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HYGIENE, ADVISORY BOARD
FEB. - SEPT. 1944

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB-COMMISSION
Malaria Control Branch
APO 394

MEMORANDUM ON MALARIA AND ITS CONTROL
IN LIBERATED ITALY, 1 JANUARY - 30 SEPTEMBER, 1944.

PAUL F. RUSSELL, COLONEL M.C.
MALARIOLOGIST, A.C.C.

25 Sept 44
1 October 1944
27 SEP Recd

1. INTRODUCTION:

Official data on malaria incidence and control in Italy during 1944 will not be available for many months and accurate civil statistics probably never can be compiled because of the disruption of war. But it seems logical to gather together in this interim report some of the facts and figures which are at hand, with notes on historical background and epidemiology.

2. HISTORICAL NOTES:

For centuries malaria has thrived on the chaos inherent in war. Masters of master races, co-prosperity spheres, or the four freedoms, making no distinction between despoiler and liberator or between soldier and civilian, malaria parasites, allied with Anopheles mosquitoes, have carried on an aerial invasive warfare which in the present world conflict has immobilized thousands of soldiers and has greatly heightened the incidence of fever among civilians in many countries.

Of all the theaters of war none has been so intimately or for so many centuries concerned in the written history of malaria as the Italian. For example, Cicero referred to "the old fever temple on the palatines where the cult of the fever goddess had long existed. Virgil noted that settlement of land around Rome was prevented by "the summer fever". In the same areas this fever seriously disrupted Caesar's campaigns in the Roman Civil Wars. Again, when the Gauls were besieging Rome, malaria so plagued their forces that they retreated in disorder. In the XIIIth Century this disease is said to have disorganized the army of Frederick Barbarossa, who was attempting to capture Rome. His defeat was commemorated by Geoffrey of Viterbo who wrote:

"those from whom Rome was unable to defend herself,
were dispersed by the air,
at whose breath the German youth fell".

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Official data on malaria incidence and control in Italy during 1944 will not be available for many months and accurate civil statistics probably never can be compiled because of the disruption of war. But it seems logical to gather together in this interim report some of the facts and figures which are at hand, with notes on historical background and epidemiology.

2. HISTORICAL NOTES:

For centuries malaria has thrived on the chaos inherent in war. Unaware of malarial fevers, of prosperity spheres, or the four freedoms, making no distinction between despoiler and liberator or between soldier and civilian, malaria parasites, allied with Anopheles mosquitoes, have carried on an aerial invasive warfare which in the present world conflict has immobilized thousands of soldiers and has greatly heightened the incidence of fever among civilians in many countries.

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* Those from whom Rome was unable to defend herself,

Were dispersed by the air,

At whose breath the German youth fell*.

At that time, and until the latter part of the XIXth Century malaria was thought to be caused by bad air arising from marshes. The Italian words mal and aria meaning "bad air" were first used to describe the cause of the so-called Roman or intermittent fevers. Gradually, the words came to be used to name the disease itself. Finally, in 1740, Horacio Walpolo, writing home from south Italy, put these two Italian words together and was first to use as an English expression the name "malaria".

In 1590, Sixtus V died of malaria following an inspection of the Pontine Marshes which he was attempting to drain. A month later, Urban VII also died of the same disease, probably contracted in the Vatican. Here, too, at the Conclave in 1623, eight cardinals and thirty secretaries caught malaria and died of it. Many others at the Conclave had the disease.

quoting Mackay, "the efforts of Caesar and Augustus, of Sixtus V and Pius VI, of Napoleon himself, and of all the emperors from the Risorgimento to the Great War, failed utterly to dislodge malaria from this little region lying about a city which was, in many ways, the center of the world, and what is more remarkable, there is no evidence that human authority, technical skill, or financial resources in the slightest degree influenced the imperturbable rhythm of malarial coming and goings".

By the latter part of the Middle Ages, the "Roman Aires" had an evil reputation throughout all Christendom. As Peter DeLion wrote:

"Rome, voracious of man, drunk on the strongest human nature, Rome, hothed of fevers, is an ample giver of the fruits of death".

In 1712, following the arrival of cinchona bark in Italy, Parisi observed that malaria fever could be separated from others by its response to specific treatment. By 1890 the Italian Marchesani, Galdi and Golgi had uncovered many of the secrets of the malaria parasite which had been discovered by Laveran, in Constantine, in 1880. Then, in 1898, Bignami, Bastianelli and Grassi in Rome, were first to prove conclusively that the human malaria parasite is transmitted by *Anopheles* mosquitoes. Ross, in India, in 1897 had discovered the parasite in a mosquito and, by demonstrating the cycle of avian malaria in 1898, had clearly pointed the way.

So, at the beginning of the XIXth Century, the road had been opened to better malaria control and treatment. This resulted in Italy in a decline in malaria mortality from 710 per million population in 1897 to 57 per million in 1911.

Then came the first World War, and, as invariably happens, malaria made what it could of an opportunity to exploit a disorganized society. Malaria mortality rates per million in Italy rose to 105 in 1915, 137 in 1916, 297 in 1917, and 304 in 1918. Rates had not been so high since 1901. Following the war, rates fell gradually to 68 by 1926.

In 1924 the Rockefeller Foundation, in collaboration with the Italian Health Department, established a Malaria Experiment Station in Rome and began a demonstration and practical application of scientific principles of malaria control, including and emphasizing an attack on the mosquito vector. As a result, malaria mortality rates per million dropped from 104 in 1924 to 14 in 1939.

A large factor in the reduction of malaria in Italy since 1897 has been a tremendous amount of intelligent land reclamation. The so-called "Bonifiche etrusche" have included not only drainage, but treatment of malaria cases at special dispensaries, screening of houses, use of Paris Green as a larvicide, and introduction of *Cambusia flumina* into canals. All five fundamental lines of attack on malaria have been followed, viz:

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Then came the First World War, and, as invariably happens, malaria made what it could of an opportunity to exploit a disorganized economy. Malaria mortality rates per million in Italy rose to 195 in 1915, 137 in 1916, 237 in 1917, and 324 in 1918. Rates had not been so high since 1901. Following the war, rates fell gradually to 68 by 1926.

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A large factor in the reduction of malaria in Italy since 1887 has been a tremendous amount of intelligent land reclamation. The so-called Bonifiche schemes have included not only drainage, but treatment of malaria cases at special dispensaries, screening of houses, use of Paris green as a larvicide, and introduction of Gambusia fishes into canals. All five fundamental lines of attack on malaria have been followed, viz:

1. Treatment of malaria carriers
2. Protection from adult mosquitoes
3. Destruction of mosquito larvae
4. Permanent elimination of breeding places
5. Use of naturalistic measures of control.

One of the tragedies of the war has been the systematic destruction by the German Army of the great land reclamation projects or so-called bonifiche of Italy. Not only has this smothering of pumps, blocking and silted canals, and deliberate reversal of sea and river water greatly increased the breeding of Anopheles malaria mosquitoes. It has also driven from their homes thousands of peasants, has flooded thousands of acres of farm land and has set back disastrously the economy of entire provinces. The areas of farm land in

South Italy flooded by the Germans is estimated at 37,000 hectares or 98,000 acres. This figure includes only the areas South of Rome. It is probable, from the air photos, that the Po delta in the north east has been similarly sabotaged.

This flooding has in no case retarded the movement of Allied troops more than a few hours. However, except the Germans may be in practical psychology they are seldom stupid in the technical details of warfare. The Public Health and agricultural aspects of sabotaging Italian bonifiche must have been obvious to German engineers and medical entomologists who are known to have provided about the areas in 1943 just prior to the flooding.

This winter destruction did not hamper Allied transport but it dealt a terrible blow to Italian peasants and it increased the malaria potential enormously. It is no exaggeration to say that in some areas, as in the Agro Romano, the appearance of the countryside when the Germans were driven back, was that of 1890 before the earliest advances in land reclamation had been made.

Fortunately, Italian engineering has been sound. Prompt action, stimulated by AGC, as noted below, has and will result in considerable salvage. But complete recovery must wait pumps not now available in Italy. It will then take some years for the land to swelter again.

While flooded bonifiche have constituted an important factor in the greatly increased malaria potential in Italy in 1944, there have been several other reasons why this disease presented a serious hazard to Allied forces. Breeding places for malaria mosquitoes have been created where canals or rivers have been blocked by the debris of wrecked bridges, by hastily built canals without culverts, or by destruction of embankments. Bomb and shell craters are numerous in some areas. Moreover, at a time of greater need for mosquito control under these conditions there has been a disruption of the normal control organization and a dearth of all essential supplies and equipment for civilian use.

The civil population has been more exposed to infection by destruction of windows and door screens, demolition of homes, mass evacuation, and by flight into open country to escape combat danger. This increased exposure has been coincidental with greatly reduced medical personnel, dispensary facilities, and anti-malarial drugs. Refugees and Italian soldiers, many of whom malaria carriers, have returned to certain areas where they have constituted foci of infection.

Finally, in some areas livestock has been depleted so that Anopheles which normally feed on animal blood may have attacked man.

In other words, all the epidemiological factors which go to create malaria among a population have been intensified in 1944. Here in Italy was a situation which if not properly handled might well have resulted in widespread epidemic malaria with many of the same disastrous losses of

had been made.

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In other areas, all the epidemiological factors which go to create malaria among a population have been intensified in 1944. Here in Italy was a situation which if not properly handled might well have resulted in widespread epidemic malaria with many deaths and with disastrous loss of fighting strength within the Allied forces. Fortunately, no other unhappy result has occurred.

3. CHRONOLOGY:

It is useful to keep in mind the following dates in connection with the malaric control program of ACC.

September, 1941 - Salerno landings on the 9th. At this time many of the canals of the Salerno and Positano bonifiche were blocked by bomb, shell, and tank action. There was evidence that many of the canals had been neglected for several years.

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October, 1962 - Haples occupied on the lat. V. in river crossed on the 12th. The bleds, V. turned, and bled bled. fishs were sub-merged during September and early October by instruction of pings and usual bleds, blocking of tangle, and diversion of water into low areas.

In the foggy area there was some damage inflicted by fighting but the chief difficulty was that the schools had been neglected for several years.

November, 1942 - During November while fighting was static the systematic destruction of the Pontine Marsh reclamations projects was carried out. Details were blocked, water diverted into low areas. Pumps were mined but not blown until May 1944. They were kept out of operation, however, so that the winter rains produced very extensive flooding.

January, 1944 - Audio benchwork established on the 20th. Experimental magnetic control measures carried out by the Army to the benchwork were from time of occupation until June.

May, 1944 - Disturbs push started on 11th. Casino captured on 18th. Auto racecourse broke through at Glaciera on 25th. The Germans blew up the Pontine gates before leaving the area.

June, 1944 - Bums captured on the 4th. The Aero Remains plugs
were blown in late May or early June as the Germans left. But
the Aero Remains area has been allowed to stand firm early in
the year. In December, water from the Tabor has been diverted
into low areas.

July, 1964 - pumping resumed in same area of San Agustin Reservoir.
Extensive canal discharges started in Pouting and Agustin Reservoirs.

September, 1944 - Pilot captured on the 2nd. Reports received that 2nd Airlift Group has been extensively flooded by salvaging of wreckage and stores, similar to the 2nd Air Division.

1. EPIDEMIOLOGY OF MALARIA IN ITALY

c. General Distribution: No large region in Italy is normally free from malaria but, as always, this mosquito-borne infection is unevenly distributed geographically, seasonally, and from year to year. Malaria throughout the theater is generally found below 2000 feet altitude and in rural rather than urban conditions. Such cities as Naples, Rome, and Palermo, are not malarious, although the disease may approach the municipal limits and occasionally penetrate them. Rural towns on the plains of South Italy are apt to be free of the disease. As a rule the clinical incidence of malaric begins to increase slightly in April too. It is believed, mostly in relapsing cases infected during the previous year. In 1944 such a rise has been seen in both civilian and military malaric. The seasonal upswing has to now

the beachhead area from time of occupation until June.

May, 1944 - Ansturno push started on 11th. Cassino captured on 15th. Anzio beachhead broke through at Cirotone on 29th. The Germans blew up the pontine dams before leaving the area.

June, 1944 - Rome captured on the 4th. The Agro Romano pumps were blown in late May or early June as the Germans left. But the Agro Romano area had been allowed to flood from early in the year. In Messegross, water from the Tibor had been diverted into low areas.

July, 1944 - pumping resumed in some areas of the Agro Romano. Extensive canal clearance started in Pontine and Agro Romano areas.

September, 1944 - Fiume captured on the 2nd. Reports received that 10 Italian areas had been extensively flooded by embosage of canals and pumps, similar to the Pontine destruction.

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b. Malaria Mosquitoes: Although there are several Anopheles in Sicily, only one is an important carrier of malaria. This one is Anopheles labranchiae. labranchiae Fullerton, 1926. It is one of several morphologically similar species which comprise the so-called maculipennis complex. These species can be differentiated by characteristic cell patterns, but not by larval or adult anatomical features.

labranchiae is found in its aquatic stage chiefly in small intermittent and pools of rivers, streams, canals, and irrigation channels.

not often above an elevation of 2000 feet. It is also taken in ponds, marshes and shallow agricultural fields, or water points. It will tolerate brackish water with salt content up to about 1.9 percent. This mosquito in some situations will travel from a breeding place as far distant as two miles, in waters sufficient to propagate malaria. Lebrauchius alatus habitually rests in houses, huts, animal sheds, and outbuildings in the day-time, feeding almost exclusively after sunset and having a strong preference for human blood.

Lebrauchius is also the chief anopheline in Sicily in where its habits resemble those in Sicily.

In Italy itself there are several malaria vectors. South of Naples, both east and west, the chief vector is Anopheles sacharovi. Favr. 1903, associated in the south-east by Anopheles superpictus Grunski, 1899. North of Naples, in the west, Lebrauchius is the carrier, while further west, up to the coast, with Lebrauchius existing. In the delta region of the river Po, Favr. 1903, listed by Anopheles lebrauchius atroparvus var. thicki, 1927, another member of the maculipennis complex and closely similar to Lebrauchius lebrauchius.

Anopheles sacharovi is sometimes been called clutus. In its aquatic stage it is often found associated with Lebrauchius. But sacharovi will tolerate a greater degree of salinity, with content up to 2.2 percent. Hence it is apt to be more prevalent closer to the sea. Both Lebrauchius and sacharovi will breed in either still or slowly moving water, both feed by preference on man, both habitually rest in the daytime in cave-like structures. Sacharovi is somewhat harder, flying a possible radius more often and in greater numbers, and more effectively withstanding hot-dry and cold-wet seasons. Both species undergo a semi-hibernation and it is believed that occasionally either one may cause a winter infection. Both species begin to breed in April and have greatest prevalences in May and June. Larvae become scarce by the end of September and the density of adults is soon markedly reduced.

But Lebrauchius is usually found in small streams in hill or mountain country, smaller robustus etc., sometimes beneath the stream-bed stones and thus distant from coastal view, are typical breeding places. This species, like sacharovi, is a strong flier, feeds on man, and rests in cave-like structures. It does not tolerate brackish water. Atroparvus is similar to Lebrauchius in its habits, but possibly a little more tolerant to salinity and dependent less particularly on its blood source, feeding on animals almost as readily as on man.

There are other species of the maculipennis complex in Italy. For example, Anopheles maculipennis maculipennis Meigen, 1818, Anopheles californicus, 1926 and Anopheles melanocephalus Robinson, 1934, are found in the marshes, rice fields, and inland lakes. But ordinarily these three anophelines do not feed on man and hence are not vectors. Whether the

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4) Malaria infections are fairly common.

f) The majority of relapses are due to P. vivax.

g) Some strains of P. falciparum in Italy are more virulent than average.

a. Malaria cycles. Under usual summer conditions malaria mosquitoes in Italy will develop through egg, larva, and pupa stages in 10 - 12 days. Adult females will feed the second or third night after emergence. If a mosquito ingests suitable gametocytes these will undergo development and become infective sporozoites in about 12 days. Of course, temperature and species as well as other factors will modify these periods. When an individual is infected with sporozoites, he will usually develop clinical malaria in about 14 days, depending on species of plasmodia. The minimum incubation period for vivax is 8 days and the maximum for malaria may exceed a month. Under suppressive medication the onset of symptoms may be postponed until some weeks or even months after the drug has been withheld.

These figures are averages, but it is apparent that the first new infections each season will appear clinically not earlier than 5 to 6 weeks after the vector mosquito begins actively to oviposit. As the weather becomes warmer, the cycle becomes shorter, but probably in this theater it is rarely less than 30 days. With each cycle the number of gametocytes increases, and a second onset is taken should it be interrupted. It is important to remember these time relationships and to realize, for example, that the mosquito breeding observed in an area may be reflected clinically in malaria the next month.

5. ACC MALARIA CONTROL ORGANIZATION:

a. Headquarters:

On 7 August 1943, a malaria control officer (Lt. M.A. Mancolini, Sn C) was appointed by the Public Health Division of AMG, for work in Sicily. This officer was transferred to Italy on 10 October 1943. In both Sicily and South Italy considerable assistance was given in the distribution of anti-malarial drugs and in re-establishing civilian dispensaries and malaria control agencies. It was possible to initiate a certain amount of larva control with Paris green in Sicily but the season was over in South Italy before AMG civilian control could be started.

The Allied Control Commission was activated on 10 November 1943 and the Malaria Control Officer AMG was transferred to the Public Health Sub-Commission A.C.C. During the winter months this officer made surveys and assisted in setting up programs and budgets for the 1944 season in Matera, Potenza, Salerno, Sanza, Naples, Benevento, and Avellino.

On 14 March, 1944 Col. Paul F. Russell, M.C. was assigned by AFHQ to ACC as Chief Malariaologist with the Public Health Sub-Commission on 16 April, 1944 a Malaria Control Branch was established within this Sub-Commission, at Adv. H. Naples until 16 June when the Branch was moved to

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5. AMG MALARIA CONTROL ORGANIZATION

a. Headquarters:

On 7 August 1943, a malaria control officer (Lt. M.A. Mantelli, SN C) was appointed by the Public Health Division of AMG, for work in Sicily. This officer was transferred to Italy on 10 October 1943. In both Sicily and South Italy considerable assistance was given in the distribution of anti-malarial drugs and in re-establishing civilian dispensaries and malaria control agencies. It was possible to initiate a certain amount of larva control with Paris Green in Sicily but the season was over in South Italy before AMG civilian control could be started.

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As of 1 September 1944 the Malaria Control Branch, Public Health Sub-Commission was organized as follows:

CHIEF: Paul F. Russell, Colonel M.C.

Civilian Control Unit

Malaria Engineer	-	T.P. Anderson, Major, SN C.
Medical Officer	-	V.F. Tuzio, Capt. M.C.
Entomologist	-	M.A. Mantelli, Capt. SN C.
Entomologist	-	J.A. Richards, 1st Lt. OAD
Consultant	-	Doctor A. Caradotti (Inst. Rigiolo, Rome)
Consultant	-	Doctor P. De Muro (polyclinic, Rome).

Valuable advisory help has been given freely by Prof. A. H. Stroll, head, of the Illinois Laboratory of the Study of Crystals in Rocks.

Donations

Director	Dr. F.W. Soper		
Chief Pathologist	Dr. H.A. Krum	*	*
Entomologist	Dr. L.A. Richl	*	*
Mechanical Engineer	Dr. F.W. Knipps	*	*
Executive Officer	H.W. Houlter, 1st Lt. Inf.		
Chief Inspector	Dr. Carlo Cipolletti		
Medical Officer	Dr. G. Cipolletti		
Medical Officer	Dr. L. Kiof		
Medical Officer	Dr. F. Longo		
Medical Officer	Dr. A. Rubino		

Also 1 interpreter, 4 clerks, 2 transcriptionists, 4 drivers, 2 statisticians and 2 laborers. The Institute of Hygiene in Bonn generously furnished laboratory and office space for the Demonstration Unit.

The functions of the Civilian Control Unit have been to assist the regional and local police officers in developing an effective civilian police control system primarily to provide the best possible extra-judicial protection of the Allied Forces from malaria and secondarily to prevent malaria among the civilians of Italy, Sicily, and Sardinia.

The functions of the Division of Entomology, no established by arrangement between AFM and AGS, have been to develop practical methods of eradicating the rice insecticides, DDT, against anopheline larvae and adults.

The Malaria Control Branch has cooperated and been fully cooperative with Surgeon KATONA, the DCS and AGH, and the consultant epidemiologist, all of them with the Malaria Specialist, KATONA, the DCS and AGH, the Surgeon General, the Malaria Specialists of the Army, Navy, Air Force, and the Malaria Control Branch. One of the outstanding features of the Malaria Control Branch has been the very high degree of cooperation between the Malaria Control Branch and the Malaria Control Branch.

[illegible]

Each Regional Public Health Officer ADC has been concerned with malaria control and all have been successful in re-establishing and stimulating civilian control agencies. There have been full time ADC Malaria Control Officers, in addition to sanitary officers, in Regions I, III, IV, V, and VIII for varying periods during the season. Lt. Col. Herbert Spencer, Sn C, has served as Malaria Officer in Region I, IV, and V. Major S.D. Hall Sn C, has been the Malaria Officer in Region III. Capt. M.T. Hall, Sn C, served as Malaria officer in Regions I and VIII.

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The functions of the Civilian Control Unit have been to assist the regional and Air Mobile officers in developing an effective civilian intelligence control program primarily to provide the best possible other-than-host protection of the Allied Forces and Italian and secondarily to protect civilians among the civilians of Italy, Sicily, and Sardinia.

The functions of the Construction unit, as established by comparison between A894 and A60, have been to involve practical work in building the new Inactivation, DIF, against encroaching larvae and adults.

The Malaria Control Branch has cooperated and been fully coordinated with the Surgeon, MATOUSA, the DMS and ADM, and the Consultant Epidemiologist, all of AFHQ. Also with the Epidemiologist, MATOUSA, the DMS and ADM. All the Surgeon SOS, the Epidemiologists of the Army, AFHQ, and the Surgeon, AFHQ and District. One of the outstanding features of Malaria Control in Italy in 1944 has been the very high degree of cooperation between the many and varied Allied Forces Malaria Officers and Units and the AFHQ Malaria Control Officers.

• **Threats to validity**

Each Regional Public Health Officer ACC has been concerned with malaria control and all have been successful in re-establishing and stimulating civilian control agencies. There have been full time ACC Malaria Control Officers, in addition to sanitary officers, in Regions I, III, IV, V, and VIII for varying periods during the war. Lt. Col. Herbert Spencer, M.D., has served as Malaria Officer in Regions I, IV, and V. Major J. O. Hill Sr. O. has been the Malaria Officer in Region III. Capt. M.T. Hill, M.D., served as Malaria Officer in Regions I and VIII.

0-1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040

Each province in Italy in peacetime has had a Health Officer (Medico provinciale) appointed by the Minister of the Interior and approved by the Senate. In provinces where malaria is a problem there has usually been a Malaria Control Committee (Comitato provinciale Antimalario) to plan and direct the provincial control program, including the operation of malaria dispensaries. This Committee, generally headed by the provincial health officer, has included the provincial public works engineer (Genio Civile), the provincial bacteriologist, and frequently the provincial inspector of the railways.

Malariae provinces have generally had malaria dispensaries, and local control stations with agents and plans for control maintenance, use of Paris green larvicide, distribution of prophylactic and therapeutic anti-

active, continuous, and full co-operation has been maintained between the malaria officers of AOC and those of army military echelons as AFM, AAI, JAG, RAE, IEN, 5th and 8th Armies, SOG, HHC, IIS, HAAC, Districts and Areas, UZF, and the Italian collaborating Army.

7. REPORTS.

A considerable amount of money has been allotted to malaria control and land reclamation in South Italy in 1944. Complete or accurate figures are not available but the following table gives a fair approximation of the total sums provided by the Ministry of the Interior and the individual provinces.

REGION	Lire allotted primarily for		TOTALS
	Malaria Control	Land Reclamation	
I	34,357,000	-	34,357,000
II	4,343,206	-	4,343,206
III	13,892,228	-	13,892,228
IV	4,282,571	51,450,000	55,732,571
V	513,000	41,957,987	42,470,987
VI	18,132,329	-	18,132,329
VII	3,530,372	-	3,530,372
VIII	224,281	-	224,281
Area	5,147,283	2,380,000	7,527,283
Area Totals	70,325,250	113,157,987	183,483,237
Dollar Totals	783,254	1,131,320	1,914,574
Pound Totals	195,998	282,275	478,273

Note: (Areas north of Greece provided not included).

The bulk of these moneys have been and are being spent under the supervision of Public Health or Public Utility officers of AOC, Headquarters or Regional.

8. SUPPLIES.

a. Anti-malarial drugs.

In order that no civilian in liberated Italy suffering from malaria in 1944 should remain untreated for lack of specific medicine, the

Medical Supply Branch in cooperation with the Malaria Central Branch, AOC, before the onset of the malaria season, and to avoid loss from the IBA some 11,000,000 tablets of chloroquine (0.1 gram) and 19,000,000 tablets of quinine (for intravenous use in extreme cases). This supply has been augmented by captured drugs and a moderate number of quinine and italcium remaining to local authorities from 1943, so that there is an abundant reserve. Prompt distribution of adequate supplies has been made by AOC to every provincial capital in Allied hands.

D. Malaria Oil:

At the beginning of the 1944 season Paris Green was not available through AOC for civilian use. It was essential that all AMH, stocks of this item be held for the Allied Forces in view of the very high malaria potential which existed. Therefore, arrangements were made before the onset of the anopheline breeding season for the distribution of anti-mosquito oil through the agency of the Comitato Italiano Retrotti. The following allotments were made available from 1 April,

Region	1	10,000	gals monthly
"	II	8,652	"
"	III	25,704	"
"	V	10,000	"
"	VII	5,904	"
TOTAL		50,320	gals monthly.

Region VI had reserve stocks of Paris Green remaining from 1943 and also acquired some oil from other sources. Other regions had not been occupied.

Although Italian for the most part have been accustomed to using Paris Green rather than oil for malaria control, the oil allotted was immediately put to good use. For spreading the oil, some 700 kangaroo sprayers were distributed from AOC stocks.

E. Paris Green:

By the first of June it was possible, through the recommendation of the INS and ADI AAI, to obtain from AAI British stocks, 10 tons of Paris Green for use by civilian agencies in the vicinity of military installations. Again in July and in August the same amount was made available so that all together 30 tons of Paris Green have been distributed by the Malaria Central Branch to the several regions, (I, II, III, IV, V, VI, VII, VIII, IX and X). This supply made available by AAI, has been of further help to civilian agencies who were equipped, by past experience and with apparatus, from previous seasons, to mix and spread the Paris Green in an effective manner.

There were 15 tons of Paris Green held in Rome by the Institute of Hygiene for 1944 distribution. An additional 10 tons of captured German

Region	I	II	III	IV	V	VI	TOTAL
Paris green	10,000	0,652	25,784	10,000	5,964		60,320
oil							
monthly							

Region VI had reserve stocks of Paris green remaining from 1943 and also required some oil from other sources. Other regions had not been occupied.

Although Italians for the most part have been accustomed to using Paris green rather than oil for malaria control, the oil allotted was immediately put to good use. For spreading the oil, some 700 kerosene sprayers were distributed from AOC stocks.

c. Paris Green:

By the first of June it was possible, through the recommendation of the DME and AAI AAI, to obtain from AAI British stocks, 10 tons of Paris green for use by civilian agencies in the vicinity of military installations. Again in July and in August the same amount was made available so that all together 30 tons of Paris green have been distributed by the Malaria Control Branch to the several regions. (I, II, III, IV, V, VI, VII, VIII, IX and X). This supply made available by AAI, has been of immense help to civilian agencies who were equipped, by past experience and with apparatus, from previous seasons, to mix and spread the Paris green in an effective manner.

There were 15 tons of Paris green held in Rome by the Institute of Hygiene for 1944 distribution. An additional 10 tons of captured German Paris green was found in Rome, making a total of 55 tons available for civilian use in 1946.

d. Insecticides:

Other material distributed through the Malaria Control Branch included 400 sets of repaired uniforms and 3000 pairs of repaired army shoes (obtained from Economic and Supply Branch, Region III, AOC) for regional malaria control laboratories; 1000 picks and 1000 shovels (from AAI) for use in canal clearance; 560 insecticide spray guns (purchased locally).

By arrangement with CIP a small stock of Italian Brown pyrethrum flowers was processed into a kerosene-pyrethrum spray for use against adult mosquitoes. More than 30,000 liters had been distributed by the end of September. Organized spraying programs were being carried

out in a few to me in Regions IV and VIII, under the RHODs.

In cooperation with the primary Sub-Commission AG, the Malaria Control Branch made arrangements for the manufacture of 15,000 spray cans of an improved pattern, designed by the Demonstration Unit.

It is a fair statement that in spite of very great difficulties inherent in malaria control in a country devastated and defeated in a total war there have been distributed anti-malarial supplies adequate to carry out a comprehensive and successful civilian malaria control program in that part of Italy in Allied hands at the onset of the 1944 campaign.

9. LABOR

The following table gives average numbers of laborers employed by civilian agencies for malaria control in the various regions. Probably an equal number of civilians have been employed for the same purpose by military units.

Regions	Number	Regions	Number
I	2680	VI	587
II	455	VII	330
III	1270	VIII	103
IV	982	Rem	644
V	719	TOTAL	7,775

There have been many and various difficulties in regard to food and transport for malaria laborers. In some areas army units have furnished free transportation for malaria laborers working on projects of special benefit to their installations.

The daily wages of laborers have averaged 75 lire for which they have given generally six hours work. Many laborers have also had their own farms and it was considered important to permit them to produce as much food as possible.

10. WORK ACCOMPLISHED:

a. General:

It is impossible to give more than rough estimates of the malaria control work done by civilian agencies. But the following table is

Region	Number	Region	Number
I	2680	VI	337
II	455	VII	330
III	1275	VIII	103
IV	982	Sub	644
V	719	TOTAL	7,775

There have been many and serious difficulties in regard to food and transport for malaria laborers. In some cases Army units have furnished free transportation for malaria laborers working on projects of special benefit to their installations.

The daily wages of laborers have averaged 75 lire for which they have given generally six hours work. Many laborers have also had their own farms and it was considered important to permit them to produce as much food as possible.

10. WORK ACCOMPLISHED:

a. General:

It is impossible to give more than rough estimates of the malaria control work done by civilian agencies. But the following table is probably a fair statement of the totals for a few items up to 1 September, 1944.

Cannals cleaned, cleared or dug	2,000,000 meters
Flooded land drained	20,000 hectares
Pumps repaired or replaced	15 units
Barbs given applied	26 tons
Oil applied	200,000 gals
Atchings distributed	5,000,000 tablets
Money appropriated	191,593,337 lire

b. Rome Region:

The following table for the Rome Region is a good example of the type of work done by civilian malaria control agencies and is a more accurate report than is available from other regions. (Total areas of Rome Region 180,000 hectares).

Para Region Malaria Control

22 June to 1 September 1944

gangs allotted	22,277,283	liters (only partly spent by 1 Sept.)
laborers (max)	644	
man hours	159,634	linear meters
Cumala cleared	98,850	hectares
Flacoid land drained	4,850	cu meters
Griggs Isabela cleared	22,126	kg.
Paria green applied	1,425	cu meters
oil applied	1,496	
Civilian countenants or men sprayed with DDT	5,500	
* sprayed weekly with DDT	200	
* pumps repaired	7	hours
Pumps repaired	1,829	
Gravels filled	659	
Atabrine distributed	299,363	tablets

This Para Region program was under the immediate supervision of Maj. Anderson of the Malaria Control Branch, AGO at the request of and in cooperation with the RPHC. The use of insecticides was supervised by Dr. Kuhn of the Demonstration Unit.

c. Littorio Province;

Although, due to the extensive flooding, there has been considerable malaria in Littorio Province, the disease has not been widespread. In fact, only one death from malaria was reported from this province in August. The following table summarizes some aspects of the control program instituted by civilian agencies with help from AGO.

Laborers employed for malaria control

Comitate Provinciale Antimalarico	316	
Comitate di Bonifacio di Littorio	400	
Comitate di Bonifacio di Pontina	213	
TOTAL	929	
	14	
	32	
	2	tons
	64,077	liters
	25	
	43,000,000	liters
	13.6 kg.	
	1.6 kg.	
	1,605,270	
	25,790	

Dispensaries opened for treatment of malaria
Malaria Staff of Malaria Provinciale
(Malariaologist, inspectors and nurses)
Paria green sprayed by airplane (U.S. Army plane)
Paria green 1 per cent dust applied by civilians
Canal clearing projects completed
Money allotted to canal clearings
Antimalarials received by the Province:
Quinine sulfate
Quinine bicarbonate
Atabrine tablets
Chloroquine tablets

299,363 tablets

This year Region IV has been under the immediate supervision of M.D. An order of the Malaria Control Branch, ACC at the request of and in cooperation with the M.D. The use of insecticides was supervised by Dr. Hunt of the Demonstration Unit.

2. Littoria Province:

Although, due to the extensive flooding, there has been considerable malaria in Littoria Province, the disease has not been un-expected. In fact, only one death from malaria was reported from this province in August. The following table summarizes some aspects of the control program instituted by civilian agencies with help from ACC.

Labors employed for malarial control

Comitato Provinciale Antimalarico	216	
Comitato di Bonifica di Littoria	400	
Comitato di Bonifica di Pontinia	212	
TOTAL	929	
	14	
	32	
Dispensaries opened for treatment of malaria	2	tons
Malaria Staff of Molise Provinciale	64,077	liters
(Malariaologist, inspectors and nurses)	25	
Paris Green spread by airplane (U.S. Army plane)	43,000,000	liters
Paris Green 1 per cent dust applied by civilians		
Canal clearing projects completed		
Money allotted to canal clearance		
Antimalarials received by the Province:		
Quinine sulfate	13.6	kg.
Quinine bicarbonate	1.8	kg.
Atarapine tablets	1,805,270	
Fluorenone tablets	25,796	

11. BULLETINS:

Several technical bulletins have been prepared and issued by the Malaria Control Branch ACC as follows:

- T.B. No. 1 - A Note on the Epidemiology of Malaria in Italy (English)
- T.B. No. 2 - Larvicidal Oiling (English and Italian)
- T.B. No. 3 - Malaria-Killing Adult Mosquitoes (English and Italian)
- T.B. No. 4 - Note on the treatment of malaria with Atarapine/Moscorin (English and Italian)

- 7.2. No. 5 - Malaria Control by Field Mixing and Hand-casting
Paris from (English and Italian)
- 7.3. No. 6 - Malaria Control by Field Mixing and Hand-casting
Paris from (English and Italian)
- DOT Bull. No. 1 - Airplane Spraying of DDT
- DOT Bull. No. 2 - Use of DDT in a Spray (Dust and Liquid) in Swallowing

12. DEMONSTRATION UNIT

A separate report will be prepared for the Demonstration Unit. It may be noted here that the special program of this unit set up at the request of AFHQ, has been:

- a. Development of airplane spraying with DDT in diesel oil and fuel oil.
- b. Development of methods of spraying swallows to attack adult mosquitoes and flies.
- c. Development of special spraying apparatus for the effective application of DDT in oil.
- d. Evaluation of hand-casting and backpack dusting with DDT powder for larvicide purposes.

All that may be said here is that the Allied Forces have been able to make practical use of several of the methods suggested by the Demonstration Unit.

13. RESULTS

This is an interim report in which it is not possible to present final results as measured by malaria incidence figures. These will not be available for many months, and then only in part, because of the confusion of war. But it is possible at this time to make some general statements to supplement data on work accomplished, as shown above.

In brief outline, it is an outstanding fact that the Allied malaria control program, in Italy in 1944, has effectively kept this disease in check throughout the liberated provinces and the armed forces in spite of a very high malaria epidemic potential, a disorganized public health service, and a serious lack of transport and supplies, in a country defeated and distracted in a total war.

The following longer statistics are all that are available:

Region I - Population 4,000,073 Malaria cases reported in 1944
up to 31 August ----- 2171

Region II - Population 3,150,224 Malaria cases reported in 1944
up to 31 August ----- 495

Region IV, Italian Province (Population 245,000) Malaria cases

and flies.

- c. Development of special spraying apparatus for the effective application of DDT in oil.
- d. Evaluation of hand-casting and backpack spraying with DDT powder for larviciding purposes.

All that may be said here is that the Allied Forces have been able to make practical use of several of the methods suggested by the Demonstration Unit.

13. REMARKS:

This is an interim report in which it is not possible to present final results as measured by malaria incidence figures. These will not be available for many months, and then only in part, because of the confusion of war. But it is possible of this date to make some general statements to supplement data on work accomplished, as shown above.

In broad outline, it is an outstanding fact that the Allied malaria control program in Italy in 1944 has effectively kept this disease in check throughout the liberated provinces and the armed forces in spite of a very high malaria epidemic potential, a disorganized public health service, and a serious lack of transport and supplies, in a country defeated and disrupted in a total war.

The following major statistics are all that are available:

Region I - Population 4,000,073 Malaria cases reported in 1944 up to 31 August -----2171	
Region II - Population 3,180,284 Malaria cases reported in 1944 up to 31 August -----493	
Region IV - Littorio Province (population 245,000) Malaria cases reported in 1944 up to 31 August -----20,749	
Only 1 malaric death reported.	
Region VI - Cases reported in Bardonia (population 1,034,306):	
Jan - July, inclusive - 1943 - 4065	
1944 - 1852.	

The reports of the IGMOs have been searched and they are a table for the brevity of references to malaria. Obviously, the presence

of devastating epidemics would have been reported. So, too, the Italian press has referred to malaria during July and August, the peak of the season. The few references noted have been to the Pontine Marsh area. The 1944 malaria season has been so quiet that it has not aroused comment. To those who have had experience of serious epidemics of malaria this fact is very significant.

In other words, although the usual seasonal rise in the incidence of malaria has taken place in the usual places at the usual time, yet the greatly increased malaria epidemic potential has been so checked that there have been no faintest outbreaks behind the lines. Civilian reconstruction and rehabilitation activities have not been disturbed and the war effort has not been delayed by malaria. Indeed, already there has been lay comment to the effect that Italy has not proved to be a very malarious place, after all. To those few specialists who know the disease and its local possibilities, this is high praise for the effectiveness of the control program.

It is a fact, that in spite of the chaos of total war, in spite of everything the Germans could do to intensify the malaria potential, malaria in its classical form in Italy during the 1944 season has been so well controlled by military and civilian agencies that it has not been a disturbing factor either in or behind the combat area.

DEFINITION OF AOC REGIONS IN ITALY

Region	Population	Area
I	4,500,075	Sicily
II	9,150,234	Potenza, Matera, Taranto, Lecce, Brindisi, Bari provinces
III	3,698,695	Salerno, Avellino, Napoli, Benevento provinces
IV	1,510,426	Litteria, Frattino, Rieti, Viterbo, Torni, Perugia provinces
V	2,893,792	Rossini, Campobasso, Chieti, Aquila, Pescara, Teramo, Ascoli, Macerata, Ancona, Pesaro provinces
VI	1,034,206	Sardinia
VII	1,777,651	Reggio Calabria, Catanzaro, Cosenza provinces

DEFINITION OF ACS REGIONS IN ITALY

Region	Population	Area
I	4,000,078	Sicily
II	3,180,281	Potenza, Matera, Taranto, Lecce, Brindisi, Bari provinces
III	3,692,695	Salerno, Avellino, Napoli, Benevento provinces
IV	1,810,426	L'Aquila, Pescara, Chieti, Aquila, Pescara, Teramo, Ascoli, Macerata, Ancona, Pesaro provinces
V	2,878,702	
VI	1,034,206	Sardinia
VII	1,777,691	Reggio Calabria, Catanzaro, Cosenza provinces
VIII	2,274,439	Gravata, Siena, Livorno, Pisa, Firenze, Arezzo, Lucca, Pistoia, Massa provinces
IX	3,139,058	Emilia Compartment
X	4,973,049	Liguria and Piemonte Compartments
XI	3,836,342	Lombardy Compartment
XII	5,934,092	Venezia, Friuli, Veneto, and Venezia Giulia and Dora Compartments
Row	1,562,380	Acia Governorate

101!

ABBREVIATIONS USED

AAF U.S. Army Air Forces component of MATONRA.

AII Allied Armies in Italy. This is the next lower echelon under AFHQ and has both U.S. and British components.

ACC Allied Control Commission in Italy.

ADH Assistant Director of Hygiene.

ADV Advance.

AFHQ Allied Forces Headquarters - Mediterranean Theater.

AUG Allied Military Government - a separate organization prior to 10 November 1943, but thereafter a division of ACC.

CZF French Expeditionary Corps, component of AII (*Corps expéditionnaire Français).

CEP Composite Italian Petrol.

DOT Dichloro-diphenyl-trichloroethane, a new insecticide.

DMS Director Medical Services.

HQ Headquarters.

ISG Island (Sicily) Base Section, U.S. Army component of SOS.

MC Medical Corps, U.S. Army.

MATONRA North Africa Theater of Operations, U.S. Army. This is the entire U.S. Army component in the Mediterranean Theater.

PBS Peninsular Base Section, U.S. Army component of SOS.

RAAC Royal Army Allied Command, a component of AII.

RAF Royal Air Forces, component of AFHQ.

RHO Regional Public Health Officer, ACC.

SOS U.S. Army Service Forces, a component of MATONRA (is a service).

ADH Assistant Director of Hygiene.

ADV Advance.

AFHQ Allied Forces Headquarters - Mediterranean Theater.

AMG Allied Military Government - a separate organization prior to 10 November 1943, but thereafter a division of AGS.

CEP French Expeditionary Corps, component of AAI (Armée Expéditionnaire Française).

CIT Composite Italian Patrols.

DDT Dichloro-diphenyl-trichloroethane, a new insecticide.

DMS Director Medical Services.

HQ Headquarters.

ISG Island (Sicily) Base Section, U.S. Army component of SOS.

MC Medical Corps, U.S. Army.

NATOSEA North Africa Theater of Operations, U.S. Army. This is the entire U.S. Army component in the Mediterranean Theater.

PBS Peninsula Base Section, U.S. Army component of SOS.

RAAC Ross Area Allied Command, a component of AAI.

RAF Royal Air Forces, component of AFHQ.

RCHO Regional Public Health Officer, AGS.

SOS ~~U.S. Army Service Forces, Department of MATSOF (Services of Supply)~~

SH. C. Sanitary Corps, U.S. Army.

ISN U.S. Navy, component of AFHQ.

Districts and Areas Service components of the British Army under AAI.

CONFIDENTIAL

HEAD HEADQUARTERS

ALLIED CONTROL COMMISSION

APD 394

Public Health Sub-Commission

MINUTES OF CONFERENCE OF REGIONAL WELFARE OFFICERS
SUBSIDIES OF PUBLIC HEALTH SUB-COMMISSION

Brigadier G. S. Parkinson, Director

26 and 27 May 1944.

Chairman

John McSwiney
Major, Sp. S.

Secretary

Tom L. Wintersteen
Lt. Sp. C. Res.

FRIDAY

26 May 1944.

The meeting was opened by Brigadier Parkinson, Director of Public Health Sub-Commission, to whose remarks Commandatore Speciale made reply. It was moved by Major Kenny and seconded by Capt. Savin and duly ordered that these statements be included in the minutes of the meeting and that the minutes be made available to those attending. (See Appendices I and II)

Captain Silveira presented the agenda for the meeting (Appendix III) and expressed the hope of the Public Health Sub-Commission that the discussions would be full and free and directed toward the practical difficulties of the regional and provincial officers. He presented Major John McSwiney, Chairman of the Conference, and Lt. Tom L. Wintersteen as Secretary.

The Chairman called on Captain W. H. Savin, RMO, Region I to lead the discussion on Provincial Welfare Departments and related problems. Captain Savin's remarks are summarized below:

The discussion of this subject becomes important in the light of the recent AGC Executive Memorandum No. 58, directing the creation of Provincial Welfare Departments in each Province, and in view of Commandatore Speciale's statement.

To understand the present departmental organization it is necessary to know the earlier stages of welfare organization in Sicily. Welfare officers arrived at Sicily early in the occupation. Sussidi Militari, which was the largest relief agency, had been abolished by decree of AGC, and has not since been revived. In Catania and Messina, where Captain Savin first served as Provincial Welfare Officer (RMO), none of several thousands persons demanded relief, exhibiting their Sussidi Militari booklets as proof of their right to assistance. The Ente Comunale di Assistenza (ECA) was the only relief agency remaining in every comune. It had to be reorganized quickly to meet all relief needs. Attention was given to the large cities first, and little reorganization was done in the small comunes until several weeks after the occupation.

The relief program in these two cities was linked with the employment agencies, since it was recognized that employment was the best form of assistance that could be supplied. Jobs, cash relief and subsidies to institutions were the immediate concerns of the RMOs.

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The Region was still under Military Government and the Italian officials worked under direct orders of Allied officers. In the larger cities more competent civilian personnel was hired to get the situation under control quickly. Cooperation and willingness to act promptly was the general attitude of prefects and sindaco.

After the first 2 months, during which the Finance Officers gave funds directly on request, PWOs received all requests for communal relief funds and subsidies for institutions, and their approval was required for all grants.

In October the ECA for Sicily entered the creation of Provincial Welfare Departments. They were to be established in each province by November 15, and all were actually started and functioning by December 1. The recent order No. 58 of ACC is almost exactly a duplicate of the order issued to Sicily. Gradually the job of collecting and analyzing requests for funds from communes and institutions was turned over to the Italian welfare departments and by 1 February was entirely in their hands. On that date Captain Savin was able to report that Italian personnel in the provinces was able to carry on the provincial departments.

The key to the situation is personnel. In the early days of the occupation there were not enough Allied officers experienced in welfare administration. Italian personnel had either left or was in the main, particularly as regards the leadership of ECA, lacking in initiative and the capacity to handle the big job facing them. Prefects in most cases made very good appointments in consultation with Welfare Officers.

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The meeting was opened for questions and comment.

- Q. Chairman Major McGowan: Were BSA's operating in communes at time of occupation?
- A. "The BSA gave their attention to the largest communes. In the beginning requests for funds for BSA from the small communes were handled directly by Finance Officers, without reference to the P.H. & S. Section. As soon as possible, for instance in Maricao Province, the PWO made a tour of all communes with the Finance Officer, correcting the most glaring faults. Some evidence of staff and poor administration were found. It was then known that Provincial Welfare Departments were to be ordered. It was not possible to supervise the BSA of all communes until the Departments were organized."
- Q. Major Lenny: "How was top personnel recruited?"
- A. "When personnel of a provincial or communal job was incompetent an explanation of the situation to the prefect and a description of the job was usually enough to get the appointment of a competent man."
- Q. Captain Garver: "Will Captain Savin give a description of a provincial organization?"
- A. "The organization of the various provinces differed, according to the type of province. Pinar Province, with a population of 250,000, of which 50,000 lived in the largest city, had only 12 communes. This is a rural province, virtually untouched by the war. This province had only a Commissioner, an assistant for child welfare and 5 or 6 clerks. Pinar Province, with a population of 1 million, including the 150,000 of Pinar City, has 72 communes. The Commissioner here had three assistants and a total staff of 35 employees. The administrative budget was about 200,000 lire per month. The staff included 3 inspectors who made visits to communes, inspecting BSA operations and institutions."
- Q. Captain Kilcock: "What were BSA relief rates?"
- A. "The maximum rate was 25 lire for head of family and 5 lire for each dependent child. The maximum was usually restricted to families of officials whose allotments had been cut off. The rate in most provinces was 15 lire for the head of the family and 5 lire for each dependent, and in some rural communes was as low as the former Fascist Military rate of 8 lire for the head and 3 lire for each dependent."
- In Pinar Province the average monthly governmental expenditures for all relief purposes during the year ending 30 June 1943 had been 24,000,000 lire. During the period (five months) October 1943 to February 1944, the comparable figure was 15,000,000 lire per month."
- Q. Major Hirt: "Did this include materials in kind?"
- A. "No."

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C. Captain Carver: "Will Captain Savin give a description of a provincial organization?"

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Q. Captain Bilcock: "What were ECA relief rates?"

A. "The maximum rate was 25 lire for head of family and 5 lire for each dependent a day. The maximum was usually restricted to families of officials whose allotments had been cut off. The rate in most provinces was 15 lire for the head of the family and 5 lire for each dependent, and in some rural communes was as low as the former Fascist military rate of 8 lire for the head and 3 lire for each dependent.

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Q. Major Birt: "Did this include materials in kind?"

A. "No."

Q. Major Birt: "Were private donations included?"

A. "No. Only governmental funds."

Q. Major Birt: "To what factors does Captain Savin attribute the reduction?"

- A. "1. Centralization of relief in ECA.
2. Better administration and tighter control, eliminating graft.
3. The availability of jobs with army and spending of soldiers."

Q. Capt. Spedale: "What would be the attitude of the group to a proposal to pay now the Fascist military grants for September and October? This is being considered because many borrowed in anticipation of receipt of these grants, and need help in repaying loans."

A. (After discussion) The consensus was that this question should be considered one of the many questions regarding indemnification of war damage. Its answer would depend on the policy on this whole question.

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Declassified E.O. 12356 Section 3.3/NND No. 785017

Q. Comm. Speciale: "Should WFA buy food and distribute in kind rather than provide relief in cash?"

Major Kenny:

"In U.S. our experience with distribution of surplus commodities was not good. No balance to diet thus provided and relief very irregular."

Capt. Millican:

"Relief in cash, especially when supplies are short, is not because regularity can be better achieved."

Capt. Brooke:

"In Guardia relief in form of staple foods is frequently given in kind."

Capt. Bellini:

"Food supplies are short, as temporary measure to get food to people quickly, distribution in kind has merit. But as a permanent or long range program it is not to be recommended."

Capt. Savini:

"The question is broader than merely persons on relief. Wage levels are not much greater than relief rates in many instances. The food distribution system for all the people cannot be improved by attempting to develop a special one for part of the people. In one of the provinces of Sicily the Prefect has raised funds from his wealthy friends for a proposed non-profit market. His idea is to purchase vegetables, fruits, fish and other non-rationed, locally produced foods and resell at cost to persons of low income. The proposal is being considered."

Consensus:

"As a temporary measure staples might be given in kind by ECA, but this should be supplemented by cash for the purchase of fruits and vegetables."

Q. Major Birt: (Directed to Comm. Speciale) "Does the Italian Government intend to perpetuate the departments of social welfare now organized in the Provinces?"

A. Comm. Speciale:

"The present Italian Government believes that this question is of such importance as to require the consideration of the Legislative branch of the Government, when Italy is entirely liberated. The present Government supports the financial nature of the plan as a temporary measure, pending legislative action."

Q. Major Birt: "What is the scope of these departments intended to be? What agencies and institutions were included in Sicily? What is relationship with the social insurance? As an example, is Sussidi Militari included?"

A. Capt. Millican:

"No time at that moment to go into whole question raised by Major Birt. In re. Sussidi Militari it was pointed out that a recent decree of the Italian Government raised the payment of Soccorso Militari (Sussidi Militari) 70%, and directed that the granting of the assistance is to be determined by the ECA, with certain additions to its cost. Payment is to be made through the Post Office."

RECESS FOR LUNCHEON

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EXCESS FOR LUNCHES

Captain Carver, RMO, Region II was asked to lead the discussion on Italian Refugees in Dispersal Areas. A summary of his remarks follows:

Region II was notified on 1 November that the Region should be prepared to receive Italian Refugees at the rate of 100 to 500 per day. Provincial committees were organized to plan for reception and dispersal, but were quite ineffective. The first refugees generally arrived disoriented (there was no typhus in Region II) but they were ragged and hungry and had again packed up lice. A great deal of scabies was found.

Frequent shifts in personnel and policy produced chaotic administration of the program. Frequently the refugees arrived before the EOA was notified that they were on the way. In the first weeks he was never notified in sufficient time to make proper arrangements to receive trains.

In recent months there has been considerable improvement. Clothing has been issued in the Refugee Transit Camps, disinfection and medical screening has been more thorough, notifications have been received more promptly and the refugees have been better fed en route.

A problem which has not been taken into account by those allocating refugees to the provinces is that large areas in many places are reserved for military purposes. Allocation of quotas solely on the basis of population, without adjustment for other factors in the Province, has led to great difficulty and unfairness.

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Good committees on both provincial and communal levels, are essential. They must include hard-working sincere persons, chosen because of their interest and willingness to work, not in recognition of their positions. It is a great help if the lending number of clergy of the area is a number, however, because of the clergy's influence with the people in securing a welcome for the refugees.

Each province should have a reception center with a capacity of at least 1000 persons. Trains carry from 700 to 1000 persons. Since arrival of trains is always uncertain, it is never possible to disperse the individuals directly into the communes. Arrangements for feeding should be close to the reception center, if not part of it.

Reception center should have:

1. Adequate latrines. Churches and theaters are seldom so equipped and are therefore not good.
2. Dispensaries for disinfection and isolation of ill persons.
3. Facilities for bathing and laundry.
4. Materials and facilities for repair of clothing, old razor blades for cutting, needles and thread and scrap material.

It is necessary to recognize the great importance of keeping families together. The size of families is always astounding, but regardless of difficulties they must be kept together. It is best also to recognize the differences between classes. Peasants are unhappy in the towns, and formerly well-to-do or educated families are dissatisfied in the homes of laborers.

There are many difficulties in the way of successful dispersal of refugees into the communes. Distances are frequently great and transport very difficult to obtain. Most Sindaci are not interested and do not want refugees in their towns. Traditional attitudes of one section of Italy toward another influence reception. Italy has not been a united country long enough for the people to have forgotten ancient enmities. To a resident of Reggio in Italian from Cassino is an alien.

At best, billeting in private homes creates difficulties for the people concerned. Italian houses are small, extra rooms not in daily use by the resident are rare. Refugee families never have equipment for household living, thus forcing their hosts either to share their own meager possessions or treat the refugees callously. The result is ill-feeling on both sides. Difficulties mount when forced billeting is used, for the relationship of the two families begins in an attitude of hostility and there is no chance that the practical difficulties can be solved. These points become important if it is desired to secure stability in the refugee group, for it is such problems as these that lead refugees to abandon their assigned billets and take to the road.

Among the refugees are always men who refuse to work. The white collar group resent being forced to accept manual jobs. Peasants are usually willing to take farm work, but dislike having to do ordinary unskilled labor on docks or in towns. The only effective answer is a "no work, no eat" policy.

The refugees complain more of lack of food and cold than they do of dirt and overcrowding.

The greatest need is for a planned propaganda campaign designed to convince those receiving refugees of their duty to their fellow countrymen.

2. Comm. Laniboni: What is the physical condition of the refugees, especially the children?

A. "In the beginning there were many bad colds, bronchitis, some pneumonia and many pregnant women. There is no typhus or smallpox. The situation is now much improved, but there is need for milk for small children."

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Q. Coma. Zaniboni: "Are inspectors needed?"

A. "Yes, very much. The Italian Government should have one in each province."

Q. Major Ditt: "Foggia Province has many refugees from the south of Italy. Can they be repatriated?"

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A. Consensus: The problem of repatriation is one for the Italian Government in this connection, the importance of the central registration of refugees was noted.

Q. Lt. Wintersteen: "Naples Province faces an acute situation if refugees attempt to return to their homes north of the Volturno River, as the battle lines move north. Can anything be done to deter such a movement, or could the policy of the Italian Refugee French (IRF) be such as to bring these north-bound refugees within the jurisdiction of their camps and program?"

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Major Stuart: I cannot accept returning refugees into their camps since their facilities must be planned for the evacuation of former prisoners.

RECESS

Major McGeuney opened the discussion of children's institutions. He spoke highly of the cleanliness and order generally prevalent in institutions he had seen, and of the kindly and sympathetic attitude of the religious personnel who operate the institutions.

Captain Silveira spoke of the difficulty of determining the amount of financing needed for institutions. At one time in Salerno Province it was found that to provide 1300 calories of food per day the cost was 12½ lire per person, and to buy at the level of 2200 calories - the cost was 20 lire per person, per day. No way had been found to get an accurate idea of the cost of other elements of institutional management or supply. He said the Welfare Branch of R. R. Sub-Commission would be interested in any information it could obtain.

Major Birt spoke of the confused situation regarding institutional financing. Formerly institutions received funds from one or more of four principal sources:

1. Earnings from trust funds, endowments or property.
2. The Church, local parishes, the diocese or the Vatican.
3. Wealthy patrons.
4. The government, communal, provincial or national.

The first three of these sources have, in the majority of instances, been eliminated or seriously curtailed by the war. Regarding the fourth it is frequently difficult to find which level of government is to finance the institution. He recommended putting all institutions into the budget of the comune in which they are located. There was some disagreement with this, since many institutions, in effect, serve several comunes, or even receive people from other provinces.

Comm. Speciale outlined the procedure of pre-war financing. Institutions submitted annual budget estimates in advance, and grants were made, subject to change in event of increased costs. At the end of the year a grant of public funds was made if necessary to bring the institutional budget into balance.

Captain Sevin said that in Sicily he had found that institutions reported that they never had a deficit, but that was because governmental funds were always used to balance the budget. Answers to two questions were needed now:

1. Definition of the authority of Italian welfare officials in financial matters.
2. Establishment of a uniform procedure of financing within the welfare departments.

Q. Major Birt to Comm. Speciale: "Did the Ministry of Interior ever publish any statements of minimum standards which were to prevail in institutions in receipt of public funds before the war?"

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A. "There were no standards set. Each institution had a committee of management and was subject to inspection by the Vice-Prefect Inspectors. It was considered that the standards of the committee and the VPI were acceptable to the Ministry. In the absence of any standards previously formulated by Italian authorities, it would be inadvisable to issue any now. In the chaotic situation left by the war it would be difficult, if not impossible to enforce them if issued."

Captain Savin brought up the question of a funding procedure for institutions pointing out that Executive Memorandum No. 58 calls for budgets to be acted upon by the DPR before acceptance by the Finance officer. Since the government of Sicily was turned over to the Italians the delegate of the Ministry of Finance in Sicily has been acting on budgets without reference to D.P.W. This was called to Comm. Speciale's attention and he will take the situation under advisement with the Ministry of Finance.

There was considerable discussion of the chaotic situation created by evacuations of institutions during the period when the territory was under attack, extensive requisitioning of properties by the military, and the extent of war loss of buildings and equipment. Considerable praise was given to the work of those in charge of institutions for the way in which they handled very difficult situations and for the generally fine condition of their institutions. The "sweatshop" tinge to some work done in institutions and the lack of variety in institutional activity programs was deplored.

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SATURDAY

27 May 1944

Major McSweeney opened the discussion of child-care problems. Then he was assigned to Region III an important problem was presented by children who had been "adopted" by troops, and were being surrendered to the Regional Welfare Officer, under terms of an Army order forbidding units to keep children as mascots. The necessity of finding accommodation for them took Major McSweeney into many institutions. These children presented a very difficult placement problem, since they had been thoroughly "spoiled" by the troops with whom they had stayed and were not at all inclined to give up the freedom, indulgent kindness, excitement and adventure of their "army" life.

Several factors in Italian life makes child-care in Italy differ materially from the programs to which we are accustomed in the U.S. and Britain.

1. Families in Italy are larger than in our countries. This means that when fathers and mothers are killed several children, not just one or two remain to be placed.
2. Italians seem to think and plan for care by categories, e.g. separate programs for illegitimate children, without regard to the fact that they thus become marked, and separation of children by sex, which destroys family ties between brothers and sisters.
3. There is frequent placing solely on basis of financial problems of parents, a policy expressly forbidden in most State laws in the U.S.
4. Except for care given by relatives on a very informal basis, there is practically no evidence of foster home placement.
5. There is often a lack of observance of adoption laws.
6. Education of children in institutions is on a fairly definite class basis, i.e. the children of manual laborers are given education and training which is different both in kind and extent from those given children of parents of the white-collar class.

In Region III there are some cases of refugees children lost, orphaned or abandoned in the battle area, requiring placement. There have not been too many such cases, not as many as some anticipated.

The extent of juvenile delinquency in Naples had greatly disturbed the Regional Legal Section and the RMO was asked to collaborate in developing a better program and structure. In his report the RMO directed attention to the effect of the occupation on the poor children of the city. Italy is a poor country and the children had never seen the evidence of wealth and plenty that coming of the allies brought. Allied troops were careless, left coats and bags casually in cars, placing tremendous temptations before the children.

When children began to come before the courts, sentences in the first instances were too lenient. A child would be punished very much less severely than an adult for the same offense. The result was that families of the lowest social levels in Naples began using their children in crime, contributing to their delinquency.

The schools were closed much too long, and after they began to reopen the buildings in some of the areas most in need were still occupied by troops or used

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The schools were closed much too long, and after they began to reopen the buildings in some of the areas most in need were still occupied by troops or used for military purposes. The fact that schools remained closed was a definite contribution to increased delinquency.

The ASO worked with the Regional Legal Section toward a more humane handling of persons awaiting trial and a better court procedure for juveniles. He has attempted to recruit the nucleus for a probation staff, and has himself accepted responsibility for 27 children who report to him once a week.

After the schools had been reopened the Education Section found that many children (at least 65%) were underfed. The Economics and Supply Section has allowed a supplemental ration for kindergarten and day-nurseries and it is hoped to expand this gradually until a hot luncheon is provided to all school children. The dried soups brought in by the Economics & Supply are well suited for this purpose when properly prepared.

In closing, Major McGowney said that the war created many urgent problems for children and the agencies for their care. In better days we would want to establish as high a standard of care as possible, but that now we must be content with whatever we can make available.

SECRET

Major Birt stated that some kind of standard is essential. It is impossible to evaluate an institution except against a standard. Executive Memorandum No. 58 requires the establishment of standards as we should be prepared to give the Italian officials realistic leadership in their formulation.

Capt. Savin called attention to the child welfare policies and procedures of the D.F.W.S. of Sicily. A bulletin was prepared in conference with the Italian officials and contains a statement of the minimum standards used in Region I. Child Welfare Directors in provinces used these statements as a guide in their placement of children.

Q. Major Birt, directed to Comm. Speciale: "In the past, committees of citizens worked with the courts in the handling of juvenile delinquents. These committees used the Carabinieri or Civil Police to make their investigations. Is the present Italian Government satisfied with that procedure?"

A. "No. It is hoped that further reforms will lead to such investigations being made by child welfare workers."

Q. Major Birt to Comm. Speciale: "There are no juvenile courts in some provinces. Will the Italian Government start at least one in each province?"

A. Comm. Speciale was not aware that they are not now functioning as completely as they should.

In regard to placement, Capt. Savin described abuses discovered in Sicily. Couples intending to marry would have a child first, in order to secure the indemnity paid to mothers of children born out of wedlock. Also, mothers would place children in institutions for illegitimate children, and a few days later return and adopt them, in order to secure the 5 lire per day paid to foster parents. Comm. Speciale said that this was an immoral program. He explained that these payments were part of the demographic policy of the Fascist Government and that all such laws were under review.

RECESS

As the meeting reconvened, Capt. Silveira said that Brigadier Parkinson had requested the consideration of the conference on a matter not listed on the agenda, and that it was desired to bring it up at this time, while Lt. Colonel Friselle was available.

Lt. Colonel Friselle stated that recently, in Sicily, a conference of Italian Public Health Officials was convened. Lt. Colonel Pizzozero had attended, representing ASC Public Health Sub-Commission. During this conference the question of reorganization of the National Government activities in the fields of health and welfare was discussed.

The groups then meeting decided to recommend the creation of a Ministry of Health and Welfare, in which all health and welfare functions on the national level would be centered. A chart of the organization of the proposed ministry had been prepared and was submitted for discussion by Lt. Colonel Friselle. (See appendix 4). The group considered it advisable to specify that medically trained men be the heads of each of the divisions of the ministry, since the

4. Major Bart to Comm. Speciale: "There are no juvenile courts in some provinces. Will the Italian Government start at least one in each province?"

5. Comm. Speciale was not aware that they are not now functioning as completely as they should.

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MEETING

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The meeting being opened to discussion, Lt. Wintersteen pointed out that the proposed chart of organization did not actually include the most important welfare functions. The terms used in the chart refer to two social insurance systems, and are not inclusive of the most important welfare activities. The question was raised if the doctors were talking about a Ministry of Health and Social Insurance, rather than Health and Welfare.

Capt. Savin stated that this subject is of the greatest importance. It was the first proposed change in a European government and would be given great attention everywhere, if effected. Differences between British, American and Italian administrative practice and philosophy must be recognized. To Capt. Savin, this proposal was like stating that the Social Security Board and the Children Bureau should be placed under the U.S. Public Health Service.

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The doctors of the States would be against it such an idea. He agreed that a Joint Ministry of Health and Welfare would be possible but proposed two separate major sections which would operate independently on all levels of administration. These would come together only at the top, in the person of ministerial rank who would represent both in the high councils of the government. The head of the welfare section should be a person familiar with welfare organization and procedure, and the position should not be limited to doctors. The point is welfare experience, not medical training.

14. Colonel Frizella made clear that the present draft of the chart was a preliminary draft, prepared as a basis of discussion. He believed that its proponents welcomed criticism and proposals for amendment. Major Henry proposed that three RWOs be designated to advise with the Public Health Sub-Commission on this or similar problems. All present concurred and the Chairman agreed to request Brigadier Parkinson to take this action. Capt. Savin also suggested the inclusion of Italian welfare personnel from the provinces in future discussions.

Returning to the agenda, Major McWeeney introduced Signorina Luigia Barbati, Secretary of the Youth Committee, and consultant to the ACC Education Sub-Commission, to lead the discussion on planned recreation.

Miss Barbati said that the Sub-Commission had given its first attention to the problems of school buildings and equipment and to pressing problems of health. Many school buildings have been damaged or are used by the military and the first effort was to repair and free enough buildings so that the schools could reopen. Then as children returned, health problems came to light and demanded action. Only recently had it been possible to give any attention to planning recreation programs. Efforts have been made to secure playground space in the congested areas of Naples City, but both space and equipment are difficult to obtain. The program being tentatively formulated will include sports, handicrafts, club activities and spectator programs. The Sub-Commission realizes that these programs must be well planned, for it will be difficult to attract the children away from the free-and-easy, exciting life of the streets.

Major Birt said that he has been much interested in the question raised by the abolition of G.I.L. Its program had had 4 elements: Fascist party propaganda, material relief, military training and sports, including club activities, handicrafts and dramatics. The relief provided was a duplication of other relief programs and had been clearly an effort to buy interest in other phases of G.I.L. activity. The military training was definitely out of place. The propaganda was mixed in with all other activities but had definitely to be eliminated.

The fourth element of G.I.L. met definite needs and should be continued, under other auspices. Foggia Province has considered the subject and believes it best to put all these forms of recreation activity under the schools. The great problem is with the older children, 12 to 18 years of age, who are out of school. Planning a program for them, in the schools is difficult but Foggia is working in that direction. The plan is to have

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The welfare department will assist with school lunches, and provide for the relief needs of families, but the program planning phases will be the responsibility of Education, rather than Welfare.

There was general agreement with Major Birt's statement of the problem and Foggia Province's procedure.

Major Birt went on to point out that many of the activities proposed both in recreation and in the assistance and child welfare fields previously discussed, would need large numbers of carefully trained personnel. Italy has not had schools of social service administration and suffers now from lack of trained and experienced personnel.

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It was the consensus that the Italian National Government should give early attention to establishing courses in social services in the higher educational institutions. This was adopted as a recommendation of the conference to the Italian Government.

The Chairman closed the meeting with expressions of thanks to Comm. Speciale and his staff present in the meetings for their interest and help, and to Captains Silvagni and Savage for the excellence of their preparations for the conference.

In reply, Comm. Speciale expressed the thanks of the Government for the interest of the groups in the welfare of the Italian people and assured the conference that the closest attention would be given our comments, suggestions and recommendations.

Adjournment.

T. E. WINTERSTEEN,
1st Lt. A.U.S.
Secretary.

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T. E. WINTERSTEEN,
1st Lt. A.U.S.
Secretary.

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HARRISON

Welfare Conference 26 May 1944

Brigadier Parkinson's Opening Remarks.

1. A welcome to H.E. Commandatore Renato Spiciale. His presence here is one of the many signs we are receiving of the close cooperation of the Italian Government with this Sub-Commission and it is unnecessary for me to say how much we value and appreciate this.
2. The policy of the Allied Control Commission is that the Italian Government should not be prevented for particular legislation and our task is to operate existing forms of government after removal of undesirable elements, and not to introduce reforms and changes.
3. This is not intended to mean that we should not assist the Italian Government and give our support where possible to any changes they may wish to make and that they wish to make certain changes in their Public Health and Welfare Services was brought to light at a recent meeting held at Palermo when the question of setting up a Ministry of Health was discussed.
4. It would not be right however to suggest that the views expressed there were those of the whole country and as the creation of a new Ministry in any country is not just one of passing moment, it must take time and must get the wholehearted supported of those it most concerns.
5. The wish of this Sub-Commission as far as Welfare is concerned is not to destroy machinery just because it had a Fascist origin, but rather to pick out all that was good and by modifying it to meet the needs of a changing world to weld it into something which will remain with the Italian people as one of the good things which sometimes cometh out of evil long after the horrors of this war are forgotten.
6. I am very glad to see so many old friends here this morning and to have an opportunity of hearing something about your work which has been so well performed, often under the most difficult circumstances on account of shortage of personnel, transport, etc., and I would like to take this opportunity of thanking the American and British Red Cross for the valuable help they have given us.
7. I will not take up more of your time as you have a lot agenda. I hope you will have a very satisfactory conference and will be able to solve some of the many problems that you meet in your daily work and my one regret is that I cannot be here tomorrow.

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APPENDIX II

Statement made by the Director General
of Civil Administration, Comm. Rosario
Speciale at a Welfare Meeting held by
The Allied Control Commission
26 May 44.

I am glad to participate at the meeting of the Allied Military Government officers who direct welfare activities in liberated Italy, and to express to them the deepest gratitude for the high spirit of humanity which inspires their work of alleviating the suffering of the needy population.

The Allied command, upon reaching Sicily, saw the necessity to give a new organization to welfare in the Island.

It is probable that such necessity was determined from the state of complete disorder, caused by the war, in the various welfare services of Sicily, some of which were not in condition to function because of the continuous movement of population from one city to another for reasons of safety, because of the moving of some offices to places less exposed to military action, and because of the paralysis in railway, postal, telegraphic and telephonic services; thus it was not even possible to send the funds necessary to the granting of assistance.

What was seen in Sicily took place, until recently, in many other provinces, causing a condition of want among the population which was worthy of note.

These premises may serve to mitigate the unfavorable impression of the Allied Military Government on the functioning of welfare in the liberated provinces, which, without the causes above indicated, would not, perhaps have been noticed.

The Minister of Interior, taking into consideration the desire expressed by the Allied Control Commission, has given instructions to the High Commissioner in Sicily that, as a temporary measure, there be maintained in operation on the Island the now welfare organization created by the Allied Government, even though lacking a law which juridically sanctions its operation.

Subsequently, it was asked that a permanent character be given to the reform extending it to the other liberated provinces and to those that will be returned to Italian administration.

The Italian Government thinks it not opportune to undertake a reform of such social importance when yet so large a part of the national territory awaits liberation and when the country still needs to undergo long labour before reaching a definite adjustment. The reform, in addition, implies a substantial modification in the existing legislation of public assistance and charity, which has an old tradition in Italy, and it is well that the regular legislative assembly pass upon such a reform at the time when, with the total liberation of Italy, it will be possible to proceed with the reconstitution of the two branches of Parliament on the basis of new democratic principles.

Until this happens, the Minister of Interior proposes to prepare quickly a

ment of population from one city to another for reasons of safety, because of the moving of some offices to places less exposed to military action, and because of the paralysis in railway, postal, telegraphic and telephonic services; thus it was not even possible to send the funds necessary to the granting of assistance.

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Until this happens, the Minister of Interior proposes to prepare quickly a legislative provision with the object to create, of a temporary character, in all liberated territory and in that which will be subsequently freed, an office analogous to that existing in Sicily which will take in all activities that are social welfare in nature, an office endowed with autonomy, capable, that is, to carry on its work quickly without having first to receive particular authorizations from the Ministry.

The new organization contemplates the establishment in every capital city of the province a provincial office whose function shall be to make possible the realization of all the services deemed necessary to the diversified classes of needy persons: the aged, adults, children, infants, excluding, however, all health services.

In order that the provincial welfare office may attain the scope of work assigned to it, it shall have a branch in every commune, that is, the Ente Comunale di Assistenza in its new form as established by the recent law-decree of April 11, 1944, No. 125.

To avoid useless expenditures the new offices shall avail themselves, insofar as possible, of the personnel of the agencies temporarily suppressed and to limit the hiring of new personnel to such that is strictly needed.

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APPENDIX II - Sheet 2

The necessary funds shall be provided in part by the agencies whose functions pass on to the new welfare organizations, and in part by the government, providing for this purpose contributions towards their respective budgets as a supplement which it actually gives to the Ente Comunale di Assistenza and other forms of financial assistance charged inclusively to it.

As regards the institution of a Regional Welfare Department the Ministry of the Interior retains that for the present it is best that such a plan be put off whether it be because it seems of little practical usefulness, or whether because it could bring about conflicts in function in Sicily and in Sardinia with the High Commissioners, or for reasons of economy, especially when it is considered that regional coordination of welfare is not an essential objective, whereas an efficacious policy of control of the provincial and communal welfare activities, may well be placed, in each province, with the Prefect, who should be always responsible for the proper functioning of the services that are operating within his jurisdiction.

The Ministry of the Interior plans to keep itself in rapport with the sections of the Allied Control Commission which are responsible for welfare in order to make factual the particulars of the reform which, it is well to make clear, must have for the present a temporary status.

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APPENDIX III

HEAD HEADQUARTERS
ALLIED CENTRAL COMMISSION
May 30, 1941
Public Welfare Sub-Commission
(Welfare Branch)

Conference of Regional Welfare Officers,
28 and 29 May 1941.

20 May 1941

26 May

0930 - 1045

Introduction.

1. Opening remarks

Brig. Parkinson, Director,
Public Welfare Sub-Commission.

2. Discussion of Public Welfare
and All-Allied Welfare

Comandante Posarino
Speciale, Prefetto del
Genio, Direttore Generale
dell'Amministrazione
Civile.

3. Organization of
Working.

Capt. E. E. Silveira,
Chief, Welfare Branch.

0930 - 1045

Provincial Welfare Departments and related problems. Discussion leader: Capt. W. H. Savin,
Regional Welfare Officer, Region I.

Recess.

1045 - 1100

1100 - 1200

Continuation, with special reference to functions of ECA, and types and standards of general relief.

1100 - 1530

Refugees in Disposal Areas.
Discussion leader: Capt. Hanson Carver, Regional
Welfare Officer, Region II.

Recess.

1530 - 1545

1545 - 1700

Institutions: standards, financing, coverage.

27 May

0900 - 1030

Child Welfare, with special reference to CMI,
child placing, foster homes.
Discussion leader: Major John McSweeney, Regional
Welfare Officer, Region III.

1030 - 1045

Recess.

1. Opening remarks.

Comandante Benito
Sordani, Direttore del
Regio, Direzione Sanor-
ale dell'Amministrazione
Civile.

3. Communication of
Meeting.

Provincial Welfare Department and related prob-
lems. Discussion leader: Capt. W. H. Gavin,
Regional Welfare Officer, Region I.

Recess.

Continuation, with special reference to functions
of RWA, and types and standards of general relief.

Refugees in Dispersal Areas.
Discussion leader: Capt. Ransom Carver, Regional
Welfare Officer, Region II.

Recess.

Institutions: standards, financing, coverage.

27 May. 0900 - 1030

Child Welfare, with special reference to ORML,
child placing, foster homes.
Discussion leader: Major John McSwiney, Regional
Welfare Officer, Region III.

Recess.

1030 - 1045

Continuation, with special reference to planned
recreational work.

1045 - 1200

Particular subjects desired to be discussed by
Welfare Officers.

1100 -

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APPENDIX IV



Dirett. Gen. Servizi
Amministrativi

Dirett. Gen.
Servizi di
Laboratorio

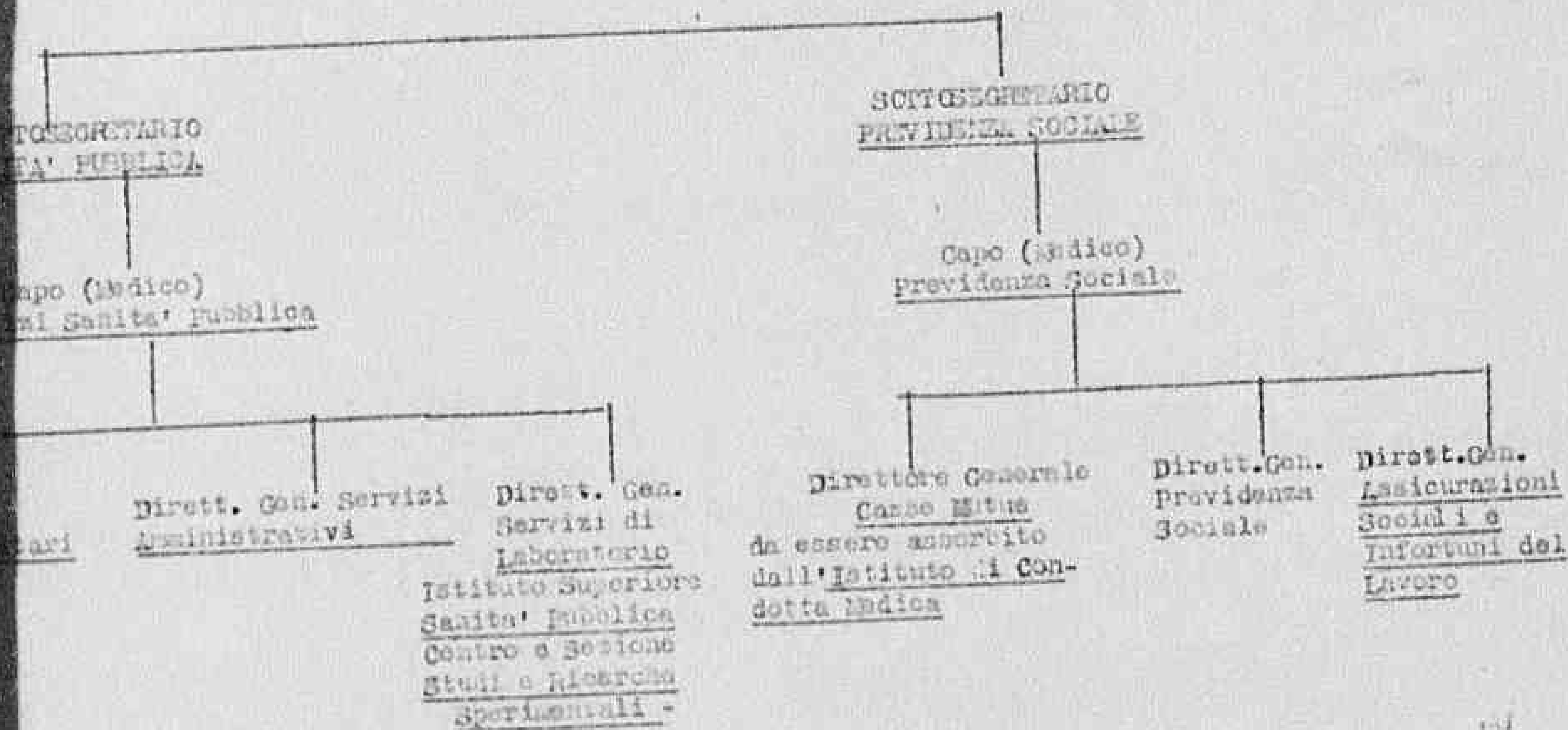
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CONFIDENTIAL**APPENDIX V****PARTICIPANTS IN THE CONFERENCE OF REGIONAL
WELFARE OFFICERS 25 - 27 May 1944**Allied Control Commission Personnel:Public Health Sub-Commission:

Brigadier G. S. Parkinson, Director, Public Health Sub-Commission.
 Lt. Colonel Frizelle, Chief, Public Health Branch.
 Captain Earl S. Savage, Executive Officer.
 Captain E. N. Silveira, Chief, Welfare Branch.
 1st Lt. Eugene Markborough, Public Health Nursing.
 2nd Lt. Edwin C. Wilson, Public Health Nursing.

Regional Welfare Officers:

Major John McQuinn	Region III
Major Charles J. Pitt	Region V
Major Raymond Kenny	Region IV
Capt. William H. Gavin	Region I
Capt. Benson Carver	Region II
Capt. C. S. O. R. Brooke	Region VI
Capt. John Hallen	AME 5th Army
Capt. F. M. Wilcox	AG 5th Army

Other Allied Control Commission Officers:

Lt. Colonel T. V. Smith, Director, Education Sub-Commission.
 Major T. G. Harding, Public Relations Branch.
 Major Luigi Ottico, War Material Disposal Sub-Commission.
 Major Reakes, Civil Affairs Branch.
 Major J. C. Stuart, Italian Refugee Branch.
 Lt. Tom H. Winterstein, Provincial Welfare Officer.

Civilian:

Luigia Bartoli, Education Sub-Commission.

Red Cross personnel:

Mr. W. H. Jefferson, Director Civilian War Relief, ABC.
 Major C. Knight, British Red Cross.

Italian Government Personnel:Ministry of Interior

Comm. Mario Speciale, Director General, Civil Administration.
 Dott. Domenico Minerva, Consigliere, Civil Administration.
 S. Ten. Ignacio Greco, Civil Administration.

Captain Paul S. Savage, Executive Officer.
 Captain E. H. Silveira, Chief, Welfare Branch.
 1st Lt. Eugene Yarbrough, Public Health Nursing.
 2nd Lt. Maria C. Wilson, Public Health Nursing.

Regional Welfare Officers:

Major John McKeeney	Region III
Major Charles J. Hart	Region V
Major Raymond Henry	Region IV
Capt. William H. Gavin	Region I
Capt. Hanson Carver	Region II
Capt. C. S. O. B. Brooke	Region VI
Capt. John Haller	AB 8th Army
Capt. T. M. Wilcox	AG 5th Army

Other Allied Control Commission Officers:

Lt. Colonel T. V. Swift, Director, Education Sub-Commission.
 Major T. G. Bardin, Public Relations Branch.
 Major Luigi Grasso, War Material Disposal Sub-Commission.
 Major Rankes, Civil Affairs Branch.
 Major J. C. Stuart, Italian Refugee Branch.
 Lt. Tom E. Antaresen, Provincial Welfare Officer.

Civilian:

Luigia Barbetti, Education Sub-Commission.

Red Cross personnel:

Mr. W. A. Jelferson, Director Civilian War Relief, ARD.
 Major C. Wright, British Red Cross.

Italian Government Personnel:

Ministry of Interior

Comm. Rosario Speciale, Director General, Civil Administration.
 Dott. Domenico Minerva, Consigliere, Civil Administration.
 S. Tan. Ignazio Graco, Civil Administration.

Italian Refugee Office:

Vito Zamboni, High Commissioner.
 Prof. Luigi Joscchia, Magistral Medico.
 Avv. Francesco Oneto.
 Mario Morrice.

CONFIDENTIAL

785017

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB-COMMISSION
MALARIA CONTROL BRANCH
APO 39A

19 JUN 1944

16 June, 1944.

TECHNICAL MEMORANDUM)

NUMBER

4

)

NOTE OF THE TREATMENT OF MALARIA WITH
ATABRINE-MEPACRINE

1. INTRODUCTION.

Although a fair amount of atabrine was used in Italy before the war, quinine was the drug most commonly employed for treatment of malaria. During the present season, practically no quinine will be available for treatment of civilians, except where local supplies remain from last year. Therefore, it seemed logical to prepare this memorandum on the subject of atabrine and its use in malarial therapy. The views presented are those of a majority of observers but in no sense whatever constitute a directive. Some of the information may be of use to Regional Public Health Officers for presentation to civilian doctors. Prophylaxis is not discussed because supplies of atabrine are not sufficient for suppressive treatment of civilians.

2. ATABRINE - MEPACRINE.

Atabrine is an acridin dye, a bright yellow, odorless, crystalline powder having a bitter taste. It was developed in Germany, first appeared during the years 1930-33, and since that time has come into world-wide use. According to the U. S. Pharmacopoeia, atabrine has the following formula: $C_{23}H_{39}ClN_3O \cdot 2H_2O$.

Atabrine and closely related compounds have appeared under a confusing variety of names, some of which are given in the following table:

<u>Acridin X1</u>	An Indian, atabrine-like compound;
<u>Acridine</u>	Russian trade name;
<u>Atabrine</u>	Winthrop trade name for atabrine hydrochloride for U.S.A. and
<u>Peasequin</u>	(Other U.S.A. firms are now also making atabrine under the
<u>Winthrop</u>	Winthrop patent);
<u>Atabrin</u>	German trade name;
<u>Chinocobina</u>	Italian product akin to atabrine;
<u>Chinacrin dihydrochloride</u>	Former non-proprietary name used in New and Non-

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<u>Acridin X:</u>	An Indian, atabrine-like compound;
<u>Acridiquine:</u>	Russian trade name;
<u>Atabrine:</u>	Winthrop trade name for atabrine hydrochloride for U.S.A. and possessions; (Other U.S.A. firms are now also making atabrine under the Winthrop patent);
<u>Atabrin:</u>	German trade name;
<u>Chemiochina:</u>	Italian product akin to atabrine;
<u>Chinacrin dihydrochloride:</u>	Former non-proprietary name used in New and Non-official Remedies, U.S.A.;
<u>Erion:</u>	Former German experimental name. Sometimes seen as non-proprietary name in British colonies;
<u>Italichine:</u>	Italian atabrine;
<u>Mepacrine hydrochloride:</u>	Official British Pharmacopoeia name;
<u>Metoquina:</u>	Winthrop trade name in Latin America;
<u>Quinacrine:</u>	French trade name. Also used by English firm, May and Baker;
<u>Quinacrine hydrochloride:</u>	Official U.S.A. Pharmacopoeia name;
<u>Atabrin misonat:</u>	German trade name for dimethylsulphonate of atabrine, formerly used for parenteral injections;
<u>Atel:</u>	German trade name for a combination tablet of atabrine 0.1 gram and plasmochin 0.01 gram;
<u>Metoquina compuesta:</u>	Winthrop trade name for atel;

b. Action on sporozoites.

There is no experimental proof that atabrine has any effect on sporozoites, hence the general belief that it will not prevent infection.

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c. Action on schizonts.

Atabrine is essentially a schizonticide, highly active against asexual forms of all species of the plasmodia of human malaria. Against some strains of P. falciparum, atabrine seems more effective than quinine. For instance, James found that he could control infections caused by an Italian strain of falciparum more readily with atabrine than with quinine. Ciura and his colleagues had the same experience in Romania. On the other hand, Field observed that Malayan strains of falciparum responded a little better to oral quinine than to oral atabrine.

Atabrine in 0.3 gram daily initial doses acts more slowly than the usual doses of quinine (10-15 grains) in cases of falciparum malaria, but somewhat more rapidly in vivax infections. With higher initial doses of atabrine the two drugs appear to be equally effective.

It is not known how atabrine acts to cure malaria but the experiments of James suggested a more direct attack on the parasite than is seen with quinine.

d. Action on gametocytes.

Atabrine, like quinine, does not destroy falciparum gametocytes nor have any apparent effect on their vitality. Of course, by its effective action on schizonts, it gradually causes the disappearance of falciparum gametocytes by bringing an end to schizogony. Vivax gametocytes usually disappear as rapidly under atabrine as under quinine treatment. Quertan gametocytes are generally more resistant.

e. Action as regards relapses.

When atabrine first appeared it was thought to have a higher sterilization value than quinine. But with wide-spread use during the past few years, early optimism has gone and it is generally believed that there is not much difference between short courses of quinine and the usual atabrine treatment in regard to the prevention of vivax relapses. It may be that the use of higher initial doses of atabrine will give better results. In general, atabrine seems more effective than quinine in preventing falciparum relapses.

f. Plasma concentration.

It is known that upon absorption, atabrine is taken up by many tissues of the body. As regards its action on malaria, the concentration of atabrine in blood plasma is of the greatest importance. Methods for determining plasma atabrine levels have been devised and are becoming available in Army hospitals.

g. Excretion of atabrine.

Atabrine is slowly excreted and has been found in the urine of patients as long as two months or more after treatment. This is in marked contrast to quinine, which is generally not found in the urine for more than two days after treatment has been stopped.

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3. TREATMENT.

a. General statement.

Treatment regimes for malaria have been more numerous than malarialogists. No series of cases has seemed too small, no bed-side experience too limited, for the addition of another item to the already mountainous accumulation of notes on ways to treat malaria.

The reasons are obvious. In the first place, malaria is probably the most important disease in the world today. Secondly, there has been no treatment devised thus far which will prevent malarial relapses in a considerable percentage of cases. Thirdly, many cases of malaria certainly will proceed to recovery on any medication or without medication. Finally, the term malaria refers to a complex of diseases, caused by one or more of four recognized species of plasmodia, each consisting of little known, but probably numerous strains which, even within the same species, vary widely in virulence and in response to therapy. In these circumstances, it is natural that search for a better anti-malarial continues. The clinician without sufficient experience, or who is not statistically educated, frequently gives weight

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to results which have no real significance.

Although doubtless close at hand, the day is not yet here, when it is proper to advocate specific therapeutic regimens for individual species (and perhaps strains) of plasmodia. At present, despite the variety of types of clinical malaria, it is practical, for purposes of treatment, to consider each type under one or the other of two categories:

- (1) Malaria cases in which oral medication is possible;
- (2) Malaria cases in which oral medication is not possible immediately.

2. Malaria Treated by Oral Medication.

As a general rule, any patient with malaria who can swallow and retain an anti-malarial drug should be treated orally, not parenterally. The exceptions are:

- (1) Patients with cerebral or elgid malaria;
 - (2) Patients suffering from hemorrhagic falciparum malaria, with epistaxis, rectal bleeding, or petechial hemorrhages;
 - (3) Patients with severe gastro-intestinal symptoms;
 - (4) Patients with P. falciparum infections, who have hyperpyrexia or whose blood smears show that five percent or more of the erythrocytes are parasitized;
 - (5) Patients who retain medication, but do not absorb it and who, therefore, do not respond to the anti-malarial therapy, but remain seriously ill.
- Only such patients, (provided diagnosis of malaria has been confirmed by positive blood smear) and those others who can not swallow or retain medication, should be treated parenterally.

The standard treatment of malaria with atabrine has usually consisted of three tablets a day for five days. These tablets are given, one after or during each meal, with a glass of water or fruit juice. Sometimes this regimen is initiated by giving quinine sulfate, 10 grains, three times a day for two or three days before starting the course of atabrine. This is the treatment recommended for civilian use in Italy in 1944, using the preliminary quinine if local stocks are available. Children under 1 year will tolerate 0.05 gram of atabrine daily; 1-4 years of age, give 0.1 gram daily; 5-8 years of age, give 0.2 gram daily; over 8 years, give adult dose of 0.3 gram daily. Administer the fractional doses in milk if possible.

It now appears that, analogous to sulfanamide therapy, it is desirable to obtain a relatively high plasma level of atabrine early in the treatment. The following regimen has been adopted by the Surgeon General of the United States

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1st day. - Atabrine hydrochloride 0.2 gram (3 grains) and sodium bicarbonate 1 gram (15 grains) by mouth, with 200 to 300 c.c. of water, sweetened tea, or fruit juice, every six hours for five doses. This is a total of 1 gram of atabrine (15 grains) during the first 24 hours.

2nd to 7th days. - Atabrine - (mepacrine) hydrochloride 0.1 gram (1½ grains) three times a day with or immediately after meals.

By this regime the patient receives a total of 2.3 grams of atabrine during one week's treatment. No plasmechin (pamaquin) is given, as a rule. If a relapse occurs, it is treated as a new infection.

In the British Army, the standard treatment at present consists of quinine, grains 10, in solution three times daily for three days, then mepacrine 0.1 gram three times daily for five days. The mepacrine is started on the third day of treatment and is given concurrently with the quinine on that day. Following the last day of atabrine, there are two days of rest from treatment.

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Then pamaquin (plasmoquin) 0.01 gram is given three times daily for three days.

2. Malaria Requiring Initial Parenteral Treatment.

Whenever malaria is complicated by disorders such as intense nausea, persistent hiccup, severe intestinal colic, diarrhea, epistaxis, rectal bleeding, petechial hemorrhages, hyperpyrexia, collapse, delirium, or coma, immediate parenteral treatment is indicated. This also applies to patient whose blood smears show that five percent or more of the erythrocytes are infected with P. falciparum. Parenteral therapy should also be administered to those who have a positive blood smear but do not respond to oral therapy, remaining seriously ill at the end of the 3rd day of treatment.

Many observers believe that atabrine should not be given intravenously because sudden, and sometimes fatal, toxic reactions may occur. But atabrine functions well when given intramuscularly and is not toxic in the usual doses. The following procedure is recommended by the Surgeon General of the U.S. Army with concurrence by the National Research Council:

Atabrine (mepacrine) dihydrochloride 0.2 gram (3 grains) in sterile distilled water 5 c.c., is injected intramuscularly, with the usual precautions, into each buttock. (Total 0.4 gram or 6 grains). If necessary, one or two similar doses of 0.2 gram (3 grains) may be given at intervals of six to eight hours. As soon as oral administration is feasible, atabrine hydrochloride should be given by mouth, as described above, in such doses as to give a total by both routes together of 1.0 gram (15 grains) in the first 48 hours. This should be followed by 0.1 gram (1 1/2 grains) three times a day with, or immediately after, meals for five days.

Some quinine dihydrochloride will be available for civilians requiring parenteral treatment. It should be given intravenously in doses of 0.6 gram (10 grains) in sterile physiological saline 300 to 400 c.c., injected slowly. This dose may be repeated in 12 hours. Then oral atabrine should be started.

4. TOXIC MANIFESTATIONS OF ATABRINE - MEPAKRINE.

Atabrine is capable of causing toxic reactions and is not tolerated by certain individuals, even in average therapeutic doses.

The toxic symptoms of atabrine vary from mild gastric discomfort to severe vomiting and diarrhea, with abdominal cramps. Headache and fever may be present. Existing diarrhea and dysentery may be intensified. Mental symptoms, such as lightheadedness, mild excitement, and, rarely, transient psychoses, have been reported. In a percentage of cases there may appear a lemon-yellow tinting of the skin, because of the deposition of atabrine dye. It must be emphasized that this yellowing of the skin definitely is not jaundice. It disappears within a few weeks after termination of treatment. The ocular conjunctiva, which usually is stained in jaundice, is rarely tinted by atabrine. (At the inner and outer sides of the cornea, where the conjunctiva sometimes thickens, a yellow pinguicula may be mistaken for

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5. TREATMENT OF CIVILIANS.

It will frequently not be possible to treat civilian malarial in hospitals or even in homes. Cases will come to ambulatory or dispensaries for treatment which they may or may not receive from skilled hands. Such cases, which may be a majority in some areas, will usually have to be treated from day to day as they apply at the dispensary. A complete course of atabrine tablets may not safely be given into the keeping of these cases at the first visit. For atabrine commands a high price in the black market, and, moreover, even those who could follow directions may not know how to do so. Therefore, almost all that can be done is to administer two tablets and give the patient one more with instructions to take it before going to bed, and if return for similar treatment each day for a week.

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In most provinces patients will be treated free in their homes by a community doctor, engaged by the local anti-malaria committee, the Medico Provinciale, or by a bonification scheme. Each Regional Public Health Officer should attempt to have such a scheme functioning properly in malarious communes, and to see that adequate supplies of atabrine are available. As stated in Executive Memorandum No. 54, dated 25 April, 1944, paragraph 10, 'Each Regional Health Officer, A.C.C., will requisition from the Medical Supply Branch, Public Health Sub-Commission, A.C.C., the amount of atabrine/mepacrine required by his regional provinces. The supply Branch will send the desired amount to the Regional Headquarters, from which provincial distributions will be made to the local malaria committees on requisition.'

6. SUPERVISION.

Finally, it must be stressed that atabrine supplies are limited and if wasted or used for prophylaxis, they may be insufficient for therapeutic needs towards the end of the season. Therefore, careful supervision of the atabrine supplies is required. No civilian clinical case of malaria need go untreated this year if (a) suitable organization for treatment is set up in each malarious commune; (b) suitable requisitions are made for the required supplies; and (c) if the atabrine supply is properly used.

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3 JUN 1944
HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB-COMMISSION
MALARIA CONTROL DIVISION
APO 344

1 June 1944

TECHNICAL MEMORANDUM)
NUMBER 3)

SUBJECT: HAND-KILLING ADULT MOSQUITOES.1. INTRODUCTION.

The Malaria Commission of the League of Nations in 1927 recommended that, "An active and energetic endeavor should be made, wherever possible, to induce householders, especially housewives, to make the killing of adult mosquitoes found within the house a part of the daily cleaning task". The Commission was convinced that, "this measure, if it could be effectively carried out, would have very remarkable results".

As a matter of fact, this measure was used effectively by Gorgas in the Panama Canal Zone, where systematic hand destruction of adult mosquitoes notably reduced malaria incidence in certain installations. Ross, in 1911, also emphasized the possibilities of this method and suggested that children should carry it out.

Certain popular malaria control bulletins published by the Italian Government, prior to the war, included hand-killing of adult anophelines among practical measures believed to be within the capabilities of average families.

But not much attention has been paid to these considerations because, normally, it has been easier to use other means of destroying mosquitoes or of screening them out. Even in countries like Italy, where malaria carrying anophelines usually spend their daylight hours resting on walls and ceilings of bedrooms and stables, easily accessible, very little hand-killing of these insects has been practiced.

Yet this measure of hand-killing adult anophelines in the daytime would seem to have potential value, especially during the present season in Italy, where little or no insecticide or screening will be available to civilians. Here the malaria-carrying mosquito is highly vulnerable in the daytime. If systematically and well done, hand-killing in a village would certainly reduce the transmission of malaria to a marked degree by destroying a high percentage of infected mosquitoes before they could become infective. It is known that the plasmodium requires from 10 to 14 days in which to mature into the infective sporozoite stage.

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The purpose of this memorandum is (a) to suggest that attempts be made to get householders in malarious areas to destroy as many as possible of the mosquitoes which rest on the walls and ceilings of their bedrooms and stables in the daytime; and (b) to outline some details of this measure of hand-killing adult anophelines.

2. METHODS.

The simplest method of hand-killing mosquitoes resting on the walls and ceilings is to hit them with a fly-swatter. The swatter may be made in the usual way of a square of wire screen-cloth fastened to a handle, or it may be improvised from paper, cloth, leather, small twigs, rushes, or other material. A damp towel, half-folded lengthwise, makes a good mosquito swatter. It must be used in a slapping rather than a brushing manner.

Slapping mosquitoes with the hand is less satisfactory, but it may be done if the hand is kept as flat as possible and is pushed rather than waved against the insect. Mosquitoes on the wing are more easily hand-caught if palms and

fingers are wet, especially if the water is soapy.

Anophelines are sluggish in the daytime. Blooded individuals are easy prey, others require but little skill. Children soon become adept at destroying resting mosquitoes in houses and outbuildings.

Simple collecting cans may be made from small shallow tin containers holding cotton, paper, cloth, or matted hay soaked in kerosene, crude oil, soapy water, or soft mud. The tins are mounted on handles, one tin at the end for mosquitoes on the ceiling and one tin on the side for those on the walls. When disturbed, a resting mosquito will fly down into the moist madding, where it sticks long enough to be overcome by fumes or crushed by fingers. With a scarcity of almost everything but mosquitoes, some ingenuity may be required to make an effective collecting can. In some areas it might be possible to have a quantity of mosquito catchers manufactured locally and cheaply from salvage tins. The appended diagram illustrates a type of catcher used in Italy before the war.

If a room can be closed, a smoke smudge will paralyze all mosquitoes present so that they fall to the floor. Burning a little damp hay or green vegetation on a spade or sheet of metal will produce smoke generally dense enough to paralyze mosquitoes after 15 to 20 minutes exposure. Adding leaves of mint or eucalyptus to the fuel may increase the toxicity of the smoke. But smoke does not kill the insects, as a rule, so they must be swept up and burned or otherwise destroyed while temporarily paralyzed.

The best time of day for hand-killing anophelines is in the early forenoon. The insects are most apt to be found resting on walls and ceilings of bedrooms, stables, pig styres, and out-houses. Some will rest under culverts, but the majority are in buildings, especially in the darker corners. White-washing or calclining walls and ceilings of bedrooms and stables not only gives general hygienic improvement, but makes it much easier to see resting mosquitoes. In some locations a good catching time is one hour after sunset, when the insects may collect at windows and screens.

3. CONCLUSIONS.

Naturally, this measure of hand-killing anophelines will not have much effect unless it is done systematically in a majority of the houses of a village. But in view of the increased malaria potential this season, with greatly reduced facilities for malaria control, it would seem logical to push hand-killing for all it is worth. In some areas it is perhaps the only measure of malaria control possible for the individual householder. Screens, bed nets, sprays, repellants, and prophylactic quinine or atabrine will generally not be available. The mosquito that spreads malaria will usually be found sitting on the walls and ceilings, easily accessible for hand-killing. The householder is not helpless against an insect which sleeps all day right under his hand.

Attempts might well be made to institute effective local propaganda regarding this measure. Civil, school, and church authorities might be helpful. Locally prepared posters, handbills, and other publicity measures should be considered. Competition for prizes might be arranged for school children. At any rate the sleepers should be kept under control.

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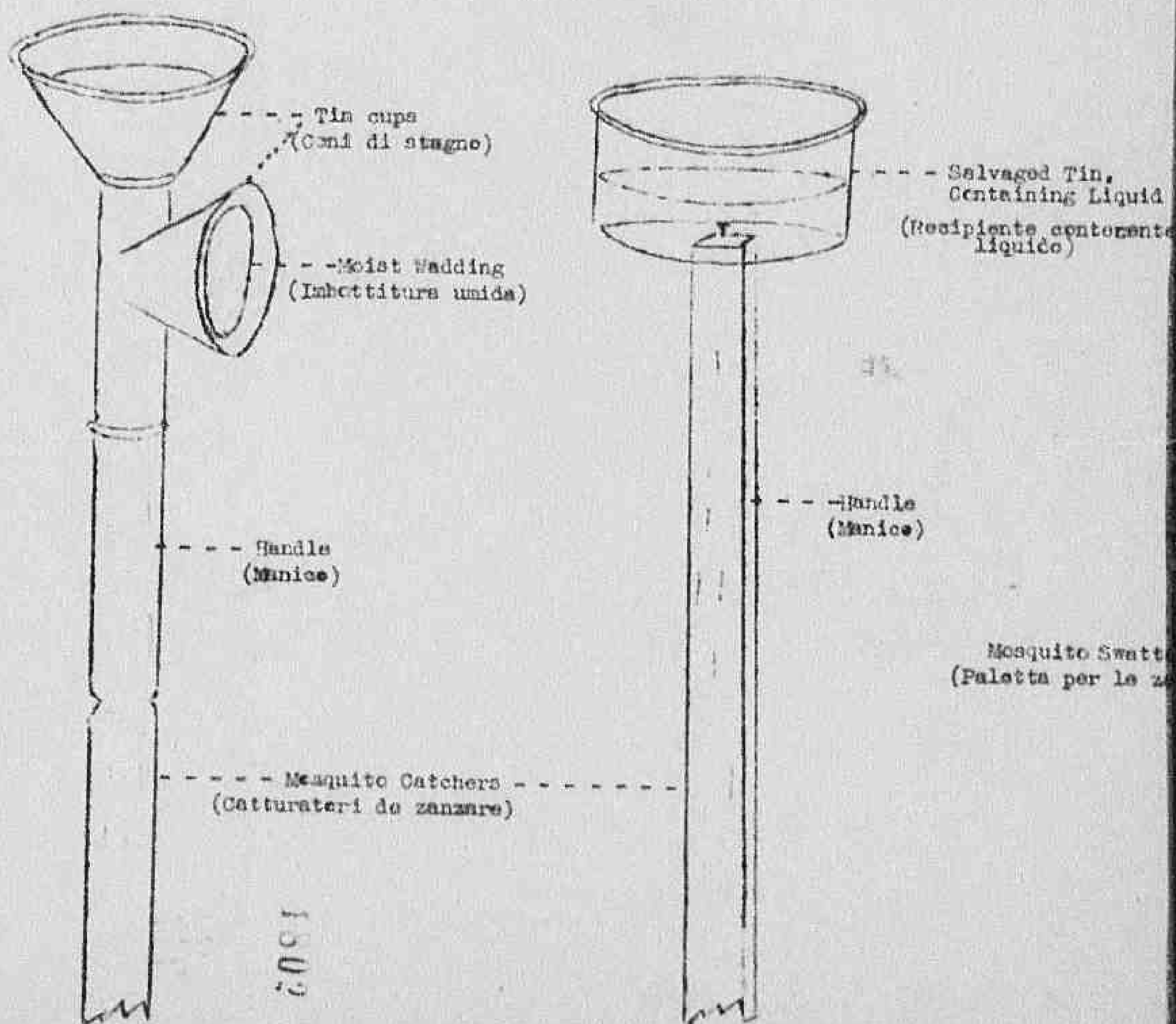
Naturally, this measure of hand-killing anophelines will not have much effect unless it is done systematically in a majority of the houses of a village. But in view of the increased malaria potential this season, with greatly reduced facilities for malaria control, it would seem logical to push hand-killing for all it is worth. In some areas it is perhaps the only measure of malaria control possible for the individual householder. Screens, bed nets, sprays, repellents, and prophylactic quinine or atabrine will generally not be available. The mosquito that spreads malaria will usually be found sitting on the walls and ceilings, easily accessible for hand-killing. The householder is not helpless against an insect which sleeps all day right under his hand.

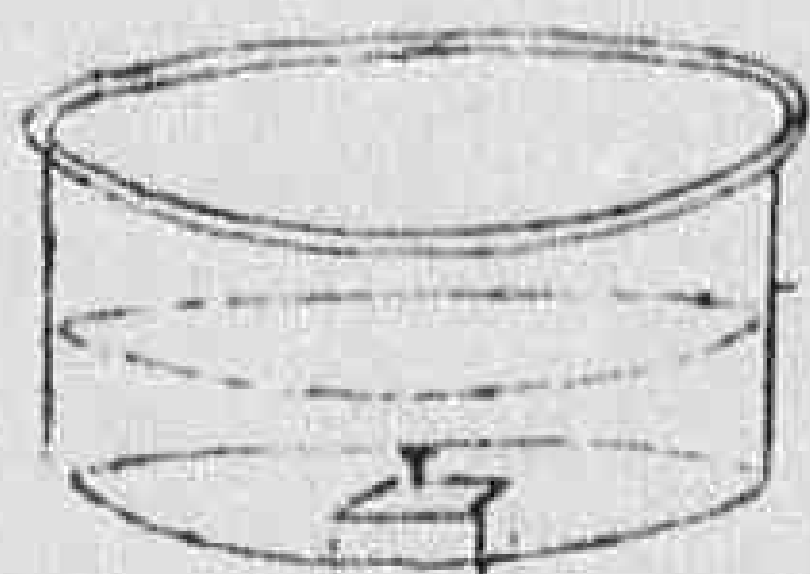
Attempts might well be made to institute effective local propaganda regarding this measure. Civil, school, and church authorities might be helpful. Locally prepared posters, handbills, and other publicity measures should be considered. Competition for prizes might be arranged for school children. At any rate the slogan should be, "Kill Anopheles Mosquitoes and Prevent Malaria".

Paul F. Russell
PAUL F. RUSSELL

Colonel, M. C.

Chief, Malaria Control Branch, AGC

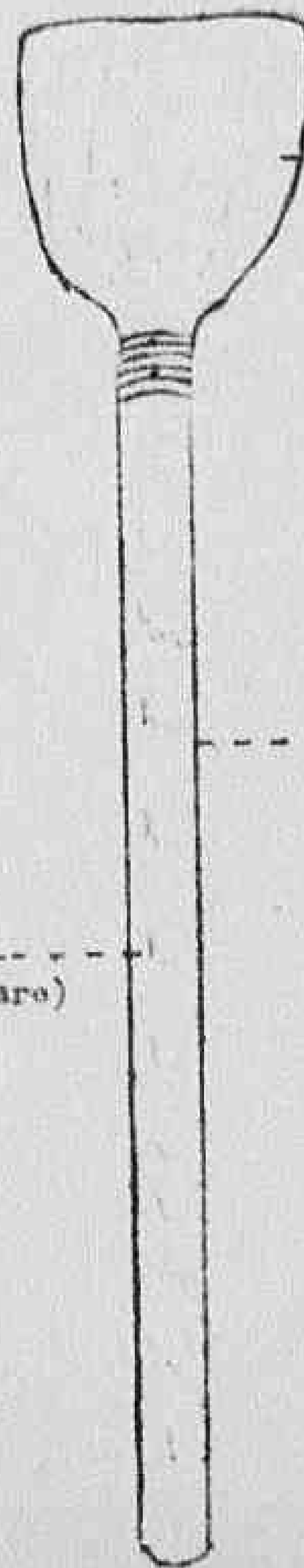




--- Salvaged Tin,
Containing Liquid
(Recipiente conteniendo
líquido)

--- Handle
(Manice)

Mosquito Swatter ---
(Palotta per le zanzare)



--- Swatter
(Palotta)

--- Handle
(Manice)

tin cups
(tazze di stagno)

Moist Wadding
(imbottitura umida)

Mosquito Catchers ---
(cattori de zanzare)

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB-COMMISSION
MALARIA CONTROL BRANCH
APO 394

MEMORANDUM TECNICO)

NUMERO 3)

1 June 1964.

SOGGETTO: UCCISIONE A MANO DELLE ZANZARE ADULTE.

1. INTRODUZIONE. La Commissione Anti-Malaria della Lega delle Nazioni comandava, nel 1947, che "uno sforzo attivo ed energico si sarebbe dovuto fare, se possibile, per indurre le famiglie, specialmente le donne di casa, a far sì che l'uccisione delle zanzare adulte trovate in casa diventasse una parte della pulizia quotidiana. La Commissione era convinta che, se questa misura si fosse potuta mandare ad effetto, avrebbe avuto risultati notevolissimi".

Infatti, questa misura fu usata effettivamente da Corrado nella zona del Canale di Panama, dove, la distruzione a mano delle zanzare adulte, risultò notevolmente l'incidenza della malaria in certe località. Bress, nel 1941, illustrò ampiamente la possibilità di questo metodo, e, suggerì che i ragazzi lo mettessero in pratica.

Certe istruzioni popolari di propaganda sulla lotta anti-malaria pubblicati dal Governo Italiano prima della guerra, includevano l'uccisione a mano degli anofelini adulti fra le misure pratiche che rientrano nelle capacità di tutte le famiglie.

Ma non molta attenzione è stata fatta a queste considerazioni, perché, normalmente, è stato più facile utilizzare altri mezzi per distruggere le zanzare e mantenerle al di fuori per mezzo di reti metalliche. Pure nel paese come l'Italia, dove gli anofelini malarigeni, durante le ore del giorno si posano sui muri o sui soffitti delle camere da letto e stalle, e dove quindi, sono facilmente estraibili, l'uccisione a mano di questi insetti è stata praticata molto relativamente.

Ancora, questa misura di uccisione degli anofelini adulti durante il giorno, sembrerebbe che avesse un valore potenziale, specialmente durante la corrente stagione in Italia, dove poco o niente insetticida e reti metalliche saranno disponibili per i civili.

In questo paese, la zanzara malarigena è molto vulnerabile durante il giorno. Se questa misura sarà sistematicamente praticata e ben fatta, l'uccisione a mano in un villaggio, certamente ridurrà notevolmente il contagio della malaria, mediante la distruzione di un'alta percentuale di zanzare infette, prima che possano divenire infettanti. È noto che il plasmodio richiede da 10 a 14 giorni, per maturare allo stadio infettivo di apocrozoite.

Il compito di questo memorandum è (a), di suggerire che siano fatti tentativi per indurre i padroni di case in zone malariche, a distruggere il maggior numero possibile di zanzare che si possono trovare sui muri o sui soffitti delle camere da letto e le stalle durante le ore del giorno; e (b) per dare dei dettagli circa questa misura.

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Ma non molte attenzioni e' stata fatta a questa considerazione perche', normalmente, e' stato piu' facile utilizzare altri mezzi per distruggere le zanzare e mantenerle al di fuori per mezzo di reti metalliche. Pure nei paesi come l'Italia, dove gli anofelini malarigeni, durante la ora del giorno si possono sui muri o sui soffitti delle camere da letto e stalle, e dove quindi, sono facilmente catturabili, l'uccisione a mano di questi insetti e' stata praticata molto relativamente.

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1801

2. METODI.

Il metodo piu' semplice per l'uccisione delle zanzare, posate sui muri e soffitti e' quello di colpirla con una retina. La retina puo' essere fatta nel modo comune, cioè con un quadrato di reticella di filo di ferro attaccata ad un manico, o puo' essere improvvisata con una carta, tessuto, cuoio, ramicelli, o altro materiale. Un asciugamano umido, piegato una volta in lunghezza, anche puo' essere utilizzato contro le zanzare. Si deve fare in maniera che queste vengano colpite sul posto. Colpendo le zanzare con la mano, i risultati sono meno soddisfacenti, ma comunque buoni se la mano e' tenuta ben stretta e' spinta contro con prontezza, anziche' con indecisione. Le zanzare che volano sono piu' facilmente catturate se le mani sono bagnate, e specialmente con acque sapunate.

Gli anofelini sono meno svelti durante il giorno. Gli insetti che hanno gia' succhiato sangue si prendono facilmente, gli altri richiedono un po' di abilita'. I ragazzi divengono presto molto abili nel distruggere le zanzare che stanno nelle case ed in alberi fabbricati.

Semplici scatoline catturatrici possono essere fatte con piccoli e bassi recipienti di latta contenenti cotone, carta, tessuto o fieno, imbevuti di nafta, petrolio, acqua sapunata o fango poco denso. Le scatoline sono montate su bastoni, una scatola all'estremità per le zanzare sul soffitto ed una sul fianco per quelle sulle pareti. Quando o' disturbata all'improvviso, la zanzara che riposa volerà nel materiale bagnato dove aderirà abbastanza a lungo per essere uccisa dai vapori o schiacciata dalle dita.

E' chiaro, quindi, che con mezzi non molto difficili a procurarsi, e poca abilità si può fare una scatolina catturatrice molto efficace.

In alcune località ci sarebbe la possibilità di avere una considerevole quantità di catturatrici di zanzare, manifatturate localmente e a poco prezzo, ottenute con scatoline di rifiuto.

Se una camera può essere chiusa, una fumigazione paralizzante tutte le zanzare presenti, cosicché esse cadranno sul pavimento. Bruciando un po' di fieno umido o erba, su di una paletta o un pezzo di metallo, si otterrà un fumo generalmente abbastanza denso, tale da paralizzare le zanzare dopo 15-20 minuti di trattamento. Ma il fumo, di regola, non uccide e perciò esso dev'essere sparzato via e bruciato o altrimenti distrutto durante la temporanea paralizzazione. Aggiungendo foglie di menta o di eucalipto al combustibile, si può aumentare la tossicità del fumo.

Il miglior tempo del giorno per uccidere con le mani gli anofelini, e' il primo mattino, o il tramonto, (circa un'ora dopo di esso). E' questo il momento in cui essi escono dai nascondigli dove si sono ripuliti durante il giorno, e cercheranno di uscire all'aperto per l'accoppiamento e la deposizione delle uova.

Se si attenderanno una mezz'ora presso i vetri delle finestre, specialmente di quelle che guardano a ponente, si potranno facilmente uccidere tutte le zanzare che si trovano nel locale. Gli insetti, molto facilmente si trovano, mentre riposano sui muri e soffitti delle camere da letto, stalle, porcili ed altri fabbricati. Alcuni si fermano sotto i ponti, ma la maggior parte nei fabbricati o specialmente negli angoli più oscuri. Mettendo il bianco di calce sui muri ed i soffitti delle stanze da letto e stalle, non si ottiene solamente un generale provvedimento igienico, ma più facilmente si potranno vedere le zanzare, quando si posano sui muri e soffitti.

3. - CONCLUSIONE.

Naturalmente, questa misura dell'uccisione a mano degli anofelini, non avrà grandi effetti a meno che non sia praticata sistematicamente nella maggior parte delle case e dei villaggi. In visione dell'aumentare di potenzialità malarica in questa stagione, e di conseguenza, con facilità grandemente ridotta, per il controllo della malaria, e' logico stimolare l'uccisione a mano per i vantaggi che darà. In alcune località, sarà forse l'unica misura possibile per la lotta contro la malaria, a disposizione dei padroni di casa. Reti metalliche, reticelle, spruzzatori, repellenti e mezzi profilattici, quali chinino e atabrina, non saranno probabilmente disponibili. La zanzara che propaga la malaria sarà facilmente trovata sui muri e soffitti e l'uccisione a mano sarà più facile. Il proprietario non e' privo di aiuto contro gli insetti che dannano tutto il giorno proprio a portata delle sue mani.

(Autorità civili, scolastiche ed ecclesiastiche)

di trattamento. Ma il fumo, di per se, non agisce come la temperatura paralizzante di trattamenti a vapore. E' importante distribuire durante la temperatura paralizzante le spazzate via e bruciate o altri trattamenti distruttivi. Si puo' aggiungere foglie di menta o di eucalipto al combustibile, si puo' aggiungere le tossicite' del fumo.

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Autorita' civili, ecclesiastiche ed ecclesiastiche, potrebbero essere di grande aiuto. Affissioni localmente preparate, manifesti ed altre misure di pubblicita' dovrebbero essere adottate. Competizioni per i premi potrebbero essere fatte per i ragazzi di scuola. In ogni modo il monito dovrebbe essere:

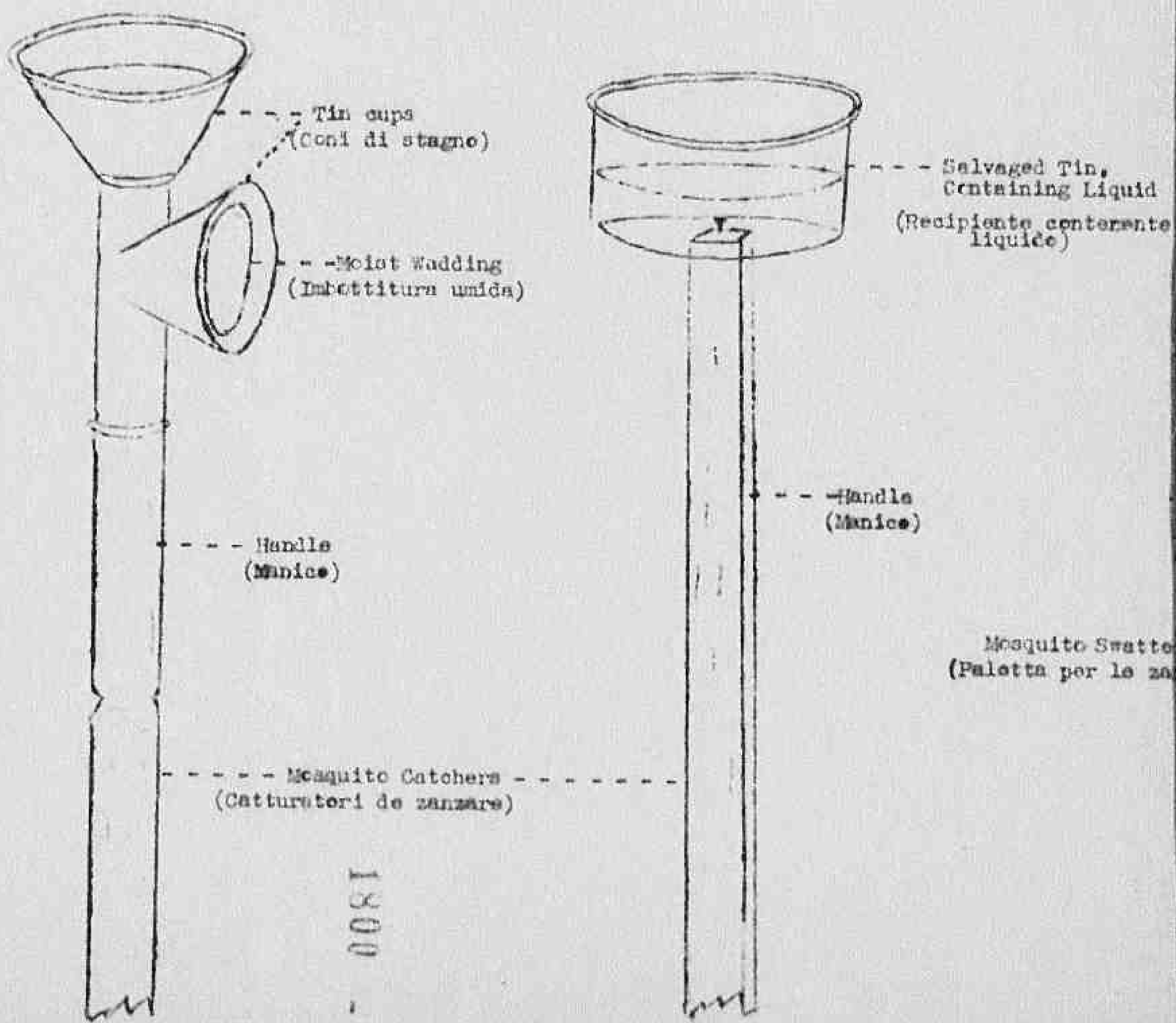
Uccidere la Zanzara Anophele e Prevenire la Malaria.

PAUL F. RUSSELL,

Colonel, M.C.,

Chief, Malaria Control Branch.

Declassified E.O. 12356 Section 3.3/NND No. 785017

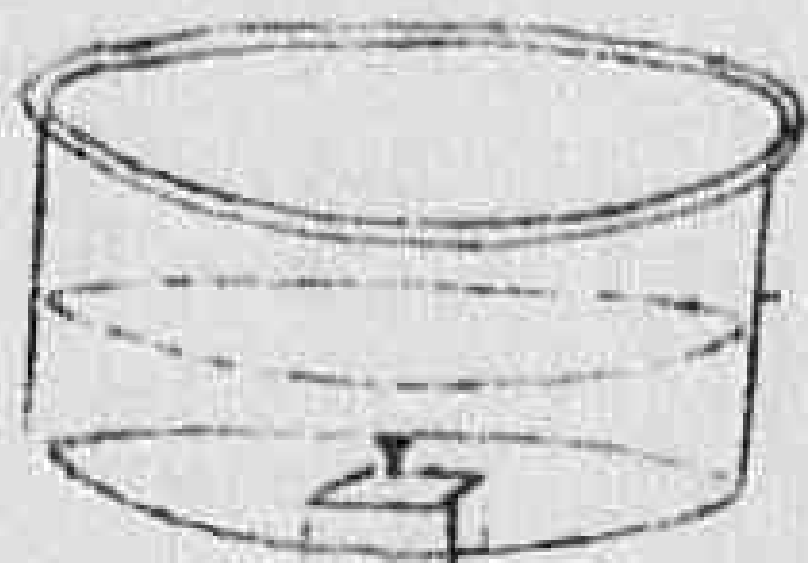


Declassified E.O. 12356 Section 3.3/NND No.

785017

Tin cups
(Cupi di stagno)

-Moist Wadding
(imbottitura umida)

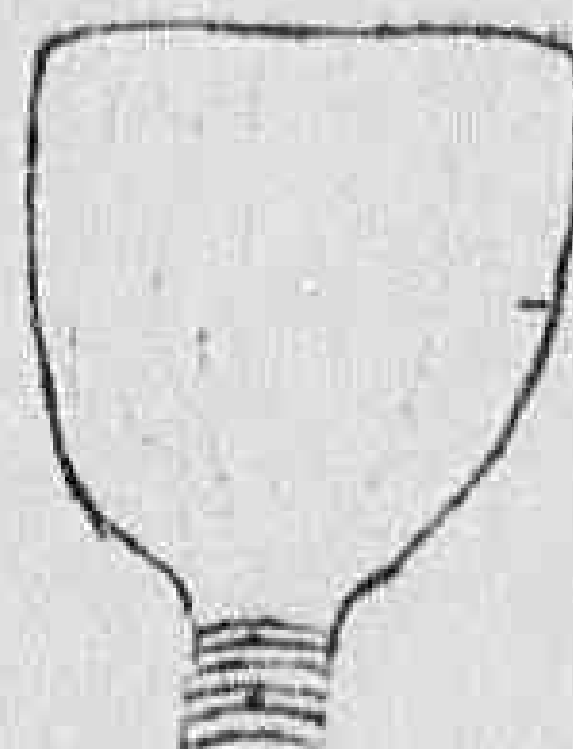


--- Salvaged Tin,
Containing Liquid
(Recipiente contenente
liquido)

--- Handle
(Manice)

Mosquito Swatter ---
(Paletta per le zanzare)

Mosquito Catchers ---
(Capi de zanzare)



--- Swatter
(Paletta)

--- Handle
(Manice)



1800

785017

231
JUN 1944
JUN 1944

HEADQUARTERS
REGION 3, ALLIED CONTROL COMMISSION
APO 394 - US ARMY

R/3118

30 May 1944

SUBJECT: Transportation for Anti-malaria Commission

TO: Provincial Commissioners - MAFAS
AFUJED
BASTARD
BASTARD

1. Will you instruct your Prefect that a motor car is to be made available for the use of the Provincial Medical Officer working in the field of malaria control.

2. This matter shall be treated as urgent.

PK 2/6

CHARLES POLETTI
Colonel
Regional Commissioner

R/3119

1st Ind.

HEADQUARTERS, REGION 3, ALLIED CONTROL COMMISSION, APO 394 - US ARMY

TO: Regional Control & Military Government Section
Headquarters, Allied Control Commission
Attention: Colonel Norman E. FISKE

In compliance with your letter 21 May 1944, Ref/231/5h/CA, the above instruction was sent to all Provincial Commissioners, Region III.

Charles Poletti
CHARLES POLETTI
Colonel
Regional Commissioner

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB-COMMISSION
MALARIA CONTROL BRANCH
220 904

24 May 1944

TECHNICAL MEMORANDUM)

NUMBER 2)

SUBJECT: LARVICIDAL OILING.

1. INTRODUCTION.

Due to world-wide military requirements, no supplies of Paris green have been allocated to the Allied Control Commission for use by civilian anti-malaria agencies in Italy during 1944. Limited amounts are available in some provinces from the 1943 allowances or from military sources for an extra-cantonment control program. For general use, it has been possible for the Allied Control Commission to make Diesel oil available to Regional Public Health Officers for provincial anti-malaria committees. The oil is being distributed, on the basis of monthly requirements, to local depots by CIP. (See Executive Memorandum No. 54, dated 25 April 1944, HC & M3 Section, A.C.C.). The purpose of this memorandum is to discuss certain phases of larvicidal oiling for the information of those concerned. It may be useful for the guidance of local officials, many of whom have been trained in the use of Paris green, but not of oil as a larvicide.

It may be recalled that in Italy, until after 1925, malaria control consisted largely in the distribution of quinine for prophylactic and therapeutic use. Cooperative experiments by the Rockefeller Foundation and Italian malariologists then demonstrated the value of anopheles control, especially by drainage and by the use of Paris green. Provincial anti-malaria committees for nearly a decade before the war carried out malaria control programs, in which Paris green larviciding was an important part. Oil has always been relatively expensive in Italy and has not been used to any great extent in Italian malaria control programs. Hence, the need for special emphasis on the technique of larvicidal oiling during the present season.

2. GENERAL PRINCIPLES.

In 1812, Robert Southey in London suggested the use of oil as a larvicide.

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2. GENERAL PRINCIPLES.

In 1812, Robert Southey in London suggested the use of oil as a larvicide, and in 1846, an Italian observer also called attention to the fact that, when oil is spread on water, it forms a film which kills mosquito larvae. Put not until the work of Howard in the United States in 1892, Ross in Sierra Leone in 1899, and Gargas in Panama in 1904, was the value of oil as a larvicide widely recognized. It is today probably used more extensively than any other anti-mosquito agent.

There have been many studies to determine exactly how oil destroys mosquito larvae. It is now generally agreed that several factors are involved. The oil may enter the breathing tubes and either poison or suffocate the larvae, or it may cause a matting of their feeding brushes or destruction of their food supply so that they starve. The old idea that it is necessary to have such a thick film of oil that larvae are unable to penetrate it to obtain air has been disproved. With a toxic oil, such as the Diesel grade supplied by A.C.C., a thin film is sufficient. But it should be an unbroken film which will persist for a day or two in quiet water.

3. ADVANTAGES OF OIL.

The chief advantages of oil as a larvicide are the following:

- a. Oil is readily obtainable and easily applied.
- b. Oil kills eggs, larvae, and pupae of all species of mosquitoes (Paris green destroys anopheles larvae; but not culicine as a rule. It has no effect on eggs or pupae of any mosquito species).
- c. Oil can be seen clearly after application so that inspections are readily made.

4. PRECAUTIONS.

Oil has disadvantages, some of which may be outlined as follows:

- a. Oil has common uses which make it liable to theft.
- b. Oil is more expensive than Paris green and is less easily transported.
- c. Recently oiled water may be unfit for bathing or drinking.
- d. Oil does not penetrate well among grasses or into floatage where larvae may be sheltered.

5. APPLICATION.

In mid-summer, it is usually necessary to oil a mosquito-breeding place each week. The intervals may be greater in cooler weather. The quantity of oil required will vary from 10 to 25 gallons per acre, (One acre equals approximately 0.4 hectare), increasing with the amount of vegetation or floatage. (One gallon, U.S.A. equals 231 cubic inches, or 3785 cubic centimeters and is approximately 0.6 of an Imperial gallon). A gallon of oil should cover some 250 linear yards (Approximately 230 meters) with a spray about 12 inches wide (Approximately 30.5 centimeters). The amount of oil that one laborer can spread properly in a day will vary, of course, with the nature of the breeding place and its distance from headquarters. With a knapsack sprayer, one man can cover about five acres (approximately 2 hectares) a day, if the going is good.

6. KNAPSACK SPRAYING.

There are many ways of spreading oil for larvicidal effect, and they vary from simple hand-pouring to distribution from airplanes. The most common method

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6. KNAPSACK SPRAYING.

There are many ways of spreading oil for larvicidal effect, and they vary from simple hand-pouring to distribution from airplanes. The most common method, and the one of choice for provincial anti-malaria programs, is the use of a knapsack sprayer. This oiler consists of a tank holding three to five gallons of oil. The tank fits on the back of the laborer where it is held by straps, which should be padded. The tank is equipped with a rubber hose and a nozzle, which should deliver a conical spray of oil about 18 inches (approximately 45 cm.) in diameter for a distance of about four feet (approximately 122 cm.).

Oil may be forced out by a pump inside the tank, activated by an overhead handle, worked continuously by the laborer as he sprays. In another type of sprayer a hand pump is located between the tank and the nozzle. This is worked back and forth by the laborer as he spreads the oil. A third type is the so-called pressure tank. The laborer, from time to time, unmounts the tank and pumps up air pressure. He then refastens the tank to his back and sprays until the pressure is exhausted.

Whatever the type of knapsack sprayer, certain principles should be noted. At the first place, it is necessary to protect the laborer's skin from excess

or spilled oil. Most tanks have a high rim around the top to trap spilled oil. A piece of sackcloth between the tank and the laborer's shirt is advisable. Laborers should be instructed to bathe completely when the day's oiling is finished.

The care of equipment is very important. Each day, after use, the knapsack sprayer should be dismantled and cleaned by repeated flushing with water. This will greatly prolong the usefulness of the rubber hose and washers, and will tend to keep the nozzle from becoming blocked. The laborer should be taught that this is a routine phase of the day's oiling.

7. OTHER OILING DEVICES.

There are various other devices for spreading oil. Drip cans, for instance, have some valves over narrow, sluggish streams or canals. Such cans may be made from kerosene or petrol tins by putting a nail-hole in the bottom and leaving the nail in the hole with some string packed around and under the nail-head to retard the flow of oil. The length of stream or canal effectively treated by a drip can will vary with conditions and must be ascertained by observation in each case. There is, of course, danger of theft from such cans in some areas.

In some places, oil-soaked sawdust may be hand-cast on the water of breeding places and will produce an effective film.

Although a fair number of knapsack sprayers are being distributed through A.C.C. for civilian anti-malaria agencies, there will be some shortages. Where no sprayers are available, brush or 'dip-stick' oiling may be done. It is slow, but is economical and effective. In this method, some sackcloth or waste cloth or twigs or rushes are tied firmly to the end of a stick of convenient length. The mop of the 'dip-stick' is immersed in a pail of oil and then rubbed along the edge of the stream, canal, or pond where larva control is required. If breeding is occurring out beyond the edge of the spread, oil may be splashed on the water by suitably flicking the mop.

8. PREVENTION OF THEFT.

In order to minimize the chances of larvicidal oil being used for purposes other than malaria control, it is possible, in some areas, to add 10 percent waste engine oil. It should be strained when added. Sometimes arrangements may be made with military motor pools, Navy Yards, or airfields for a supply of waste oil. Care must be used to avoid adding anything to the Diesel oil which will clog the spray nozzles or damage the moving parts.

E. H. Russell

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ing places and will produce an effective film.

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Although a fair number of Knapsack sprayers, there will be some snags. It A.C.C. for civilian anti-malarial agencies, there will be some snags. It is slow, but is economical and effective. In this method, some sacking or waste cloth or twigs or rushes are tied firmly to the end of a stick of convenient length. The mop of the "dip-stick" is immersed in a pail of oil and then rubbed along the edge of the stream, canal, or pond where larva control is required. If breeding is occurring out beyond the edge of the spread, oil may be splashed on the water by suitably flicking the mop.

a. PREVENTION OF THEFT.

3. PREVENTION OF THEM.

In order to minimize the chances of lervicidal oil being used for purposes other than malaria control, it is possible, in some areas, to add 10 percent waste engine oil. It should be strained when added. Sometimes arrangements may be made with military motor pools, Navy Yards, or airfields for a supply of waste oil. Care must be used to avoid adding anything to the Diesel oil which will clog the spray nozzles or damage the moving parts.

Howard G

DALL, T. RUSSELL

Colonel, H. C.

Colonel, M. C.
Chief, Malaria Control Branch,
Allied Control Commission

HEADQUARTERS
ALLIED CONTROL COMMISSION
H.Q. & M.C. SECTION
APO 394

Lee

Ref/231/60/3A

25 May 1944

SUBJECT: Anti-Malarial Measures.

TO : Economic Section.

50

Reference your RS/12 of 23 May 1944,
please forward a report on the petrositua-
tion in Region I after Col. Eyles has completed
his investigations. The report should state
the arrangements made for providing Provincial
Medical Officers with petrol for their cars.

JK

NORMAN R. FISKE
Colonel
Deputy Executive
Commissioner

B/A noted
30/5
1944

SUBJECT :- Malaria.

SAC, Base, Eighth Army

On/217

23 May 44.

PO CARPONESSO PROVINCE : PO ANVILA PROVINCE
" CHIETI " : " TIRANO "
" FROSINONE " : " PESCARA "
" Rieti "

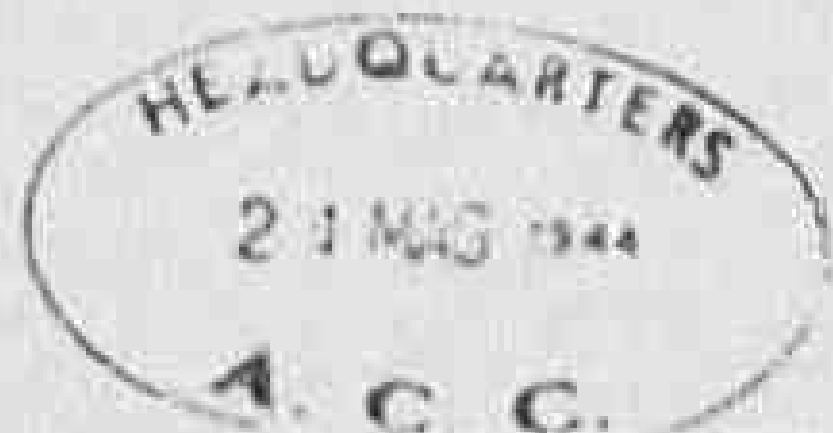
Copy to : ALLIED CONTROL COMMISSION, ESEC COMMISSIONED RESEARCH Ref 231/54/0a
of 21 May 44.

REGION IV HQ
REGION V HQ

1. Italian Provincial Medical Officers will be provided with tpt so that they can get around their provinces to supervise anti malaria activities. In Chieti and Carpinone Provinces this will be done immediately; in remaining Provinces as soon as such officers start to function.

2. Cars will be requisitioned by the Prefect or through Regions IV and V, and the users instructed that they are primarily for anti-malaria work.

3. Please treat as urgent.



Major, RA. +
GSO II,
SAC EIGHTH ARMY. 1796

ALLIED MILITARY GOVERNMENT
INTER OFFICE ²³¹ EMO ¹⁰⁰

JBT/lab

From: **ECONOMIC SECTION**

SUBJECT **Anti-Malarial Measures**
TO **Executive Commissioner.**

FILE NO. **ES/12**
23 May 1944

Reference your letter subject as above dated 17 May 44,
the attached letter from Industry & Commerce Sub-Commission
shows the action that is being taken by the Economic Section
in this matter.

*has been done
for Commission - 25/5
4057
see 25/5
see 25/5*

D. S. Adams
D. S. ADAMS,
Colonel, C.E.,
Executive Officer,
Economic Section.

1795

HEADQUARTERS
ALLIED CONTROL COMMISSION
INDUSTRY & COMMERCE SUB-COMMISSION
APO 394

ASB/rj

Ref. AGC/5146/1/IC

20 May, 1944

SUBJECT: Anti Malarial Control - Region I

TO : Economic Section

1. RC & MG letter of 17 May 1944 refers.
2. Petrol for all purposes is allocated in bulk and supplies are normally bid on a monthly basis by Regions and allocations made accordingly.
3. In recent months, however, Region I have asked for very large supplementary allocations towards the end of the month and Petroleum Section are very concerned about the POL situation on the Island.
4. Accordingly, Col. Eyles, head of Pet. Sec. is visiting Region I early next week to go into the whole question on the spot and will take up the question of petrol for Malaria Control personnel at the same time.
5. There should be ample supplies from the allocations made for all purposes, but it appears that very large quantities are being used for some purpose (possibly A.C.C.'s own vehicles) which are causing shortages elsewhere.
6. Pet. Sec's letter PET 19/3/5 of 18 May 1944, copy attached is relevant.

W. P. Evans

W. P. EVANS
Colonel,
Director, Industry &
Commerce Sub-Commission.

1 Incl:
Ltr from Pet Sec ref. PET 19/3/5
dtd 18 May 1944.

Copy to:
Pet. Sec. (with copy of RC & MG ltr
dated 17 May 1944).

22 May
49

1494

785017

OPY

Advanced AFHQ
Petroleum Section
C.M.F.
A.P.O. 400

PET 19/3/5
18 May 1944

SUBJECT: Region 1, Monthly Report

TO : HQ ACC, Industry & Commerce Sub-Commission, APO 394

1. Reference your ACC/5146/IC dated 15 May 1944.

2. The allotment of Petroleum for Sicily for the month of April was as follows:

	Petrol	6000 bbls	-	AGO	8700 bbls	-	Kero	2000 bbls
Supplementary allotment was	"	360 "	"	"	70 "	"	"	"
	"	6360 "	"	"	8770 "	"	"	2000 "
TOTAL	"							
Quantities requested	"	6463 "	"	"	9251 "	"	"	1815 "

3. Return of sales from CIP for the month of April is as follows:

Petrol	6024 bbls	-	AGO	7157 bbls	-	Kero	1572 bbls
--------	-----------	---	-----	-----------	---	------	-----------

From above it will be seen that the original allotment was more than sufficient with the exception of Petrol where sales were only 24 bbls over. Consequently the demand for a supplementary allotment of Petrol 1428 bbls, and AGO 457 bbls is not understood.

4. The statement in paragraph 2 that the allotment figures are approximately $\frac{1}{2}$ of the quantities requested is obviously very wrong.

5. It is noted that about 1000 private cars have been refused Petrol coupons for the month of May, this means that approximately 250 bbls petrol should be saved. Yet a demand has already been received for a supplementary allotment for the month of May for Petrol 1015 bbls and AGO 1494 bbls, against which allotment has been made of Petrol 485 bbls and AGO 590 bbls.

/s/ H.B. Ryles

/t/ H. B. RYLES
Colonel
Petroleum Section.

1793

22 May
49

785017

CONFIDENTIAL *AB* 1 MAY Recd
 ALLIED CONTROL COMMISSION
 INCOMING MESSAGE

TO: ACTION FREEDOM INFO ADNAF

FROM: MIDEAST

SIGNAL MESSAGE CENTER No: 21 78

REFERENCE No: AMHQ (B) 03670

CLASSIFICATION: CONFIDENTIAL

PRECEDENCE: IMMEDIATE

DATE AND TIME OF ORIGIN: MAY 20/1901 OFFICE OF ORIGIN: CITE NAME FHMGS

Files H.H.B., K.G. refers?

FROM BALKANS. YOUR 047020 OF 17. DESIRABILITY STAFF VISITS OF SELECTED OFFICERS ALREADY APPROVED IN PRINCIPLE BY YOU. MCQUEEN ALREADY LEFT FOR ITALY HAVING RECEIVED PERMISSION ADNAF. CONSIDERABLE BINGHAM PAYNTER VISIT ITALY TO CONTACT THEIR RESPECTIVE BRANCHES IN ORDER OBTAIN PROCAICAL KNOWLEDGE OPERATIONAL REQUIREMENTS. APPRECIATE DIFFICULT SITUATION NOW BUT REQUEST PERMISSION DESPATCH OFFICERS AS AIR PASSAGES AVAILABLE

REACD
 21 MAY 1944
 A. C. C.

ACC DIST

INFO IEP CC
 CA BR
 EC OFFRS
 FILE
 FLGAT

Local Shirts free
ph 23/5
ll 23/5
Cor Fike? 7
EC
1492
78

DATE and Time of RECEIPT MAY 21/0031

Distribution:

CONFIDENTIAL

HEADQUARTERS
ALLIED CONTROL COMMISSION
R.O. & M.G. Section
APO 394

Ref/231/54/CA.

21 May 1944

SUBJECT: Anti-Malarial Measures.

TO : R.Os. Regions I, II, III, IV, V, VI & VII.
SCAOs. 5th and 8th Armies.

1. Colonel Russell, Chief of the Malaria Control Branch states that anti-malarial measures in the field will break down unless Italian Provincial Medical Officers are provided with transport. As the malaria season is shortly approaching it is imperative that Provincial Medical Officers should move quickly about their provinces. Regional Commissioners will take immediate steps to ensure, if this has not already been done, that one car per province is made available for the use of the Provincial Medical Officer. As the matter is of extreme importance Regional Commissioners will report the steps taken to allocate transport for this purpose.

2. Colonel Russell also states that the rationing of petrol in Region I has brought anti-malarial work to a standstill.

3. Economic Section have been asked to arrange for an increase of the petrol ration in Region I. Arrangements can also be made for increases in other Regions if circumstances warrant and a case is established.

4. This letter cancels our letter 231/53/CA dated 18 May 1944

WDM/R&O.

W.D. Fiske
for NORMAN E. FISKE,
Colonel,
Deputy Executive
Commissioner.

Copy to: Region VIII.
" IX.

Admin Section (3)

Recn Section

Colonel Russell, Malaria Control Branch.

785017

HEADQUARTERS
ALLIED CONTROL COMMISSION
R.C. & M.G. Section
APO 394

Ref/231/53/CA.

18 May 1944.

SUBJECT: Anti-Malarial Measures.

TO : R.Cs. Regions I, II, III, IV, V, VI, VII, VIII & IX.
SCAOs. 5th and 8th Armies.

1. Colonel Russell, Chief of the Malaria Control Branch states that anti-malarial measures in the field will break down unless Italian Provincial Medical Officers are provided with transport. As the malaria season is shortly approaching it is imperative that Provincial Medical Officers should move quickly about their Provinces. Regional Commissioners will take immediate steps to ensure, if this has not already been done, that one car per province is made available for the use of the Provincial Medical Officer. Economic Section have been asked to arrange. As the matter is of extreme importance Regional Commissioners will report the steps taken to allocate transport for this purpose.
2. Colonel Russell also states that the rationing of petrol in Region I has brought anti-malarial work to a standstill.
3. Economic Section have been asked to arrange for an increase of the petrol ration in Region I, and to arrange for transport being provided, either by re-allocation or requisitioning.

JER/RAC.

NORMAN E. FISKE,
Colonel,
Deputy Executive
Commissioner.

Copy to: Admin Section (3)
Econ Section
Colonel Russell, Malaria Control Branch.

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB-COMMISSION
MALARIA CONTROL BRANCH

APC 394

TECHNICAL MEMORANDUM

NUMBER 1

25 May 1944

SUBJECT: A NOTE ON THE EPIDEMIOLOGY OF MALARIA IN ITALY.

1. GENERAL DISTRIBUTION.

No large region in Italy is free from malaria but, as always, this mosquito-borne infection is unevenly distributed geographically, seasonally, and from year to year. Malaria throughout the theater is generally found below 2000 feet altitude and is rural rather than urban conditions. Such cities as Naples, Rome, Palermo, Ajaccio, and Bastia are not malarious, although the disease may approach the municipal limits and occasionally penetrate them. Rural towns on the plains of South Italy are apt to be foci of the disease. It is generally correct to assume that communities of Italians forming the plains, river tracts, or marsh areas south of Pisa or Ancona, and that rural Sicilians or Sards, in the valleys and low coastal areas of their islands, will be reservoirs of malaria. For the most part, these indigenous concept an annual series of chills and fever as a normal experience. As a rule the clinical incidence of malaria begins to increase slightly in April due, it is believed, mostly to relapsing cases. In 1944 such a rise has been seen in curves of both civilian and military malaria. The seasonal upswing due to new infections makes its appearance in May and the curve climbs steeply in June and July, reaching a peak in late July or in August. Thereafter it declines in September, in some areas shows a modest secondary peak in October (following September rains) and then falls sharply, coming to its lowest point in March.

2. MALARIA MOSQUITOES

Generally under military conditions it is a rule to combat all nearby mosquitoes whether disease-bearing or merely annoying. But in civilian communities it is often necessary to concentrate on malaria vectors, consequently some knowledge of these species is useful. Sicily, Sardinia, and South Italy will be considered separately.

Although there are several Anopheles in Sicily, only one is an important carrier of malaria. This one is named Anopheles labronchius labronchius Valleroni,

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Although there are several anopheles in Sicily, only one is an important carrier of malaria. This one is named Anopheles labranchiae labranchiae Yellerton, 1926. It is one of several morphologically similar species which comprise the so-called maculipennis complex. These species can be differentiated by characteristic egg patterns, but not by larval or adult anatomical features.

labranchiae

The anopheles is found in its aquatic stages chiefly in small indentations and pools of rivers, streams, canals, and irrigations channels, not often above an elevation of 2000 feet. It is also taken in ponds, marshes, and shallow agricultural wells, or water points. It will tolerate brackish water with salt content up to 1.7 percent. This mosquito in some situations will travel from a breeding place as far distant as two miles, in numbers sufficient to propagate malaria. labranchiae adults habitually rest in houses, huts, animal sheds, and outbuildings in the daytime, feeding almost exclusively after sunset and having a strong preference for human blood.

Sardinia is blighted by two important malaria carriers and has thereby become notorious for intense paludism. One of the two vectors is Anopheles labranchiae, with much the same habits as in Sicily. The other is Anopheles sacharovi Ferr., 1903, once named slutskyi and sometimes still so called.

The aquatic stages of Saicharovi are often found associated with labbranchiae. But Saicharovi will tolerate a greater degree of salinity, with content up to 2.2 percent. Hence it is apt to be more prevalent closer to the sea. Both labbranchiae and Saicharovi will breed in either still or slowly moving water, both feed by preference on man, both habitually rest in the daytime in man-made structures. Saicharovi is somewhat harder, flying a two-mile radius more often and in greater numbers, and more effectively withstanding not-dry and cold-wet seasons. Both species undergo a semi-hibernation and it is believed that conceivably either one may cause a winter infection. Both species begin to breed in April and have greatest prevalence in May and June. Larvae become scarce by the end of September and the density of adults is soon markedly reduced.

In Italy itself there are several malaria vectors. South of Naples, both east and west, the chief vector is Saicharovi, assisted in the southeast by Anopheles superpictus Gressel, 1899. North of Naples, in the west, labbranchiae is the carrier, while Saicharovi extends up the east coast, with labbranchiae assisting. In the delta region of the river Po, Saicharovi is assisted by Anopheles labbranchiae Atroparvus, van Thiel, 1927, another member of the Maculipennis complex and closely similar to labbranchiae labbranchiae. The habits of Saicharovi and labbranchiae in Italy are much the same as already described. Superpictus is usually found in small streams in hill or mountain country. Shallow residual pools, sometimes beneath the stream-bed stones and thus hidden from casual view, are typical breeding places. This species is a strong flier, feeds on man, and rests in man-made structures. It does not tolerate brackish water. Atroparvus is similar to labbranchiae in its habits, but possibly a little more tolerant to salinity and somewhat less particular as to its blood meals, feeding on animals almost as readily as on man.

There are other species of the Maculipennis complex in Italy. For example, Anopheles Messae Fallerup, 1926 and Anopheles Melanoc Melano Hackett, 1934 are found in the marshes, rice fields, and inland lakes of South Italy. But ordinarily these two Anopheles do not feed on man and hence are not vectors. Whether the animal population has been sufficiently reduced so that these species will feed frequently enough on man to become air-time carriers of malaria is a question which must be kept in mind.

3. PLASMODIA.

The following statements represent a consensus of opinion:

a. P. vivax, P. falciparum, and P. malariae all occur in Italy.

b. P. vivax in the overall picture is most common and P. malariae least prevalent.

c. In some areas P. falciparum is more common than P. vivax and there are a few small foci of predominant P. malariae.

d. There is usually a seasonal variation in the prevalence of the various species.

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There are other species of the maculipennis complex in Italy. For example, Anopheles messeae Falleroni, 1926 and Anopheles messeae Hackett, 1934 are found in the marshes, rice fields, and inland lakes of South Italy. But ordinarily there two anophelines do not feed on man and hence are not vectors. Whether the animal population has been sufficiently reduced so that these species will feed frequently enough on man to become year-time carriers of malaria is a question which must be kept in mind.

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The following statements represent a consensus of opinion:

- a. P. vivax, P. falciparum, and P. malariae all occur in Italy.
- b. P. vivax in the overall picture is most common and P. malariae least prevalent.
- c. In some areas P. falciparum is more common than P. vivax and there are a few small foci of predominant P. malariae malaria.
- d. There is usually a seasonal swing, with P. vivax most prominent in spring and early summer, while P. falciparum takes the lead in late summer and autumn.
- e. Mixed infections are fairly common.
- f. The majority of relapses are due to P. vivax.
- g. Some strains of P. falciparum in Italy are more virulent than average.

4. MALARIA CYCLE.

Under usual summer conditions malaria mosquitoes in Italy will develop through egg, larva, and pupa stages in 10 - 12 days. Adult females will feed the second or third night after emergence. If a mosquito ingests suitable gametocytes these will undergo development and become infective sporozoites in about 12 days. Of course, temperature and species as well as other factors will

51
modify these periods. When an individual is infected with sporozoites, he will usually develop clinical malaria in about 14 days, depending on species of plasmodia. The minimum incubation period for vivax is 8 days and the maximum for malariae may exceed a month. Under suppressive medication the onset of symptoms may be postponed until some weeks or even months after the drug has been withheld.

These figures are averages, but it is apparent that the first new infections each season will appear clinically not sooner than 5 to 6 weeks after the vector mosquito begins actively to oviposit. As the weather becomes warmer, the cycle becomes shorter, but probably in this theater it is rarely less than 30 days. With each cycle the numbers of gametocytes carriers increase and a seasonal epidemic takes shape. It is important to remember these time relationships and to realize, for example, that the mosquito breeding observed in an area today may be reflected clinically in malaria next month.

5. Malaria Incidence.

Statistics of malaria morbidity and even mortality are seldom satisfactory in regard to civilian areas. But some idea of trends and potentialities may be obtained from a table of malaria mortality in Italy (Petragnani, 1941). This table indicates that malaria deaths in Italy declined from 490 per million in 1900 to 57 in 1914. During the first World War the curve began to rise and came to a peak of 324 in 1918. Then there was a steady fall to a low of 14 in 1939. Conditions in 1944 are potentially as bad as if not worse than they were in 1918. Unless strenuous control efforts are made during the coming season, there is every reason to believe that malaria will be widely and intensely prevalent.

P. F. Russell

PAUL F. RUSSELL

Colonel, M. C.

Chief, Malaria Control Branch, AGC.

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P. F. Russell

PAUL F. RUSSELL

Colonel, M. C.

Chief, Malaria Control Branch, AGO.

110M

785017

231
18 MAY Recd

50

HEADQUARTERS,
ARMED CONTROL COMMISSION,
APO 394

Regional Control and Military Government Section.

17th May 1944.

SUBJECT: Anti-Malarial Measures.

TO : Civil Affairs Branch
Economic Section.

1. Colonel Russell, Director of the Anti-Malaria Commission, states that anti-malarial measures in the field will break down unless Italian provincial medical officers are provided with transport. Will Civil Affairs Branch please instruct Regional Commissioners to ensure, either by action or advice, that one car per province is requisitioned for the use of Provincial medical officers. Regional Commissioners will report when this has been done.
2. Colonel Russell states that the rationing of petrol in Region I has brought anti-malarial work to a stand still. A further issue of 4000 litres in May and an extra allowance of 14000 litres per month is required if the work has to be done properly.
3. Will Economic Section please arrange for this to be done?

MSL/JG.

MSL
Brigadier,
Executive Commissioner.

Copy to: Colonel Russell, Anti-Malaria Commission.

1787

785017

231 16 MAY Recd

HEADQUARTERS

16 MAY 1944

A. C. C.

CA Br. 2

9722

15-238

SECRET

IMPORTANT

MIDEAST FROM BALKANS FROM RUSSIA

FRIED M FOR FIMOS RPTD ACC MAIN FORM 266 CONT

MAY 16

MAY 12/2025

A1/00724

INWE

44
 YOUR 42932 OF 8 MAY. PARA 1 MOST WILLING TO HELP BUT (AM) 1 YDGO SLAVIA NOT RPT
 NOT SUFFICIENTLY ADVANCED TO HANDLE REQUEST CAN OFFICE NOT RPT NOT YET APPROVED ESTABLISHED
 PARA 2 YOUR PARA NO 6. UNDERSTAND FROM SERVICE THAT INSTRUCTIONS NOT RECEIVED TO DISPATCH
 NOT RPT NO OFFICERS UNTIL FURTHER ORDERS

ADD LIST

INFO DGC
 PUBLIC HEALTH (PO)
 CA BR 2
 FILE FLGAT

SECRET

1786

SECRET



44p

CABA

N52/12

SECRET

PRIORITY

AMPHIB EAST

FORWARD FOR PHMS RPTD ACC MAIN FORCE 266 30MTO

MAY 12 01450

MAY 12 02100

A1/00724

NOTE

44

FROM BALKAN. FROM PHMS. YOUR 242932 OF 8TH MAY. PARA 1 MOST
WILLING TO HELP BUT ORGANIZATION AND YUGO-SLAVIA NOT RPT NOT
SUFFICIENTLY ADVANCED TO HANDLE. WAR OFFICE NOT RPT NOT YET APPROVED
ESTABLISHMENT. PARA 2 YOUR PARA 6. UNDERSTAND FROM USAFIR THAT
INSTRUCTION NOT RECEIVED TO DISPATCH NO RPT NO OFFICERS UNTIL
FURTHER ORDERS

*They can only be
planned for 14 months!*

ADD LIST

INFO: DGC

P HEALTH(FO)

CA HI

FILE

PLCAT

*Not to be
used*

14/5

13/5

pa

SECRET

1785

785017

231-2
INCOMING MESSAGE

Msg Center No: 23/8

Classification: SECRET

Precedence : PRIORITY

From : FREEDOM SIGNED WILSON

To : MIDEAST FOR AFHQ (BALZENS) FOR
HUGHES RPTD USAFIRE FOR GILLES,
AGC MAIN, FORCE 266, SONTA

SECRET

Date/Time recd 081540

Date/Time Sent 081130

Reference Nr P42932

Cite

PLACING PARAGRAPHS THAT FOLLOW IN THE PROPER NUMERICAL SEQUENCE WILL GIVE YOU THE ORIGINAL MESSAGE. THIS IS A PARAPHRASE BY FREEDOM OF OUR MESSAGE NUMBER P42932.

PARA 5. IF AGREEABLE REQUEST YOU ARRANGE WITH U SAFIRE THAT AT REQUEST OF P B ZONE AND ONEADDITIONAL OFFICER, PREFERABLY MACALISTER, JOIN HIM BY FIRST AVAILABLE TRANSPORTATION. RESTATES IN EVENT YOUR CONCURRENCE THIS TO TAKE PRIORITY OVER ALL OTHERS CONTEMPLATED ASSIGNMENTS.

PARA 4. HAVE DISCUSSED WITH SPECIAL OPS THIS HQ WHO AGREE THAT AFTER NOT PRIMARILY OPERATIONAL AND WELCOME THIS METHOD.

PARA 1. MEDICAL DIRECTOR OF HLA REPORTS TYPHUS IN EAST BOSNIA AND HAS REQUESTED IMMEDIATE ASSISTANCE OF AGC.

PARA 5. CLEAR IT WOULD BE ADVANTAGEOUS TO HAVE MEDICAL REPRESENTATIVE ON YOUR ADVANCE HQ AT BARI TO MAKE IMMEDIATE FULL INVESTIGATION OF POSSIBILITIES. FOR LEAVING MAY 7 FOR NAPLES AND BARI AND WILL MAKE PRELIMINARY CONTACT ALL AUTHORITIES PENDING RECEIPT YOUR VIEWS.

PARA 3. AS AREA OUTSIDE AGC JURISDICTION AND IS WITHIN YOUR EVENTUAL SPHERE BELIEVE BEST AND JUGOSLAVIA HANDLE FROM START.

PARA 2. AGC SUGGEST INVITING USA TYPHUS COMMISSION WITH WHOM THEY WORKED IN NAPLES TO HELP. MULTIGLIDE GENERAL POL, USATG, NOW IN ALGERS AGREE SUGGEST RESPONSIBILITY.

CAB
8972 14
MAY

OF OUR MESSAGE NUMBER P42932.

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AGC DISTRIBUTION

Info...Dep C C

Public Health SC(PO DIAG)

C A B

File

Float

1781

SECRET

EXHIBITION
ALLIED CONTROL COMMISSION
U.S. & U.K. OFFICES
APO 196

RAF/234/45/14

9 May 1944

SUBJECT: Installation of Prison Team.
Field Signal Office.

TO: 1. H.Q.'s Signals III, IV, V.
S.O.A.C.'s. 1st & 2nd Armies.

There is forwarded for your information
copy of instructions promulgated by the Italian
Minister of Interior dated 17 April 1944.

RECEIVED
General
Deputy Executive
Commissioner.

Copy to:

Admin. Section (over 3092/11 of 4
May 1944)

HEAD HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394
ADMINISTRATIVE SECTION

ACC/3092/PH

4 May 1944

SUBJECT : Sanitation of Italian Towns.

TO : HC & MD Section HQ ACC APO 394

- 42 - *from attached to cover*
- 1 Attached herewith for your information are copies of the instructions promulgated by the office of the Italian Minister of Interior.
 - 2 You may consider it advisable to forward copies to Regional Commissioners Regions 3, 4 and 5 and also to the SCAD's Fifth and Eighth Armies.



R. R. Grippa
R. R. GRIPPA,
Lt. Colonel,
For VP Adm Sec.

Ex Com 1000

*9/5
Have sent copies to
Region Commissions as
above indicated. JLS*

del 4/5

Ministry of the Interior.

Palermo, 17 April 1944.

Headquarters of Public Health.

TO HIS EXCELLENCY THE HIGH COMMISSIONER OF
SICILY

PALERMO.

Subject: - Fight against Flies.

TO HIS EXCELLENCY THE HIGH COMMISSIONER OF SARDEGNA
CAGLIARI

TO THEIR EXCELLENCIES THE PREFECTS OF
BARI BRINDISI CATANZARO COSENZA LECCE MATERA.

POTENZA REGGIO CALABRIA SALERNO TARANTO

e p c BRIGADIER GENERAL G.S. PARKINSON

DIRECTOR OF PUBLIC HEALTH SUB-COMMISSION ACC SALERNO.

As the summer season is approaching, this Ministry recalls the attention of your Excellency to the necessity of giving instructions for the fight against flies, both for the prevention of infectious diseases and for the cleanliness of inhabited centres.

The chief actions to be taken in this regard are the following:

1. An improvement on the system of the taking away and destroying of garbage.
2. To intensify hygiene vigilance over stables, manure heaps, in markets food shops, and in industries that attract a number of flies.
3. To employ substances that will destroy larvae and winged insects.

There is a scarcity of material for the killing of flies this year. We must therefore insist on strict hygienic standards being maintained especially in the houses. It has been noticed that there is great difficulty in the cleaning of roads, it is necessary that:

a. Propaganda be issued by all Mayors and Public Health Officials so as to gain the cooperation of the population in keeping their houses clean.

b. That strict attention be kept on decrees 20.5.28 which contain rules of the law 20.3.28 N853 especially of Art. 2 which forbids the throwing of garbage etc. in the public road or on any private or public ground. It is also necessary to call the attention of the population to this rule and also to those dictated by local regulations on hygiene.

All the Mayors must see that these orders are strictly carried out.

It is therefore suggested that this Ministry be contacted if owing to lack of funds in the Comune the Mayor is not able to keep up the service of hygiene. The material for killing flies can be had from the Prophylactic Centres. If the Centre is out of stock, this Ministry should be informed of specific needs.

It is trusted that your Excellency will give your personal interest and cooperation for the cause of health and for the fight against flies.

It is requested that within a month of this date a short report be sent to this Ministry stating what measures have been taken on the matter.

FOR THE MINISTER.

1782

785017

231

5 MAY Recd

41

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB-COMMISSION
APO 394

Brigadier Lush, HQ and HQS.

5 May, 1944.

SUBJECT: Letter from Dr. W.A. Sawyer, Rockefeller Foundation.

TO : Lieut. General MacFarlane, Chief Commissioner, HQ, A.C.C.

For your information, I am quoting in part a recent letter from Dr. W.A. Sawyer, Director, International Health Division, Rockefeller Foundation as follows:

"I believe that my recent letter to you has already stated that we were notifying Dr. Soper that the International Health Division was accepting the invitation to work in Italy on malaria and typhus control and he will doubtless plan the details of our relationships. It is a great satisfaction to know that he will be working with such good friends of ours, including yourself, Brigadier Parkinson, and Colonel Russell. The whole plan, as far as we understand it, seems an ideal entrance by the Division into the war and postwar work in Europe. Needless to say, we are enthusiastic at this early beginning under such good auspices. The problem now is to find the required personnel and assign it as quickly possible. We have already arranged for Dr. Kuzin to come home from Colombia, establish his family here, and leave for Italy toward the end of June. Dr. Knipe, who is now in Mexico, will be available at about the same time."

I believe Dr. Sawyer's comment regarding "post war work in Europe" will be of especial interest to you because of the long range aspects of malaria and typhus control programs inaugurated under ACC.

WILSON C. WILLIAMS, Lt. Col. M. C.
Deputy Dir. P.H. Sub-Commission.

WCA/mto.

Dep Sec Com
Fols
H 5/5

231/ /CA.

Office of the
Executive Commissioner

2nd May 14

Adm Sec.

I am directed by the Executive Commissioner
to forward you copy of letter dated 27 Apr
regarding typhus and malaria control addressed
by Dr. Soper of the Typhus Control Service to
the Chief Commissioner, for your information.

Captain,
PA to Executive Commissioner.

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUBCOMMISSION
TYPHUS CONTROL SERVICE.

APRIL 27 1944

SUBJECT: ROCKEFELLER FOUNDATION COLLABORATION
WITH ALLIED CONTROL COMMISSION.
TYPHUS AND MALARIA.

TO: LIEUTENANT GENERAL NOEL MASON MACFARLANE,
CHIEF COMMISSIONER ALLIED CONTROL COMMISSION.

REF. ACC/3040/PH
CS720

1. Dr. Sawyer, the Director of the Rockefeller Foundation Health Commission, has authorized the collaboration discussed in our exchange of correspondence of the 24th and 27th of last month.
2. Necessary financial support is provided and additional personnel is being made available. Two Health Commission staff members experienced in the study and control of malaria have been named for this field. One is a medical officer, the other an engineer. These should arrive in the latter part of June.
3. In anticipation of Dr. Sawyer's authorization, plans have been made for continuing typhus control activities on a greatly reduced scale and a malaria control demonstration unit is being organized. Work on the important problem of how to apply insecticide to large marshy areas with standard air force and chemical warfare equipment has progressed to the point where a field demonstration for interested authorities has been scheduled for April 28.
4. Fortunately, there are available able Italian doctors to carry out important parts of the program in both typhus and malaria.
5. A general plan for collaboration during the coming months is being submitted for the consideration of the Public Health Subcommission.

Paul H. Sawyer
Representative of the
Rockefeller Foundation
Health Commission.

As soon as possible
Infection Commission
to see

Commission, has authorized the collaboration discussed in our exchange of correspondence of the 24th and 27th of last month.

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4. Fortunately, there are available able Italian doctors to carry out important parts of the program in both typhus and malaria.

6. A general plan for collaboration during the coming months is being submitted for the consideration of the Public Health Subcommittee.

Paul H. Sawyer
Representative of the

Rockefeller Foundation
 Health Commission.

Answered

Executive Commission

to see

unified

Send to Admin. Sec. Bm.

See 4196

11/3/5

See file 1314

1180

3-5-44

HEADQUARTERS,
ALLIED CONTROL COMMISSION,
APO 394

Regional Control and Military Government Section.

Ref: 231/58/GA.

2nd May 1944.

SUBJECT: Malaria Control.

TO : S.C.A.C., AMC, Eighth Army.

1. I have read para.3 of your GA/17 of 29th April 1944.
2. I refer you to para.11 of my Executive Memorandum No.54. You would appear to have missed the point. I quite appreciate that in your area the S.P.H.O. HQ. attends to malaria control. What I want you and your staff to realise is that malaria control is very much your lay responsibility. I want reports from you on the general malaria situation. I shall not be content with notes from P.H.O's. Please read the circular again and act as instructed.

W31/JG.

Brigadier,
Executive Commissioner.

23/11
1 MAY Recd C.A.B. (for C.A. Com)
u-5942

Subject:- Malaria Control.

AMG. H.Q. EIGHTH ARMY REAR.

OK/17.
29 Apr 44.

H.Q. Allied Control Commission,
Executive Commissioner's Branch.

1. Reference Executive Memorandum No. 54. The whole matter of Malaria control in Army Area is stated by Army to be their responsibility. S.P.H.O. this H.Q. attends the meeting of Army Anti-malaria Committee, 8 Army and Areas, and is kept informed of steps taken.
2. Any assistance the Army requires from A.M.G. is normally given.
3. Reference para. 6. The report required is beyond the capability of this H.Q. to supply; however the Provincial Medical Officers have been asked to supply notes on the Malaria situation in their monthly departmental reports and the information contained will be passed on to Malaria Control Branch.

P.C. But a Tan

Major, R.A.
J.S.C.11.
for Group Captain,
Officer Commanding,
A.M.G. EIGHTH ARMY.

Copy to:- H.Q. Allied Control Commission,
Malaria Control Board.

all 38

HEADQUARTERS
ALLIED CONTROL COMMISSION
H.Q. & H.G. Section
APO 394

Ref/251/35/CA.

25 April 1944.

EXECUTIVE MEMORANDUM)

NUMBER

54)

MALARIA CONTROL.

1. Prevention of Malaria in this theatre is of fundamental importance to Allied Forces. Experience of 1943 in Sicily and the notorious history of areas now occupied or which lie immediately ahead, indicate clearly that the Axis will sustain serious loss of manpower if malaria is not effectively controlled. All signs point to a season of unusually high density of malaria mosquitoes and of civilian carriers of the parasite - the two main factors in the transmission of malaria.
2. Protection of armed forces from malaria involves both intra and extra-theatrical control programs. Army regulations, whether British, French, or American, clearly make it the duty of commanding officers of units, great or small, to take adequate steps for protection against malaria. Within and immediately around a military installation malaria prophylaxis is definitely a constant function. In many areas there are civil malaria control problems continuous to military camps. Allied Control Commission will provide as much assistance as possible to all cases where civilian malaria or malarogenic conditions are a menace to Allied military engagements.
3. A Malaria Control Branch has been established in the Public Health Sub-Commission of Allied Control Commission. It has the following functions:
 - (a) To assist the Army Senior Civil Affairs Officers and Regional Commissioners of Allied Control Commission in restoring and implementing civilian malaria control agencies, and in directing their activities.
 - (b) To assist in coordinating civil and military malaria control activities.
 - (c) To carry out essential malaria control field tests in cooperation with the Allied Forces.
4. The Malaria Control Branch is located in Room 5, Regio Poste Building, Naples. Mail should be addressed to H.Q. Allied Control Commission, Public Health Sub-Commission, Malaria Control Branch, APO 394. The staff of the Branch is as

1. Prevention of Malaria in this theatre is of fundamental importance to Allied Forces. Experience of 1943 in Sicily and the notorious history of areas now occupied or which lie immediately ahead, indicate clearly that the Allies will sustain serious loss of manpower if malaria is not effectively controlled. All signs point to a season of unusually high density of malaric mosquitoes and of civilian carriers of the parasite - the two main factors in the transmission of malaria.
2. Protection of armed forces from malaria involves both intra and extra-cantonment control programmes. Army regulations, whether British, French, or American, clearly make it the duty of commanding officers of units, great or small, to take adequate steps for protection against malaria. Within and immediately around a military installation malaria prophylaxis is definitely a command function. In many areas there are civil malaria control problems continuous to military camps. Allied Control Commission will provide as much assistance as possible to all cases where civilian malaria or malarigenous conditions are a menace to Allied military units.
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 - (a) To assist the Army Senior Civil Affairs Officers and Regional Commissioners of Allied Control Commission in restoring and implementing civilian malaria control agencies, and in directing their activities.
 - (b) To assist in coordinating civil and military malaria control activities.
 - (c) To carry out essential malaria control field tests in cooperation with the Allied Forces.
4. The Malaria Control Branch is located in Room 5, Regia Poste Building, Naples. Mail should be addressed to H.Q. Allied Control Commission, Public Health Sub-Commission, Malaria Control Branch, APO 594. The staff of the Branch is as follows:

Chief	Colonel Paul F. Russell, MC.
Medical Officer	Captain V.F. Tustin, MC.
Malaria Engineer	Captain T.E. Anderson, Sn.C.
Entomologist	1st Lieut. E.A. Manzelli, Sn.C.
5. Direct communication on matters pertaining to malaria control is authorized between the Chief of the Malaria Control Branch, Regional Public Health Officers and Deputy Directors of Public Health, DMC 5th and 8th Armies.
6. Regional and Army Public Health Officers, Allied Control Commission will send to the Chief, Malaria Control Branch, on the first of each month, beginning 1 May 1944, a brief report listing location, type, and budget of local civilian malaria control work in progress, equipment, supply, labor, and transportation conditions, spleen or parasite surveys, malaria incidence figures, and any pertinent comments on the malaria situation. Sketch and spot maps should be included when feasible. The first report should list active Quintato Provvisoria Antimalaria, giving names and official titles of the members.

C/PX

-2-

7. In each province where there is a malaria problem there will usually be found a Comitato Provinciale Antimalarico. If this committee has been dissolved, it should be reconstituted as soon as possible. The malaria committee should be advised that, if it has not already done so, it should immediately prepare malaria control plans and budgets along the general lines of preceding years. In Regions I, II, VI and VII these malaria control budgets will be submitted (through High Commissions in Sicily and Sardinia in Regions I and VI respectively) to the finance offices of the Provincial Government for approval. Hence the approved budgets should be forwarded to the Minister of the Interior of the Italian Government. When approved by the Minister of the Interior, funds will be remitted to the Provincial Office. In Regions III, IV and V approved budgets will be forwarded from the provincial finance offices to the Regional Finance Officer, Allied Control Commission, who, if he approves will establish credits at the provincial Banco d'Italia. Since the malaria season has already begun, prompt consideration will be given to such plans and budget proposals.
8. So far as Allied Control Commission supplies are concerned, malaria control will be based on drainage, maintenance of drainage canals, curbing of streams, regulation of water, filling, oiling, and the proper treatment of clinical cases. Excepting as civilian supplies are available from last year's stocks, no Paris Green is obtainable by Allied Control Commission for the control of civil malaria. Oil in reasonable amounts is available for laviciding. Sprayers for oil are in limited supply but brush oiling may be substituted for spraying in most cases, if necessary. Considerable ingenuity will be required in regard to transport where motor vehicles are not available on requisition. Pull use must be made of mules, horses, donkeys and oxen. In many cases workers will have to walk to and from their work. Where vehicles are available but there is lack of gasoline, applications for gasoline will be favorably considered. Where the work is directly associated with military installations it may be possible to obtain transport assistance from the Commanding Officer.
9. Upon approval of plans and budgets, it is possible to obtain oil from the nearest agency of the Comitato Italiano Petroli on requisitions approved by the Provincial Officer or C.A.O. Transport will have to be provided by the Comitato Provinciale Antimalarico or the local requisitioning agency. The Medical Supply Branch, Allied Control Commission will send to each Regional Headquarters the provincial quota of sprayers. These may be obtained by the local malaria control agency from Regional Headquarters, Allied Control Commission.
10. Quinine is not available to Allied Control Commission for distribution but supplies of atabrine/mepacrine for therapeutic use have been provided. Each Regional Public Health Officer, Allied Control Commission, will requisition from the Medical Supply Branch, Public Health Sub-Commission, Allied Control Commission, the amount of atabrine/mepacrine required by his regional provisions. The Supply Branch will send the desired amount to the Regional Headquarters from which provincial distribution will be made to the local malaria committee on requisition.

8. So far as Allied Control Commission supplies are concerned, malaria control will be based on drainage, maintenance of drainage canals, curatining of streams, regulation of water, filling, oiling, and the proper treatment of clinical cases. Excepting as civilian supplies are available from last year's stocks, no Paris Green is obtainable by Allied Control Commission for the control of civil malaria. Oil in reasonable amounts is available for lawdrilling. Sprayers for oil are in limited supply but brush oiling may be substituted for spraying in most cases, if necessary. Considerable ingenuity will be required in regard to transport where water vehicles are not available on requisition. Pull use must be made of mules, horses, donkeys and oxen. In many cases workers will have to walk to and from their work. Where vehicles are available but there is lack of gasoline, applications for gasoline will be favourably considered. Where the work is directly associated with military installations it may be possible to obtain transport assistance from the Commanding Officer.

9. Upon approval of plans and budgets, it is possible to obtain oil from the nearest agency of the Comitato Italiano Petroli on requisitions approved by the Provincial Officer or C.A.O. Transport will have to be provided by the Comitato Provinciale Antimalaria or the local requisitioning agency. The Medical Supply Branch, Allied Control Commission will send to each Regional Headquarters the provincial quote of sprayers. These may be obtained by the local malaria control agency from Regional Headquarters, Allied Control Commission.

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Due to the inadequate supply, suppressive prophylactic use of atabrine/mepacrine can not be recommended for civilians. Every effort should be made (a) to facilitate distribution of atabrine/mepacrine to civil agencies for treatment of malaria, and (b) to check prophylactic use of atabrine/mepacrine among civilians unless they are engaged in operational war work or have been ordered by military authority to take it. In the latter case atabrine/mepacrine will be supplied from military sources.

11. Finally the importance of malaria control is again stressed. It is a general administrative problem in which every officer in the Region must play his part. Regional Commissioners, Provincial Commissioners, and all Allied Control Commission Health Officers must do everything in their power to stimulate and facilitate civilian malaria control programmes. The highest priority will be given to work in the vicinity of Allied military installations.

MSL

SUBJECT: Directive on Malaria Control, Folio 31 - 33.

TO : Executive Commissioner.

1. Admin Section have forwarded a directive on Malaria Control which they wish you to sign.

2. With reference to para.5 you may wish to add :

"It is the responsibility of Regional Commissioners and S.C.A.Os. Arises to keep me informed of progress in Malaria Control and on the more important aspect of the problems encountered in connection with it. It should be remembered that the prevention of malaria must not be treated as a purely technical problem, but also as a general administrative problem."

3. The draft memorandum bears the title Administrative Memorandum. I cannot see why this should not be issued as an Executive Memorandum. In fact I do not know what an Administrative Memorandum is, unless it is a Memorandum issued by the Admin Section.

G.W.I. Shipp

26 April 44.

G.W.I. SHIPP,
Lieut. Col.

*It should issue as an Executive Memorandum
micrographed - urgent.*

*Amendments opposite. Better tell Col Russell
about them.*

W/24/4/4

*Capt Talbot
will get it signed to
this in March 1944
about 25/4*

*Col Russell 6/1/45
attached 25/4*

1776

22 APR Recd

286

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331

REAR HEADQUARTERS
ALLIED CONTROL COMND ON.
Administrative Section.
APO 394.

AGC/3005/PH

21 April 1944.

SUBJECT: Directive on Malaria Control.

TO : HQ and AG. Section

21 APR 1944

6706

1. It is requested that the attached directive on Malaria Control, prepared by the Chief of the Malaria Control Branch of the Public Health Sub-Commission, be issued as an Administrative Memorandum with distribution 'A'.
2. As the malaria problem is imminent, it is requested that this memorandum be published as quickly as possible.
3. The financial points involved have already been cleared with the Finance Sub-Commission and the Italian Government.

PH/GMF/ach

J. H. Chappin
STANISLAW,
VP Adm Sec.

32

HEADQUARTERS
ALLIED CONTROL COMMISSION.
APO 39h.

Executive

ADMINISTRATIVE MEMORANDUM)

NUMBER)

21 April 1944.

Prevention of

MALARIA CONTROL.

1. A Malaria ~~prevention~~ in this theater is of fundamental importance to Allied Forces. Experiences of 1943 in Sicily and the notorious history of areas now occupied or which lie immediately ahead, indicate clearly that the Armies will sustain serious loss of manpower if malaria is not effectively controlled. All signs point to a season of unusually high density of malaria mosquitoes and of civilian carriers of the parasite - the two main factors in the transmission of malaria.

2. Protection of armed forces from malaria involves both intra and extra-cantonment control programs. Army regulations, whether British, French, or American, clearly make it the duty of commanding officers of units, great or small, to take adequate steps for protection against malaria. Within and immediately around a military installation malaria prophylaxis is definitely a Command function. In many areas there are civil malaria control problems contiguous to military camps. ACC will provide as much assistance as possible to all cases where civilian malaria or malarious conditions are a menace to Allied military encampments.

3. A Malaria Control Branch has been established in the Public Health Sub-Commission of ACC. It has the following functions:-

(a) To assist the Army Senior Civil Affairs Officers and Regional Commissioners of ACC in restoring and implementing civilian malaria control agencies and in directing their activities.

(b) To assist in coordinating civil and military malaria control activities.

(c) To carry out essential malaria control field tests in cooperation with the Allied Forces.

4. The Malaria Control Branch is located in Room 5, Regio Poste Building, Naples. Mail should be addressed to HQ ACC, Public Health Sub-Commission, Malaria Control Branch, APO 39h. The staff of the Branch is as follows:-

Chief	Colonel Paul F. Russell, MG.
Medical Officer	Captain V.F. Tuzio, MG.
Malaria Engineer	Captain T.D. Anderson, Sn C.
Entomologist	1st Lieut. M.A. Manzelli, Sn C.

5. Direct communication on matters pertaining to malaria control is authorized between the Chief of the Malaria Control Branch, Regional Public Health Officers and Deputy Directors of Public Health, ARS 5th and 8th Armies.

6. Regional and Army Public Health Officers, ACC will send to the Chief, Malaria Control Branch, on the first of each month, beginning 1 May 1944, a brief report listing location, type, and budget of local civilian malaria control work in progress, equipment, supply, labor, and transportation conditions, spleen or parasite surveys, malaria incidence figures; and any pertinent comments on the

1774

31

malaria situation. Sketch and spot maps should be included when feasible. The first report should list active Comitato Provinciale Antimalarico, giving names and official titles of the members.

7. In each province where there is a malaria problem there will usually be found a Comitato Provinciale Antimalarico. If this committee has been dispersed, it should be reconstituted as soon as possible. The malaria committee should be advised that, if it has not already done so, it should immediately prepare malaria control plans and budgets along the general lines of preceding years. In Regions I, II, VI and VII these malaria control budgets will be submitted to the finance office of the Provincial Government for approval. Thence the approved budgets should be forwarded to the Minister of the Interior of the Italian Government. When approved by the Minister of the Interior, funds will be remitted to the Provincial Office. In Regions III, IV and V approved budgets are forwarded from the provincial finance office to the Regional Finance Officer, AGC, who, if he approves will establish credits at the provincial Banca d'Italia. Since the malaria season has already begun, prompt consideration will be given to such plans and budget proposals.

8. So far as AGC supplies are concerned, malaria control will be based on drainage, maintenance of drainage canals, canalizing of streams, regulation of water, filling, oiling, and the proper treatment of clinical cases. Excepting as civilian supplies are available from last year's stocks, no Paris Green is obtainable by AGC for the control of civil malaria. Oil in reasonable amounts is available for larviciding. Sprayers for oil are in limited supply but brush oiling may be substituted for spraying in most cases, if necessary. Considerable ingenuity will be required in regard to transport since motor vehicles are not available on requisition. Full use must be made of mules, horses, donkeys and oxen. In many cases workers will have to walk to and from their work. Where vehicles are available but there is lack of gasoline, applications for gasoline will be favourably considered. Where the work is directly associated with military installations it may be possible to obtain transport assistance from the commanding officer.

9. Upon approval of plans and budgets, it is possible to obtain oil from the nearest agency of the Comitato Italiano Petroli on requisitions approved by the CAO. Transport will have to be provided by the Comitato Provinciale Antimalarico or the local requisitioning agency. The Medical Supply Branch, AGC, will send to each Regional Headquarters the provincial quotas of sprayers. These may be obtained by the local malaria control agency from Regional Headquarters, AGC.

10. Quinine is not available to AGC for distribution but supplies of atabrine/mepacrine for therapeutic use have been provided. Each Regional Public Health Officer, AGC, will requisition from the Medical Supply Branch, Public Health Sub-Commission, AGC, the amount of atabrine/mepacrine required by his regional provinces. The Supply Branch will send the desired amount to the Regional Headquarters from which provincial distribution will be made to the local malaria committee on requisition.

Due to the inadequate supply, suppressive use of atabrine/mepacrine can not be recommended for civilians. Every effort should be made (a) to facilitate distribution of atabrine/mepacrine to civil agencies for treatment of malaria, and (b) to check prophylactic use of atabrine/mepacrine among civilians unless they are engaged in operational war work or have been ordered by military authority to take it. In the latter case atabrine/mepacrine will be supplied from military sources.

11. Finally the importance of malaria control is again stressed. A Regional Commissioners, Provincial Commissioners, and all AGC Health Officers must do everything in their power to stimulate and facilitate civilian malaria control programs. The highest priority will be given to work in the vicinity of military installations.

DISTRIBUTION (A).

By Command of Lieut General MARION MACPARDINE.
(Signed) M.S. LUSH, Brigadier.

231 TH
10 APR Recd

C. H. B. 10752

30

Subject: Hygiene Advisory Board

S. A. A. F. (S. A. F. H.)

AM/306/9/1(0).

S. A. F. H.

Fifth Army (5)	Peninsular Base Section (6)
Rear Eighth Army (5)	C-in-C Med (5)
Main Eighth Army (2)	HQ AAF (6)
10 Corps (2)	HQ AAF/AFD (6)
5 Corps (5)	HQ Allied Control Commission (6)
1 District (6)	
2 District (6)	
3 District (6)	

Reference this HQ AM/306/13/1(0) dated 15 Mar '44.

1. As the Typhus Control Board has now been incorporated in the Hygiene Advisory Board, the local Committee formed under the Authority of this HQ 3095/A.1 dated 11 Jan '44 to deal with various problems connected with typhus control in Naples Area will now be disbanded.
2. The Regional Public Health Officer, S. A. F. Region 3 will arrange to convene a similar Committee for dealing with general public health matters.
3. Members of the Allied Medical Services will be invited to attend.

H/K

TJ/JLM

Copies to: AFHQ - G.1(10)

G.4
Cdn Sec
Medical
ISPO
DLM

for
Major-General J.
Chief Administrative Officer.

Acc Dist

Survey Com	1
Admin Sec	1
Pub Health (Main)	1
(Res)	1
C A B	1
AME, Region 3	1

HEAD HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394
Public Health Sub-Commission

C.A. Be. 4044
4 APR Head 1944
29

AGG/SAS/CH

2 April 1944

SUBJECT: - Control of Malaria in Italy.

TO: - (See Distribution)

In order that there may be a better understanding of Malaria problems and better coordination of malaria control activities, all major units in western Italy are invited to have a representative or representatives at the special Malaria Control Conference which will meet in Room 27, First Floor, Province Building, Naples, 1000 hours on 6 April, 1944. It is especially important that the malarialogist, and if possible the officer responsible for preventive medical services, of each major unit be present.

Among others the following are invited to have a representative or representatives present as indicated:

Surgeon, 5th Army
SAS, 5th Army
Surgeon AFHQ
Surgeon, RAF (CWF)
Surgeon, FBI
Surgeon, USAF (MTO)

AFHQ, Region III (Thru Regional Commissioner)
" Region IV
" Region V
DMS, AFHQ, Adv. Adm. Sch.
Public Health Sub-Commission, (AGC Main Bldg)

Tentative agenda is as follows:

- 10:00 1. Opening remarks by the Presiding Officer,
Lieut. G. S. Parkinson, Director, P.H. Sub-Commission.
2. The Malaria Problem, Col. Paul F. Russell, Malarialogist,
Public Health Sub-Commission, AGC.
a. Definition of areas.
b. Labor and supplies.
c. Transportation.
d. Unit resources and responsibilities.
e. Program coordination.
f. Information exchange.
3. Any other business.

By command of Lieut General HARRY H. WATKINS:

G. S. PARKINSON, Brigadier
Director, Public Health Sub-Commission

AGG/SAS/CH
DMS, AFHQ, Adv. Adm. Sch.
Office of the Surgeon, AFHQ
Surgeon, FBI
DMS, 33 District

Surgeon RAF (CWF)
Surgeon USAF (MTO)
Surgeon 5 Army
SAS 5 Army

AFHQ Region 4 (Thru Reg. Comm)
AFHQ Region 5
AFHQ Region 3

COPT For - Chief Commissioner, AGC Bldg.
" " " " " " (Main)
" " " " " " Executive Commissioner, AGC Bldg.

1771

Ref: 231/28/CA

28/
11st March 1944.

SUBJECT: Proposed Malaria Conference.

TO : Lt. Col. W. C. Williams,
Deputy Director,
Public Health Sub-Commission.

As a result of a conversation with Brigadier Parkinson I am returning this draft letter to you with the suggestion that the invitation should emanate from the Public Health Sub-Commission rather than from this Section. Perhaps you would clear the date with the Chief Commissioner through the Secretary General.

Sgd - M S Lushy

Brigadier,
Executive Commissioner.

HEH/JL

18711

PA

HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB-COMMISSION
APO 394

27

27 March, 1944.

SUBJECT: Attached Memo re proposed Malaria Conference.

TO : Executive Commissioner, HQ, ACC.

Field visits reveal lack of understanding of resources available for Malaria Control from all sources and ways in which these resources may be utilized cooperatively to best advantage for military and civilian protection. There is evident interest on the part of all concerned to have all programs coordinated in order that all available resources may be centered upon major problems and areas where an unusual incidence of malaria may affect adversely military operations and civilian health.

Accordingly it is suggested that the attached letter of invitation, or a modification thereof, be transmitted to Unit Commanders concerned and listed in proposed letter at the earliest possible time.

I have taken the liberty of having the Conference Room, Provincial Building, tentatively reserved for the proposed meeting on April 5.

A similar meeting is proposed for East Coast Units concerned on or about 20 April, 1944.

Wilson C. Williams
WILSON C. WILLIAMS, Lt. Col. U. S. C.
Depty. Director, P.H. Sub-Commission.

WCS/mto.

VPs Melrose

WCB

HEADQUARTERS
ALLIED CONTROL COMMISSION,
APO 394

Regional Control and Military Government Section.

Ref: 231/27/CA

19th March 1944.

SUBJECT: Cleaning of Towns and Villages.

TO :	Regional Commissioner,	Region I	(10)
"	"	Region II	(10)
"	"	Region III	(4)
"	"	Region IV	(4)
"	"	Region V	(4)
"	"	Region VI	(4)
"	"	Region VIII	(1)
"	"	Region IX	(1)
	S.C.A.C., AMS, 5th Army		(1)
	S.C.A.C., AME, 8th Army		(1)

1. I enclose herewith copies of correspondence from S.C.C., No. 3 District.
2. Cleanliness in towns and villages is of such importance in the matter of public health and in the interests of Allied troops that every opportunity should be taken to urge the Italians to better efforts. The action taken by S.C.C. No. 3 District will be of tremendous help to Provincial officers and I should like Regional Commissioners to suggest to the District HQ. in their Regions that similar action should be taken wherever it is possible. Only by the closest co-operation between Allied military medical authorities and the Italian authorities under the advisory control of the A.C.C. can we get this country into a state fit for Allied troops. If we neglect for one moment our burden duty in this matter the country will be black with flies, buzzing with mosquitoes and our hospitals will be full of dysentery and malaria cases.
3. Regional Commissioners and their medical staffs have a very great responsibility in this matter and must see that in the coming hot weather they do not fail.

Region II	1
Region III	4
Region IV	4
Region V	4
Region VI	4
Region VIII	1
Region IX	1
S.O.A.C., AMB, 5th Army	1
S.O.A.C., AMB, 8th Army	1

1. I enclose herewith copies of correspondence from S.O.C., No. 3 District.

2. Cleanliness in towns and villages is of such importance in the matter of public health and in the interests of Allied troops that every opportunity should be taken to urge the Italians to better efforts. The action taken by S.O.C. No. 3 District will be of tremendous help to Provincial officers and I should like Regional Commissioners to suggest to the District HQ. in their Regions that similar action should be taken wherever it is possible. Only by the closest co-operation between Allied military medical authorities and the Italian authorities under the advisory control of the A.C.C. can we get this country into a state fit for Allied troops. If we neglect for one moment our border duty in this matter the country will be black with flies, buzzing with mosquitoes and our hospitals will be full of dysentery and malaria cases.

3. Regional Commissioners and their medical staffs have a very great responsibility in this matter and must see that in the coming hot weather they do not fail.

M. G. Clark
Prigedier,
Executive Commissioner.

MSL/36

Copy to: Public Health Sub-Commission.
Secretary General.

1768

2

COPY.DO/MS

Major Gen A. L. Collier,
Headquarters,
No. 3 District,
C. M. P.

7. Mar. 1944.

Some notes on the 3 District Conference about the cleaning of towns have been sent to you under our letter 196A dated 2 Mar. I hoped that after the Conference we should have been able to send you something a bit more helpful, but the more I think of it the more it seems to be a matter of District, Area, Town Majors and units - or groups of units - forming their own committees and getting down to it with the local Italian authorities. I am very keen too that these committees should deal not only with cleaning up their towns and villages, but should also supervise all anti-malaria activities. If we have two sets of committees for these two purposes there will be over-lapping and waste of effort.

Col STOTT of 1 IXFD has made a most successful start on cleaning up his local villages and I attach some notes from him as to how he has set about it.

I am trying to find out from SIG/ACV exactly the legal action we can take against Italian civilians who fail to obey the sanitation regulations, and will let you know the answer.

As to extra pay for Italian sanitation personnel, Col CRITCHER, Director of Public Health, Region III, has undertaken to go into this. But it will take time and I am sure the immediate answer is for units to engage local labour on the authority of Area Commanders as described in para 3 of Stott's letter.

I shall put down cleaning/anti-malarial work on the agenda for the next Commanders Conference so that Area Commanders can make verbal reports as to the progress achieved, difficulties encountered and new suggestions for coping with the problem.

(SND) A. L. COLLIER.

CONF.

Subject: Measures for Improving Hygiene and Sanitation
in Billets and elsewhere.

3 District
Tel. Ext 18
vaf/A

1/1 57 Area.

1/1 94 Sub Area

ACC

2 for info.

1. The G.O.C. is much concerned with the state of cleanliness existing in the towns and villages in the District. Almost everywhere there are dumps of refuse, decaying vegetables and filth. In a few weeks time the weather will be getting warmer and these dumps will prove a ready breeding ground for flies.

If the health of the troops is not to be impaired, it is essential that steps be taken NOW to clean up all towns and villages where troops are stationed. This can only be done by every officer and other rank doing his bit. The excuses that a unit is only in temporary occupation or that it is already too busily employed will not be accepted. Man power is much too valuable to run any risks with, an extra hour or two of overtime now may save three or more weeks in hospital later.

2. Existing arrangements.

(a) Military. Units are responsible for cleaning up their own billets and for burning or burying refuse.

(b) Civil. In towns there was in peace a system of street cleaning and garbage collecting under the Podesta. In NAPLES this system has been revived by ACC and ZPS and some progress has been made, but not enough. In country towns and villages, although ACC have issued instructions, very little clearance of refuse has been done. The difficulties are:

- (i) Shortage of man power
- (ii) Low wages
- (iii) Lack of transport to remove refuse
- (iv) Uncontrolled dumping by householders

3. Action to be taken on military premises.

(i). Cleanliness of billets is of course a first essential in any unit. It is not enough to have the billet itself clean, the area around it must be clean too. This area must be increased as much as possible.

(ii) Rubbish dumps are not always well sited, units must make sure they are well away from billets and that rubbish is always taken to them.

steps be taken. Now to clean up all towns and villages where troops are stationed. This can only be done by every officer and other rank doing his bit. The excuse that a unit is only in temporary occupation or that it is already too busily employed will not be accepted. An power is much too valuable to run any risks with, an extra hour or two of overtime now may save three or more weeks in hospital later.

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(a) Military. Units are responsible for cleaning up their own billets and for burning or burying refuse.

(b) Civil. In towns there was in peace a system of street cleaning and garbage collecting under the police. In times this system has been revived by AGC and PSS and some progress has been made, but not enough. In country towns and villages, although AGC have issued instructions, very little clearance of refuse has been done. The difficulties are:

- (i) Shortage of man power
- (ii) Low wages
- (iii) Lack of transport to remove refuse
- (iv) Uncontrolled dumping by householders

3. Action to be taken in military premises.

(i) Cleanliness of billets is of course a first essential in any unit. It is not enough to have the billet itself clean, the area around it must be clean too. This area must be increased as much as possible.

(ii) Rubbish dumps are not always well sited, units must make sure they are well away from billets and that rubbish is always taken to them. Incinerators must be constructed and pits dug.

(iii) The troops must be told of the reasons and necessity for cleaning up and keeping billeting areas clean.

(iv) The unit Anti-Malarial squad can combine this with their other duties and they can do a lot to help, but they will require considerable assistance, especially at the outset.

(v) It is permissible to engage labour and clean up areas round billets. These labourers must be properly supervised, or they may merely move the refuse out of sight.

4. Assistance to Civil authorities.

(a) All units must be prepared to afford some assistance to the Civil authorities. This can best be done by forming small committees to discuss the best means of help. The committee should consist of:

-2-

The Town Major or where none exists
 The Senior military officer
 A medical officer
 Civil Affairs Officer
 The Italian Mayor

(b) The loading of transport by units for carrying refuse is obviously unpopular, but it will have to be done.

(c) Units must insist that their recommendations are carried out by the Italian authorities; only by frequent repetitions can any result be achieved. Civil penalties arise for civilians who fail to carry out instructions given by both AOC and military authorities. Details of these will be forwarded later.

(d) The AOC on a recent visit to the RTD CERVINARA saw an example of what can be done to clean up villages. Notes on the methods employed will be forwarded, but a personal visit to the RTD would be of even more value.

5. Combination of Hygiene and Malaria Committees.

The work of Hygiene and Malaria Committees is so inter-related that they should be regarded as one and work as such.

6. In order to keep a check on progress it will be necessary for monthly reports to be made. These reports should contain:

- (a) A survey of work carried out.
- (b) Amount of transport that has been used. How difficulties in its provision have been overcome.
- (c) Details of extra labour employed.
- (d) Any recommendations and suggestions.

7. It is again emphasised what a potential danger to the health of the Forces exists in the present filthy conditions. Every officer and other rank must be told of this and of the necessity for helping all he can to get things better.

(Sgt) L. LARUE,
 Colonel, IG Adm.

24

HEADQUARTERS,
ALLIED CHINESE COMMISSION,
APO 394

29/11/44.

12th March 1945.

Thank you very much for your letter DO/19 of 6th March and enclosures thereto.

I am most grateful for the work which you and your Area Commanders are doing to clean up bits of Italy - and my word doesn't the country need it. I am sending your letters to Regional and Provincial Commissioners, not only in your District but throughout the country and I shall instruct them to prod the Italians as much as possible. ←

The spring is upon us and we shall soon have flies in abundance. But I shall come down to No.3 District and be quit of them.

Major General A. L. Collier, G.B.E., D.S.O.,
Headquarters,
No.3 District,
C. M. F.

785017

CONFIDENTIAL

PATMA 2039

Fatima (Civil Affairs Branch)

14 March 1944

CONFIDENTIAL

Vogel-10090-Viale

ROUTINE

CAMPUS

PARKING BRIGADIER VISITING HOUSES SHORTLY TO PAPER TO CAMPUS FOR THE REGION
FIVE EXCEPTED FROM PATMA UNDER MACTAN. THE PAPER TO WILL DISCLOSE REPORTED
NOTING TO BE TILL THEN

Copy sent to G-1 with explanation

GB

PA

GB

L.T. MURPHY, JR.
2/Lt. AD.
ADJUTANT

CONFIDENTIAL

1765

785017

231

6 MAR Recd

U-1704

22

SUBJECT :- Hygiene Advisory Board

HEADQUARTERS

15 MAR 1944

A. C. C.

HQ ACMP ADM ECH,
CAF.

ACMP/3066/13/A(0)

13 Mar 44. Typhus control file 229

1. A Typhus Control Board was established in accordance with instructions issued under this HQ 3095/A1 dated 11 Jan 44, as reconstituted by 3095/A1 dated 21 Feb 44, and a Malaria Control Board was proposed under this HQ 3095/B/A1 dated 15 Feb 44.
2. There are, however, other important aspects of Preventive Medicine which can with advantage be discussed by a representative body of this nature, in order to achieve co-ordination and the production of a unified policy. It has been decided, therefore, to form a Hygiene Advisory Board, which will take over the functions of the Typhus and Malaria Control Boards and will, in addition, be concerned with questions of Hygiene and Preventive Medicine.
3. The Board will be composed of the members of the Typhus and Malaria Control Boards, whose responsibilities will remain as defined in the above quoted memoranda, together with any other Military or Civil representatives whom the Board may decide to co-opt.
4. The Board will advise the C.A.O., A.C.M.F. (Adm. Ech) on all matters of policy relating to Hygiene and Preventive Medicine as well as on questions of Malaria and Typhus, and will report to him as often as is considered necessary.
5. Meetings will be convened by the Chairman and will be held at such intervals as are considered necessary.

JSP/AM

A.C.C. Dist

Secy Gen
Admin Sec
Pub Hlth (Hyg)
Pub Hlth (Rear) 2
C A BR

W. H. H. H.
Brig Genl 194

Major-General,
CAC.

X

1764

Maj. Driffel - White:

Let written by Brig. Parkson to H-1
(A) ordered transfer of one Lt. Col. Paul Heath,
from Reg. I to Reg. V. Later, another letter to H-1
(A) from Brig. Parkinson, dated 24 Feb., stated that
order #1 should be amended and Lt. Col. Spencer
transferred to Reg. IV instead. ~~However~~, Because
of some error, order #2 was delayed and it
is believed that Lt. Col. Spencer never re-
ceived it thus reporting to Reg. V as per
order #1.

Petullo

1763

785017

MJDT V MJAQ NR1

T

FROM REREG 5 AMG 101255A

CMF

TO FARGO

RR 39 BT

QY 10 ---

FOR FISKE IN RE YOUR TELECOM DETACHING

LT COL SPENCER S C SPENCER IS MALARIAL

EXPERT HAS REPORTED AND WAS SENT TO

WORK IN FOGGIA ON MALARIAL TERRITORY (.)

REQUEST HE E/ BE ATTACHED REGION FIVE FOR

TEMPORARY DUTY

TOO 1145 THIS 101255

BT RECD NR 1 11/0355 A JFF AR

225 11 MAR Recd

ACTION

COPY

CAB (for E. Log)

5087



11/11/21

ACC DISTRIBUTION

(ACTION) - C.A.B. (for E. Log)

INFO - DEPC. C.

" - FILE

" - FRONT

ACTION COPY

SENT NR 1 11/0355A EHO

1762

HEADQUARTERS
ALLIED CONTROL COMMISSION
R.C. & M.G. Section
APO 394

20

Ref/229/1/OA.

9 March 1944.

SUBJECT: Typhus - Restrictions in NAPLES.

TO : R.C. Region III.

The attached copies of ACMF/3095/10/A (O) of 4 Mar 44 are forwarded for your information.

NORMAN E. FISKE
Colonel, Cavalry,
Deputy Executive
Commissioner



229 6 MAR Recd

SECURITY - URGENT

SUBJECT :- Types - Restrictions in NAPLESHQ ACP AM ECH
GCP.

ACMP/3095/1Q/A(O)

4 Mar 44

19
No Record

1. With reference to AFHQ Adv Adm Ech letter No 3095/A.1 of 6 Jan 44, authority has been given for personnel of 5 Brit Div to be granted a day pass into NAPLES Metropolitan Area, during the period they are located in the vicinity of NAPLES.

2. All troops will be warned that they are not to enter places of entertainment, cafes etc., other than those reserved for the Allied Forces. The danger of contact with civilians in a city where cases of typhus are occurring will be explained to them.

GCP/AM

Major-General,
Chief Administrative Officer.DISTRIBUTION

DCAO.

FIFTH Army Br Inscr.

'A' HQ 5 Brit Div.

'A' 3 District.

'A' 57 Area.

PMS

Medical

Provost.

Executive Commissioner ACP NAPLES.

5 MAR Recd *28*

C. A. Br.
1803

HEAD MILITARY MISSION INCOMI MESSAGE

CONFIDENTIAL

5 MARCH 44

CONFIDENTIAL

PRIORITY

FRIDAY

FATIMA



W/O SO. 29/A

R.F. NO 60089

FILED 041919

RE'D 042237

18

8 refer

TEMPORARY DUTY ASSIGNMENT COL RUSSELL AS MALARIOLOGIST REQUESTS COMPLICATIONS
BUT UNDERTAKING ARRANGEMENTS COULD BE MADE TO ADVANCE HIS PERMANENT ASSIGNMENT TO AGO IN
PRESENT RANK OF COLONEL (TO PATRICK FOR PERMISSION FROM WILLIAM SIGNED GINO CITY FIDELITY)
RECOMMEND LATTER AND REQUEST YOU INITIATE FORMAL REQUEST PERMANENT ASSIGNMENT

ADD DATA

ACTION C-1 (8) (2)
INFO SUB HEALTH
DPT CO
CA IN
FILE
FLAT

CONFIDENTIAL

MY 60

785017

8 MAR Recd

U-132711

17

RE/115

REFUGEE AND DISPLACED PERSONS SUB-COMMISSION
ALLIED CONTROL COMMISSION
Office of the Director

IDP/66/271.

1st March, 1944.

SUBJECT: Malaria Control in Refugee Camp at FERRAMONTI.

TO : Director,
Public Health Sub-Commission
Allied Control Commission
thru
Executive Commissioner,
Allied Control Commission.



Reference ACC/3005/PR dated 24 Feb. 44, a copy of which is attached.

1. Conditions at FERRAMONTI Camp from the sanitary and health points of view are understood and plans are under consideration for obtaining another site as a camp for refugees.
2. It has been proposed to move the inhabitants of FERRAMONTI Camp to a refugee Camp at TUTURANO. In the meantime an adverse report on the sanitary conditions has been received from the Camp Commandant of the camp at TUTURANO.
3. The A.D.R.S. of this Sub-Commission has been asked to make a report on the sanitary conditions at TUTURANO. It is believed that they are not as bad as depicted by the Camp Commandant. In the meantime other preliminary steps are being taken for closing the camp at FERRAMONTI. Pending the results of the medical survey of the camp at TUTURANO final action is suspended.

[Signature]
ROBT. G. KIRKWOOD,
Colonel F.A.
Director.

ENCL:
ACC/3005/PR dated 24 Feb. 44.

1st Ind.
HQ ACC, R.C. & M.G. SECTION, APO 394, 10 March 1944.

TO: Public Health Sub-Commission.

For information and action as necessary.

[Signature] 1759
NORMAN E. FISKE
Colonel, Cavalry
Deputy Executive Commissioner.

HEADQUARTERS
ALLIED CONTROL COMMISSION
R.C. & M.C. Section
APO 394

Ref/228/9/QA

28 February 1944.

SUBJECT: Malarial Control Officer

TO : Administrative Section

1. Reference your 61/AS of 26 February 1944.
2. Attached for your information are two copies of FARGO message No. 1345 dispatched from this Headquarters prior to the receipt of your memo under reference. In view of this message, it is not considered necessary to forward the memo to AFHQ.

NORMAN E. FISKE,
Colonel, Cavalry,
Deputy Executive
Commissioner.

Incl

Copies of FARGO message No. 1345 (2)

CONFIDENTIAL

PARGO 1345

PARGO (Lt Gen MacFarlane)

26 FEBRUARY 1944

CONFIDENTIAL

10050 MacFarlane

PRIORITY

FREEDOM FOR MEN

_____ In view high malaria rate anticipated by Military and personnel this Headquarters services of outstanding Malaricologist required for coordination Military, AGC and Civilian Malaria Control programs for Italy. Understand Colonel Paul Russell may be available for special temporary duty assignment this nature. If Colonel Russell not available desire men with similar background of training and experience at early date. Perhaps Hackett of Rockefeller Foundation who spent many years in Italy on malaria control might be available. Depending situation justifies immediate and concerted planning and action.

CONFIDENTIAL

L. F. RICKEN,
Lt Col, AGC,
Adjutant General.

175

785017

REAR HEADQUARTERS,
ALLIED CONTROL COMMISSION
APC 394

27 FEB Recd

61/AS

26 Feb 44.

SUBJECT : Attachment of Malarial Control Officer.

TO : Executive Commissioner, ~~ROME~~ Sec. HQ. ACC. APC 394.

1. The attached letter is forwarded for your signature and dispatch to AFHQ, MGS.

2. It concerns the attachment of an outstanding malarial control expert to the Public Health Subcommittee, which attachment is most desirable.


R.R. CRIPPS,
Lt. Colonel,
for the Vice President, Administrative Section.

Incl: 1 Proposed letter.
1 AFHQ, MGS letter.

1756

16767
14

HEAD HEADQUARTERS,
JULIUS ROBERT, COMMISSIONER
APR 374

13

41/42

26 Feb 44.

~~REMARKS~~ : Attachment of Material Control Officer.

Re: 44.

~~RE~~ : Executive Commissioner, ~~APR 374~~. HQ. AGO. APR 374.

1. The attached letter is forwarded for your signature and dispatch to ~~APR 374~~, HQ.

2. It concerns the attachment of an outstanding malarial control expert to the Public Health Subcommission, which attachment is most desirable.

RRC
R. R. CRIPPS,
Lt. Colonel,

For the Vice President, Administrative Section.

Incl: 1 Proposed letter,
1 APRIL HQS letter.

HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394

12

61/AS.

26 Feb 44.

SUBJECT : Malarialogical Personnel.

TO : Commanding General, AFHQ, MGS.

1. Reference letter dated 19 Feb 44. The attachment of Colonel Russell to the Public Health Subcommittee as Malarial Consultant would be welcomed.

2. A Malarial Control Board is being set up under the auspices of AFHQ. This Board will co-ordinate the work of the British and American forces, both ground and air, together with ACC in the sphere of malaria control. Colonel Russell would be nominated to a seat on the Board, and his experience would be invaluable to ACC in working out a supervising program for the whole of the occupied territory under its control.

3. If Colonel Russell's release from NATOUSA could be obtained as soon as possible, it is felt that the resulting benefit to ACC would be of the greatest possible value.

For the Commanding General:

M.S. LUSH.
Brigadier.
Executive Commissioner.

785017



HEADQUARTERS
ALLIED CONTROL COMMISSION
PUBLIC HEALTH SUB COMMISSION
TYPHUS CONTROL SERVICE
APO 394

219
28 FEB 1944 Recd

26 February 1944

Subject: Correction of 20 February, 1944 letter, "Summarization, Typhus Control Service"

To: 1. Chief Commissioner, Through Executive Commissioner.
2. Director, Public Health Sub Commission.

Data given on page 3, Section 5 of the above should be corrected to read as follows:

"Total vaccinations reported" 51,480 instead of 50,838.
"Total dustings reported" 1,682,445 " " 1,281,870.

The original figures were taken from an earlier daily report instead of the daily report ending 2400 hours 19 February.

Wilson C. Williams
WILSON C. WILLIAMS, Lt. Col. M. C.
Director, Typhus Control Service

WCW/jds

Distribution:
Original to Chief Commissioner (through Executive Commissioner)
Copy to DEH, ACC
" " General Blasse
" " Brigadier Galloway
Files (2)

Plr
J

Plr
1754

785017

REAR HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394.

23/8
25 FEB Recd

C.A. 8.1510

8/2

Public Health Sub-Commission.

23rd February 1944.

ACC/3091/HI.

SUBJECT:- Hygiene and Sanitation.

TO : Brigadier M.B. Lush,
Executive Commissioner, IAC and IG Section.
(Faru Admin. Directorate).

Reference your memo dated 15 February 1944 concerning the proposals of Commander 37 Area re cleanliness of towns and villages in Regions I and II, the GOC, No 3 District has called a meeting at his headquarters on 24 February 1944.

He has requested the following to be present at the meeting:-

Col. Crispin - Director of Public Health, Region III.
Lt. Col. Robertson - Provincial Commissioner, SALEM.
and his Medical
Adviser.
Lt. Col. Kincaid - Provincial Commissioner, NAFIS.
and his Medical
Adviser.

P. S. Parkinson
Dir

G.S. PARKINSON, Brigadier,
Director, Public Health Sub-Commission.

MM/GMF/arn.

1253

1010

Typhus Control.

A.P.H.Q. Adv. Adv. Scholam,
C.M.F.

3095/A.1.

24 Feb 44.

Reference: This H.Q. letter 3095/A.1, dated 11 Jan 44.

1. The functions of the U.S. Typhus Commission were assigned by the Allied Control Commission on 19 Feb. 44. Colonel Williams, U.S. I.C., Allied Control Commission, has been nominated by Brigadier Parkinson to take over the duties of Director of Civilian Typhus Control Measures.

2. The Typhus Control Board set up under the authority of this H.Q. letter 3095/A.1, dated 11 Jan. 44 will, therefore, be reconstituted as follows:-

<u>Name.</u>	<u>Appointments.</u>	<u>Responsibility.</u>
Brigadier R.W. Galloway.	MBE. Army Adv. Adv. Scholam.	As laid down in 3095/A.1, dated 11 Jan. 44.
Colonel Arnold.	Surgeon, Particular Base Section.	- do -
Colonel Moffat.	AMB. 57 Area. (Rep- resenting MB. No. 3 District).	- do -
Lt.Col. Chalk.	AMB. 57 Adv. Adv. Scholam.	- do -
Brigadier Parkinson.	Director of Public Health Sub- Commission, A.C.C.	Organization & direction of Civilian Anti-Typhus measures.
Colonel Williams.	Allied Control Commission.	Responsibility for Anti-Typhus Control measures, with the exception of hospitalization.
Colonel Graham.	AMB. Region III. Regional Public Health Officer.	Responsibility for organization and administration of Civil Hospitals and Medical services in Region III.

2. The Typhus Control Board set up under the authority of G.O. H. 3. letter 3095/A.1. dated 11 Jan. 44 will, therefore, be constituted as follows:-

<u>Name.</u>	<u>Appointment.</u>	<u>Responsibility.</u>
Brigadier R.W. Callaway.	MEM. AMB. Adv. Adm. As told down in 3095/A.1. dated 11 Jan. 44.	
Colonel Armit.	Surgeon, Punjabular Base Section.	- do -
Colonel McQuar.	ADMS. 57 Area. (Representing MEM. Hb. 3 District).	- do -
Lt. Col. Chalko.	ADM. AMB. Adv. Adm. Section.	- do -
Brigadier Purdington.	Director of Public Health Sub-Commission, A.C.C.	Organisation & direction of Civilian Anti-Typhus measures.
Colonel Williams.	Allied Control Commission.	Responsibility for Anti-Typhus Control measures, with the exception of hospitalisation.
Colonel Ordman.	AMB. Region III. Regional Public Health Officer.	Responsibility for organisation and administration of Civil Hospitals and Quaternary services in Region III.

3. The Board may co-opt additional members as it thinks fit.

4. The functions and responsibilities of the Board should remain as laid down in the above-quoted letter.

-/cc-

Major-General,
Deputy Chief Administrative Officer.

ACC-0157

Public Health man + Res
Adm. Sec.

...../Date.

17/1/44

1752

17/1/44

7850, 7

REFERENCES

[illegible]23. *Wittich*

Figure 1

Page 100

1997

441

Abstract—The purpose of this study was to determine the effect of a 12-week training program on the heart rate (HR) and energy expenditure (EE) of sedentary, middle-aged women. The subjects were randomly assigned to a control group (CON) or an exercise group (EX). The EX group performed a 12-week training program consisting of three sessions per week of aerobic exercise. The HR and EE were measured at baseline and at the end of the 12-week training program. The EX group showed a significant decrease in HR and a significant increase in EE compared to the CON group. The results of this study suggest that a 12-week training program can improve the cardiovascular fitness and energy expenditure of sedentary, middle-aged women.

[illegible][illegible]

1997

Figure 1

III. Air Force (2).

807-74

• • • • •

11. *Chrysomelidae*

[illegible]

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THE UNIVERSITY OF CHICAGO

1. *Chlorophyll a* (Chl *a*)

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

● 2006年10月1日起，凡在境内销售货物或提供应税劳务、服务的企业，其开具的增值税专用发票，必须通过增值税防伪税控系统开具。

S. KATO, *Yamanashi Univ.*

Guillem, Francisco, 200

1. *Chlorophyll a* (Chl *a*)

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S. H. CHAN, David S. CHAN

1. *Phragmites* (Common Reed)

25.11.2010

$$H^2(\mathbb{R}^n, \mathbb{R}) = \mathbb{R} \oplus \mathbb{R}^{\frac{n(n-1)}{2}}$$

Dealing with the Unknown

Professor Gini

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ALLIED FORCE HEADQUARTERS
Military Government Section

6/
19 February 1944

SUBJECT: - Malarialogical Personnel.

TO : Headquarters, AGC.

1. It has been suggested by Colonel Turner of the U.S. Surgeon General's Office at Washington that it might be well to consider at this time plans and personnel which may be needed to meet the risk of an increased incidence of malaria in the civil population during the summer months, especially in view of the destruction of Italian malaria control installations and other causes.

2. In this connection it appears that a Colonel Russell, U.S. Medical Corps, formerly with the Rockefeller Foundation in civilian life and with 20 years of past experience in malarial control measures in the United States and elsewhere, might be made available for assignment to the Public Health Sub-Commission in the capacity of a malarial consultant or in some other capacity as Brigadier Parkinson might be able to use him.

3. It will be appreciated if we may have informal advice at this time as to whether there is any possibility that Colonel Russell might be so assigned.

/s/ Henry Parkman, Jr.
/s/ H. PARKMAN, JR.
Lieutenant Colonel, U.S.C.
Deputy Acting Chief, Military Government Section.

P.S. Col. Russell is now with the Surgeon's Office MACVSEA.

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CABn.

41525

SUBJECT :- HOHQ No 3 District CMF
Tel Ext 18
126 A

18 Feb 44

Main HQ,
Allied Control Commission,
NAPLES.

1. I am much exercised over the sanitary condition of all towns and villages in this District. I consider that, unless steps are taken in the very near future to clean up the quantities of rubbish, decaying vegetables and other filth now lying in the streets, when the warmer weather comes, a serious menace to the health of the troops will result.

2. Military units can and will be instructed to keep their own billets and immediate surroundings clean, but the main responsibility for carrying out the necessary measures must lie with the local Italian authorities.

In order to find out what can be done in the matter, it is proposed to hold a meeting on 24 Feb 44 at 1000 hrs at this HQ and it is requested that the following may be present:-

Col Crichton - Director Public Health, Region 3
Lt Col Robertson - Provincial Commissioner, BAIFERO
and his Medical
Adviser.
Lt Col Kincaid - Provincial Commissioner, NAPLES
and his Medical
Adviser.

ACC-DIST

ACTION-PUBLIC HEALTH

REAR HQ(-)

ACTION-AMG REG.3(-)

Major-General
Comd No 3 District

Copy to: 'A' 57 Area (5 copies)
'A' 94 Sub Area (5 copies)
'H'
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HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394

Public Health Sub-Commission

MEMORANDUM16 February 1944

SUBJECT: - Director for Malaria Control, AOC.

TO : - Chief Commissioner (Through Executive Commissioner).

In view of the high malaria incidence in prospect and anticipated by U.S. and British Military Authorities and this Sub-Commission it is deemed advisable that early action be taken to coordinate the planning and action of Military, AOC and local groups in mosquito control. In order for this to be done most effectively an experienced malariologist of outstanding ability is needed. It has come to our attention that Colonel Paul P. Russell, an outstanding authority on malaria, who is now at AFHQ may be available for special assignment (T/D) to this area. Accordingly it is suggested that the following cable or some modification thereof be transmitted to the AFHQ for the Surgeon.

"In view high malaria rate anticipated by Military and personnel this Headquarters services of outstanding Malariologist required for coordination Military, AOC and Civilian Malaria Control programs for Italy. Understand Colonel Paul Russell may be available for special temporary duty assignment this nature. If Colonel Russell not available desire man with similar background of training and experience at early date. Impending situation justifies immediate and concerted planning and action.

For BRIGADIER PARKINSON, Director, Public Health Sub-Commission

*Wilson C. Williams*WILSON C. WILLIAMS, Lt. Col., MC
Deputy Director, Public Health Sub-Commission, AOC.

WCH/cjs.

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10 FEB Recd

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HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 394

Public Health Sub-Commission

10 February 1944

SUBJECT: - Takeover of Typhus Control by ACC.

TO : - Chief Commissioner (Through Executive Commissioner).

The attached memorandum regarding typhus control takeover by ACC is self-explanatory and is being transmitted by request of Brigadier Parkinson who is in Sicily for special conference on venereal disease control. Since preparation it has been learned that the services of Colonel Bishop would not be available beyond 20 February except on a limited consultant basis. A check on the typhus situation with Brigadier General Fox, Colonel Bishop and Dr. Soper (Rockefeller Foundation) reveals that the unexpected rapid decline in typhus cases will not require the 45 vehicles originally listed as required for control purposes. However it will be necessary for the present transport status to be maintained pending completion of programs now under way and analysis of personnel and transport needs at a later date for further readjustment as indicated.

1. The existing situation regarding officer personnel is satisfactory.
2. EM/OR personnel now available should be retained without reduction and as few replacements as possible.
3. The office space and equipment now used by the Typhus Commission should be retained for the ACC program.
4. All agencies concerned should be assured that personnel, transport, etc. now on loan will be returned immediately it is determined they are no longer needed.

For BRIGADIER PARKINSON, Director, Public Health Sub-Commission

Wilson C. Williams

WILSON C. WILLIAMS, Lt. Col., MC
Deputy Director, Public Health Sub-Commission, ACC.

WCH/ajd.

HEADQUARTERS
ALLIED CONTROL COMMISSION
APO 934
Public Health Sub-Commission

2
2 February 1944

SUBJECT: - Takeover of Typhus Control from U.S. Typhus Commission.

TO : - Director, Public Health Sub-Commission, ACC.

In accordance with previous instructions the past week has been spent contacting various individuals and agencies concerned with typhus control. In order for ACC to takeover and function effectively beginning 26 February 1944 in accordance with agreement reached between Brigadier Fox, Director, U.S. Typhus Commission and Lieut. General Mason-MacFarlane, Chief Commissioner, ACC, it is suggested that points of basic policy be submitted to the Chief Commissioner for approval or modification as required, immediately, in order that final details regarding temporary or permanent transfer to ACC of any personnel, transportation, supplies, etc. now available to the Typhus Commission may be consummated without further delay. The experience of Typhus Commission personnel who are to depart on or about 26 February utilized planning the ACC program. The following points are suggested for consideration:

1. A Medical Director, Typhus Control Service, Public Health Sub-Commission, ACC, should be designated and given full responsibility to proceed with organization and carrying out of typhus control measures required in all territory of Italy, now, or hereafter occupied and coming under ACC jurisdiction.

2. The Medical Director, with approval of the Public Health Sub-Commission Director and working through usual military channels, should have full authority to initiate plans, contact all groups having special interest or responsibility in typhus control and formulate action programs whereby all available personnel and material resources may be utilized to the fullest and with minimum delay.

3. Transport and equipment turned over by the Typhus Commission group to ACC should be on memorandum receipt in order that ultimate control will not be questioned.

As transport and loaned personnel become idle both should be returned to the agency from which originally drawn.

4. While the immediate problem requires the continuation of "operations" functions inaugurated by the U.S. Typhus Commission, the ultimate objective of the ACC program must be the training of Italian groups for handling local or national problems. Accordingly, the Medical Director in every instance, will utilize and work through established ACC regional services to the fullest extent possible.

5. Administrative responsibility for regional or local typhus control service will be determined by mutual agreement of the Medical Director and the HCAO and RPHI concerned. When such agreements cannot be made the Public Health Sub-Commission Director shall determine responsibility.

- 2 -

6. Necessary civilian personnel, professional and other, shall be added and paid from regional or communal sources by the RGAO concerned.

7. Full responsibility for approved hospitalization of all patients must be assumed by the commune or province concerned as exigencies arise.

8. The unexpected rapid decrease of typhus incidence since preparation of the original estimate and communication regarding transportation needs justifies a revision of the transportation request at this time. The thirty-five (35) vehicles now available are adequate but not excessive and should be maintained. Additional emergency transport should at least be "in sight".

9. The Public Health Sub-Commission Medical Supply Section should assume full responsibility for procurement of insecticide powder, powder blowers, etc. and distribution of same as outlined by the Medical Director.

10. An urgent request should be made to AFHQ for Col. Bishop, Asst. Director to General Fox, to continue as Medical Director. If that is not possible an effort should be made to have him remain for as long a period as possible beyond 20 February. Brigadier General Fox, Director, U.S. Typhus Commission, should be requested to serve as consultant and return at later dates to study the local situation.

Wilson C. Williams

WILSON C. WILLIAMS, Lt. Col., MC
Deputy Director, Public Health Sub-Commission, ACC.

WCW/cjd.

Declassified E.O. 12356 Section 3.3/NND No.

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