 to 6, with 16 abstentions; those voting against: Brazil, Portugal, South Africa, Spain, United Kingdom, United States).

9) The fact that some carefully selected herbicides are used, with many precautions, for weed control within the home country of a belligerent cannot legalize their use, in vast quantities, without those precautions, and for the very purpose of destroying crops or foliage, and not weed, by the armed forces of that belligerent in another country. As a spokesman of
the Scientists' Committee on Chemical and Biological Warfare, of the American Association for the Advancement of Science, expressed it: CS-gas, an anti-riot gas not lethal in itself has been applied in Indochina in a manner "lethal in effect", namely, in the words of the magazine ARMY of Oct, 1969, p. 152, for "flushing the enemy out of bunkers preceding high-explosive fire or infantry assaults." It "is also employed in underground and other confined spaces where it acts as lethal asphyxiating agent." The witness also stated, regarding the quantity of this "non-lethal" gas used in the war: "The use of CS gas in Vietnam has accelerated at an alarming rate. According to figures published in the Congressional Record (H4775) on June 12 (1969) the amount of this antipersonnel gas requisitioned for Vietnam has increased from 367,000 pounds in 1964 to 6,063,000 pounds in 1969."

The scientist further testified that if the U.S. Senate would have ratified the 1925 Protocol as interpreted by President Nixon in submitting it to the Senate in 1969 (the ratification did not take place!)

"apparently the ban on the use of biological agents (would still) not apply to organisms which destroy crops. It is a fine and essentially meaningless distinction to prohibit the military application of human pathogenic organisms without, at the same time, banning the use of agents which destroy those food sources essential for human survival."


10) The clause, "if the fact can be determined" evidently means that, if it is not certain that crops are solely intendent for the enemy's armed forces, the chemical or bacterial destruction of the crops is not permitted in the view of the Field Manual. If, on the contrary, the clause implies to permit such destruction whenever the intended use of the crops (for the enemy forces, or civilians, etc.) cannot be determined, this would flagrantly violate the prohibition by the Hague Regulations IV and Geneva Convention IV of 1949 of wanton destruction of property. Anyway, as stated above, the Field Manual's "permission" to destroy crops by chemical or bacterial agents also violates the Geneva Protocol of 1925 which has become universally binding, customary law, and violates in part the prohibition of the use of poison, by the Hague Regulations IV.


12) At the end, the authors quote a statement by U.S. Senator Gaylord Nelson:

"...never before has a land been so massively altered and mutilated that vast areas can never by used again or even inhabited by man or animal...Our program of defoliation, carpet bombing with B52's and bulldozing...did not protect our soldiers or defeat the enemy...South Vietnam, faces the worst of all possible worlds, with much of her land destroyed and her chances of independent survival after we leave in grave doubt at best." (p. 29)

To quote one other U.S. Senator critical of these policies:

"Our country must learn from its experiences in Indochina a lesson
regarding the use and deployment of American military power. The time is long overdue for our Nation, at the highest levels of government, to re-evaluate the policies and attitudes which have contributed so heavily to the massive flow of refugees, the occurrence of civilian casualties, and the inexcusably low priority attached to the care and protection of civilians in combat zones... the forced relocation of civilians, aerial bombardments, free fire zones, and similar practices have had a devastating impact on the civilian population of Vietnam, Laos and Cambodia."


14) These identical provisions are contained at the end of Convention IV (on the Protection of Civilians, articles 146 and 147) and also at the end of Conventions I, II and III; and are incorporated into articles 505 and 506 of the U.S. Army Field Manual FM-27-10 of 1956. The Manual also states, in its article 511: "The fact that domestic law does not impose a penalty for an act which constitutes a crime under international law does not relieve the person who committed the act from responsibility under international law."
U.S. POLICY CONCERNING CBW AND MODERN METHODS OF WARFARE

by

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Submission to the International
Commission of Enquiry into
U.S. Crimes in Indochina

A United Nations Conference on the Human Environment which does not seek to eliminate the manufacture and use of modern weapons of warfare is a conscious fraud. The conspicuous absence of this subject, which is the single issue crucial for the welfare and survival of the human race, from the agenda of this Conference is of course rational from the point of view of the imperialist nations of the world, of which the U.S. is the prime example.

With only 6% of the world population, the U.S. controls about half of the wealth and natural resources of planet Earth. For instance, the U.S. uses approximately 90 different minerals and metals, about half of which are to some extent imported. The U.S. is totally deficient in such key minerals as thorium, titanium, asbestos, industrial diamonds, sheet mica, quartz crystal and strontium. The first annual report under the 1970
Mining and Minerals Policy Act states:

"We have to make up our deficits in metals by imports, and they are growing larger each year... The shortage pose a real national security problem for us."(1)

The vast network of U.S. military bases stretched around the globe serves as a world police force to oversee the orderly looting of raw materials and, indeed, all of the other commercial activities of the international corporations. Since the U.S. government is merely the agent of these giant corporations it is understandable, if deplorable, that it will seek every means to underplay and disguise its programs in weapons developments.

At this point in time the U.S. government is concerned primarily with the perfection of weapons specifically designed to combat guerrilla operations and wars of national liberation (2). Some of these weapons - herbicides, tear gas, napalm, Rome plows, etc - have reached a high level of perfection in the Indochina war. The present policies of the U.S. in the area of CBW and related exotic weapons can be summarized as follows:

A distinction between chemical vs biological agents, a public renunciation of the latter and a campaign to sign treaties banning such agents.

A public relations campaign designed to show that biological agents are being discarded.
A stubborn refusal to extend the 1925 Geneva Protocol to herbicides and tear gas, and a general reluctance to give up chemical weapons.

A decentralization and dispersal of existing CBW facilities, the objective of which is to decrease the public visibility of such activities,

On April 10, 1972 the U.S. and 73 other nations signed a treaty which would outlaw and destroy stocks of biological weapons (3). Originally, the U.S.S.R. had objected to separation of the biological from the chemical agents, these two agents having been associated throughout most of the history of arms limitation laws. The promotion of a separate treaty on biological agents appears to have been a special project of the U.S. and the U.S.S.R. ultimately relented in order to get the talks moving at the Geneva Disarmament Conference in 1971; indeed, the former nation had already announced a batch-wise elimination of its biological arsenal.

The American public has been assaulted with a barrage of press releases announcing the destruction of germ warfare agents stored at different sites throughout the country. Thus Defense Secretary Melvin R. Laird stated at the end of March, 1972, that the agents at Pine Bluff Arsenal, Ark., and at Beale Air Force Base, Calif. had already been destroyed and that the disposal operations at Ft. Detrick, Md., and at the Rocky Mountain Arsenal, Colo. would be completed this summer (4). At the same time Laird told newsmen
that the Pine Bluff facility would be turned over to the Food & Drug Administration for use as a toxicological research center. Earlier, President Nixon had signaled the intention to convert Ft. Detrick, the epitome of CBW research and development, to a cancer research laboratory (5).

These activities of the American government vis-a-vis policies relating to biological weapons can be recognized as a thinly disguised exercise in public relations. No scientists known to be concerned in these affairs were invited to witness the destruction of the agents. Such material has a limited "shelf life" and since "defensive research" will continue it is safe to assume that the agents can be quickly grown up from the inoculum almost overnight. Furthermore, the two big, notoriously dirty laboratories at Pine Bluff and Ft. Detrick are being converted to activities which are, in the public mind, socially beneficial.

Defense Marketing Survey, a journal concerned with the budget and procurement policies of the Department of Defense, is reported as quoting in its April, 1971, edition:

"Despite public announcements to the contrary, the military agencies are not discontinuing chemical and biological warfare research. Work in each of these areas is continuing at funding levels equal to or exceeding those prior to the 'public relations' announcements of cessation of these efforts. CBR is merely being conducted in a different environment and, wherever possible, with less public attention. The field is difficult to crack, but there are opportunities for the chemically competent technical organization, either in the industrial or academic communities." (6)
Regarding the 1925 Geneva Protocol on Chemical and Biological Warfare, the U.S. stands virtually alone in failing to ratify this important instrument. In November, 1969, President Nixon announced with fanfare that the Protocol would be submitted to the Senate for advice and consent to ratification. A few weeks later the U.N., by a vote of 80 to 3, adopted a resolution which extended unambiguously the Protocol to herbicides and tear gas; only the U.S., Portugal and Australia took the contrary position. This vote had the effect of stalling the Protocol in the White House until August 19, 1970, the date on which Nixon actually sent the measure to the Foreign Relations Committee (7). At that time Secretary of State William P. Rogers opined, in appended report, that it was the U.S. "understanding" that tear gas and herbicides are not covered by the Protocol. Senator Fulbright, Chairman of the Senate Foreign Relations Committee, held hearings in early 1971 and subsequently announced that the Protocol would not be reported out to the full Senate until the status of herbicides and tear gas could be clarified. In Indochina, the unrestrained use of defoliants and tear gas has caused environmental havoc and has resulted in the death of a number of civilians (8).

The U.S.S.R. has submitted a draft convention to the Geneva Disarmament Conference which would scrap all chemical weapons, but the U.S. prefers a phased approach, concentrating initially on lethal agents (9). The U.S. has similarly rejected a proposal by the International Committee of the Red Cross that napalm, which has a substantial chemical mode of action, be outlawed as a weapon in situations where civilians may be involved (10). Thus the U.S. remains intent upon developing and holding chemical agents.
The Western Medical Institute of Research (WMIR) may be cited as an illustration of the new phase in CBW research and development. Proclaimed as the "Walter Reed of the West", this $28 million facility will be located at the Presido in San Francisco and it will be operated by the U.S. Army. The laboratory is patterned, at least in some respects, after the CBW installation at Ft. Detrick, Md. It will specialize in tropical diseases, especially fungal infections. There is a large oriental population in San Francisco and this, plus the fact that the Army hopes to solicit the cooperation of the scientific community in the area, forms the rationale for locating the WMIR in San Francisco. Race-specific fungal diseases, many of which do not respond well to presently known methods of medication, will probably constitute the main interest of the WMIR. Obviously, this is the type of information which is useful for development of those ethnic weapons (11) which will selectively eliminate indigenous persons and afford maximum protection to foreign, imperialist armies. The Army is quite frank in stating that its main motivation in building the WMIR is for the protection of U.S. troops who may be stationed abroad (12).

In testimony before Congress in June, 1969, a spokesman for the Pentagon claimed that no research was being conducted on the "doomsday bug" (13). The latter is an infectious agent which cannot be "controlled by either medical techniques or natural immunity. It could be of different types, such as a synthetic virus (for which no immunity can exist) or it could be an organism with a surface suitably altered so as to prevent generation of antibodies. The production of these varieties of the doomsday bug can be achieved through the use of modern methods of molecular biology and it would be surprising indeed if
several nations were not already experimenting in the field. The U.N. should definitely concern itself with this problem.

The U.S. military has also been experimenting with weather modification. Studies in this area in the past decade at the University of California at Berkeley have been funded by the Army and the Navy (14). Senator Claiborne Pell earlier this year introduced a resolution calling for an international treaty to ban the use of weather control as a weapon of war. He said developments in the field of weather modification:

"indicate the extent and proficiency of the military's ability to modify the environment."

The Department of Defense refused to answer his question on the subject, citing national security as grounds for their silence (15).

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AIR WAR: THE THIRD INDOCHINA WAR

by

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Air War Overview

The Nixon Administration remains fully committed to a 20 year old goal of American leaders: keeping friendly regimes in power in Indochina. It is for this reason that the Administration has invaded Cambodia and southern Laos; that it has doubled the bombing and introduced 10,000 new Thai soldiers into Laos; renewed the bombing of North Vietnam; dropped over 3,000,000 tons of bombs on Indochina and killed, wounded or made homeless over 3,000,000 civilians alone. And it is for this reason that Richard Nixon’s newest negotiating stance still insists that he will have a say in determining who will rule in Indochina, the very reason the war has been fought for over two decades.

But though the goals have not changed, tactics have. For a variety of reasons, the Nixon Administration has found that it cannot rely on ground armies to maintain a hold in Indochina, as did its predecessors during the first (1946-54) and second (1961-68) Indochina wars. The American ground expeditionary forces has proved too costly, causing inflation and vast expenditures in rather low level technology; American soldiers, to their credit, have proven increasingly unwilling to fight; high U.S. casualties and draft calls have provoked widespread domestic dissent. And Asian ground troops, supported by any number of U.S. foot-soldiers and/or advisors, have never been able to stand up to their guerrilla adversaries.
1. Automated War

American machines are doing most of the killing and destruction in Indochina today; electronic devices, photo reconnaissance aircraft, and light spotter planes locate targets; highly sophisticated aircraft drop ordnance and destroy them.

Substantial bombing has, of course, been carried out before: during World War II, the Korean war, the second Indochina war. But in the past such bombing has always been meant to support a large expeditionary ground force which did the bulk of the fighting and dying. Between 1965 and 1968, for example, most of the bombing was seen as strategic (in North Vietnam), interdiction (as in southern Laos and much of South Vietnam) and tactical (as in South Vietnam), all to support the half a million strong American ground force by weakening the guerrilla base and supply lines.

What is now today is that U.S.-supported ground forces are now meant to supplement the bombers which do most of the fighting. U.S.-funded Asian footsoldiers have never been able to stand up to their guerrilla adversaries. As a result, the United States uses Asians today to: (1) "show the flag", by going in after bombing has caused guerrilla retreat to take out supplies and refugees; (2) provide static defense for the major towns and bases; (3) serve as "live bait" to draw enemy fire so American pilots will have some idea where to bomb.

2. Total War

The air war, by its very nature, is destroying everything below: homes, schools, gardens, pagodas, ricefields, fruit orchards, livestock and, of course, any people caught in the open.

When American leaders chose to massively bomb in the poor, rural lands of Indochina, they inevitably undertook war against the society as a whole. The only strictly "military" targets regularly locatable from the air were roads and bridges, with the exception of a few North Vietnamese factories destroyed early in 1965. Other "military" targets, such as soldiers, trucks, arms depots, or anti-aircraft batteries, are but sporadically found or assumed to be intermixed with the civilian population. The airforce is not
prepared just to bomb the routes, trails, and bridges of Indochina, which are easily repaired or bypassed. At the same time, they have introduced hundreds of aircraft into the skies of Indochina, established rules that while out there aircraft must be used as often as possible, cannot return to base without dropping their bombs. As a result, pilots inevitably wind up systematically destroying the civilian and social infrastructure.

One of the most striking examples of this total war from the air is the Plain of Jars, in northeastern Laos. The Plain of Jars was a thriving, vibrant community of 50,000 when the Pathet Lao guerrilla movement occupied it in May, 1964. The United States then began bombing it, striking in ever-increasing intensity until September, 1969, when U.S.-supported Meo guerrillas took the survivors off the Plain. During these years, everything on the Plain was leveled. Today it is deserted wasteland. There was almost no ground fighting on the Plain during these 5 1/2 years. It is one of the first societies in history to be erased from the map by total, automated war.

3. Secret War

The Nixon Administration has been able to both wage a full-scale air war and convince many Americans that it is attempting to end the war primarily by practicing the most blatant management of news in the history of the Republic.

On the one hand, it has prohibited the press from observing most of the air war first-hand. Before 1969, 70% of the tonnage fell within South Vietnam, most of the bombing was carried out from South Vietnamese airbases. Since 1969, 2/3 of the tonnage has fallen outside South Vietnam, mostly from Thai airbases. The Nixon Administration has refused to allow newsmen to go out on bombing raids outside of South Vietnam. Newsmen are kept off Thai airbases. This has not been done for reasons of military security. Newsmen were always permitted to go out on bombing raids, have free access to bases in South Vietnam, when American lives would have been even more endangered by journalistic indiscretion. It is done solely to keep the fighting secret from the American people.

In addition, the Nixon Administration has refused to fly newsmen to the
scenes of battle in Laos and Cambodia, where most of the fighting has taken place. Newsmen are only infrequently taken in on short, packaged tours, invariably kept away from freshly-bombed areas. Thus newsmen have usually been unable to observe newly bombed-out areas taken by friendly troops. Once again, this was not the policy in South Vietnam, where first-hand reports of aerial devastation did much to create sentiment against the war in this country.

On the other hand, Administration officials have successfully created the deceptive image of a sterile, antiseptic air war waged only against "military" targets. They have done this by: (1) classifying all information about the air war besides overall tonnage and airmen figures out of public and congressional reach; (2) coining such Orwellian Newspeak phrases as "protective reaction" and "limited duration protective reaction" strikes to mask massive and sustained bombing raids; (3) maintaining time and again, in press conference, speech, or congressional appearance, that civilian targets are never bombed.

Although many of the real facts about the bombing have filtered out to a small segment of the public, the Administration news management of the air war has proved largely successful. The devastation has been taken off the front pages and TV screens. Most Americans believe Nixon is attempting to end the war. Domestic dissent has been muffled.

4. Civilian Casualties

At this very moment, unseen peasants halfway across the globe are being burned alive by napalm, riddled by anti-personnel bombs, buried alive by high explosives, and cut to pieces by fragmentation bombs. Most of these bombing casualties are civilians.

The air war causes high civilian casualties. The heavy civilian toll taken by the bombing in the past has been well-documented (see below). Although there is no way of knowing actual numbers of killed and wounded at the present moment, we may assume that they are still quite high. There are still hundreds of thousands of civilians living in areas under bombardment, and still 50,000 tons of bombs falling monthly. The drop in monthly bombing tonnages which have taken place under Nixon do not necessari-