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VI. Facilities

Quite a large number of facilities have been involved in German BW activities. The number of scientists and technicians of these facilities engaged in BW matters, however, was remarkably small. It is also remarkable, that the leading bacteriological institutes, including the "Robert-Koch-Institut, Reichsanstalt zur Bekämpfung der übertragbaren Krankheiten", Berlin, have been quite obviously not involved at all in such activities.

Even more astonishing is that the Institute for Hygiene of the Waffen-SS headed by Mrugowsky was not used for BW activities. This institute had a staff of about 200 persons at the end of the war, including 25 scientists, and one of its departments was a department of bacteriology and serology. Other departments were involved in the development of vaccines against typhoid and typhus as well as in research on arthropods as vectors for pathogens 1).

Kliewe Laboratory

The "Kliewe laboratory" was established in autumn 1940²) as department of the Institute for Hygiene and Bacteriology of the Military Medical Academy³). Space and staff of the laboratory was quite limited. Kliewe had an office and - according to different reports - two to five rooms at his disposal, but was able to use laboratories of other departments of the Academy for certain experiments. Members of his group have been Dr. Joachim Kemper, Erwin Früchte as technical assistant, and Drs Fritz and Karl Steyskal, part-time guests from the University of Graz⁴). Possibly also a Dr. Riedel was part time coworker of Kliewe, who in spring 1944 attempted to work in the Institute of Microbiology, Sachsenburg. Riedel mentioned in this connection to have worked on aerosols⁵).

The work carried out by Kliewe⁶) was stimulated by his findings at La Bouchet and by conclusions he drew from an evaluation on the intelligence reports on BW. A major part of his early experimental work was devoted to evaluate and continue the French experiments on the combined activity of chemical and biological warfare agents (see section "Agents: Anthrax"). He also studied the survival of different bacteria species dried in vacua and attempted to enhance the resistance of *Bacillus anthracis* to heat by UV irradiation.

Kliewe's work was performed on a very small scale presumably because of the limitation in lab space and the small size of the group. Obviously he also considered an extension of his experiments impracticable and unnecessary. In one of his reports he mentioned that his "investigations go beyond the scope of the problems assigned to us. Moreover, we do not possess the equipment required to work with pathogenic organisms on a large scale. It is recommended that the suggested studies be carried out immediately by a suitable bacteriologic-hygienic institute")

¹ Interrogation of Joachim Mrugowsky by his councel for defence Dr. Fleming, 26 March 1947. Official Transcript, vol. A65-68, pp. 5056-5333, see especially pp. 5081-82.

² Kliewe, H., 'Über den Einfluß von organischen und anorganischen Stoffen auf die keimtötende Kraft von Desinfektionsmitteln'. *Zbl.Bakt.*, Abt.I Orig. vol.146,no.5 (8 Oct 1940), 208-214.

³ ALSOS Mission, Report on the Interrogation of Professor H. Kliewe, May 7-11th 1945. ALSOS A-B-C-H-H/149; and ALSOS Mission, B-C-H-H/305, pp. 47-48,

⁴ ALSOS Mission, ALSOS B-C-H-H/305, p. 48,

⁵ Gildemeister, H. 1944: Schreiben an Prof. E. Gildemeister vom 16. Februar 1944. BAK R86/4210 fol.1-:28, 1944. Reprint:IN FILE Ref Number:695 Ref Number:698

⁶ Prof. Kliewe's Description of His BW Work. Capt. Henze's Translation of Prof. Kliewe's Statement.In: ALSOS Mission, note 3, Appendix C.

⁷ Kliewe, H., Report, 15 July 1942, quoted in ALSOS Mission, B-C-H-H/305, p. 48,

When Kliewe was ordered in 1942 to confine himself entirely to the study of defensive measures he initiated experiments with novel disinfectants including their application as aerosol⁸). In this connection Kliewe became interested also in atomisers and bought eight large atomisers from Gouchard in Paris and then constructed a new one which was completed by the end of 1944⁹) (see section 'R&D').

Besides the report on enemy preparation for BW (see section 'Intelligence') Kliewe prepared a compilation of publications on BW ¹⁰). Kliewe concluded that 'Glanders bacilli were actually used in Rumania and American [by German agents in WWI] ... with good success. Whether bacteria were also used in other forms is unknown and quite unlikely. In particular there is no proof of Mr. Wickham Steed's assertion' (see [the preceding chapter] [section 'Prolog']). Kliewe also elaborated directives containing instructions to be followed in the event of a BW attack ¹²).

In 1943 Kliewe evacuated part of his laboratory to Giessen where he became director of the Hesse Diagnostic Office for Infectious Diseases (Hessisches Untersuchungsamt für Infektionskrankheiten) again.

Institute for Microbiology Sachsenburg

According to Generalarzt Professor Walter Schreiber the Institute for Microbiology "should be involved in bacteriological warfare preparations and should in addition to its actual task to produce vaccines for defense purposes also produce plague bacteria".

Walter Schreiber, not only Chief, *S In/Wi G*, and cordinator for Epidemiological Research, but also head of all scientific institutes of the Military Medical Academy had claimed (obviously under Soviet pressure) the existence of an offensive German BW program¹³). In this connection Schreiber claimed that the Sachsenburg facility was involved in this activity and that Blome got permission that he and his staff could continue their work with plague bacteria in the Sachsenburg institute when the Red Army approached Nesselstedt before a new facility was finished.

The Sachsenburg near Frankenberg, not far from Chemnitz, was founded around 1190 by Otto the Rich and was used by the Nazis first as a concentration camp and later as a center for training leaders of the Nazi's Women's Movement. On 2 October 1943 it was decided to establish *two* microbiological institutes in the Sachsenburg, an "Institute for Microbiology of the Army" and a civilian one as branch of the Robert-Koch-Institute (RKI)¹⁴). It was agreed that Stabsarzt Dr. Hermann

⁸ Prof. Kliewe's Description of His Aerosol Work. In: ALSOS Mission, note 3, Appendix D, pp. 1-2.

⁹ ALSOS Mission, note 3

¹⁰ Kliewe, H. 'Extracts from publications of foreign authors concerning the supposed use on the part of Germany of bacteria as a weapon of war'. 28 July 1941. In ALSOS C-H/303, pp. 5-14.

¹¹ Kliewe, note 10, p. 14

¹² Verfügung der Heeressanitätsinspektion über "Schutz- und Abwehrmaßnahmen bei der künstlichen Anwendung von menschlichen Krankheitserregern", quoted in ALSOS Mission, note 3; and Kliewe, H. Protective and defensive measures against sabotage activity with bacteria. 1943. ALSOS C-H/303, pp. 69-70.

¹³ Schreiber, W., Schreiben an die Regierung der Sowjetunion, Moskau, 10 Apr 1946 [mit Randbemerkungen Keitels]. BAMA, N54/34; and Schreiber, W., Statements made at the International Military Tribunal, 26 Aug., In: Der Prozeß gegen die Hauptkriegsverbrecher vor dem Internationalen Militärgerichtshof, Nürnberg 14, November 1945 -1. Oktober 1946. Amtlicher Text in deutscher Sprache. Band XXI. (Verhandlungsniederschriften 12. August 1946 - 26. August 1946, Nürnberg:1948. pp. 1-706., pp.603-620, see especially pp. 607-08).

¹⁴ Gildemeister, H., Bericht über die am 2. Oktober 1943 in der Wehrmachtssanitätsinspektion stattgefundene Besprechung über die Schaffung eines Instituts für Mikrobiologie in der Sachsenburg. BAK R86/4210 fol.1-:3-5, 1943.

Gildemeister (not a relative of the President of the RKI Professor Eugen Gildemeister) became head of both institutes. In addition, a "Forschungsstelle für Auslandsmedizin und Siedlungsbiologie" ("Research Group for Medical Problems of Foreign Countries and Biological Problems of Settlement") was established in the castle under Professor Haubold¹⁵). The staff consisted in October 1944 of 'about 20 persons' ¹⁶) which included ¹⁷) Dr. H. Gildemeister, Dr. W. Reiner (since December 1944), Dr. Bauer, three technicians, as well as Prof. Popov his son and an interrogator (until mid-December 1944). Popov, together with some other Russian scientists, performed experiments on tularaemia.

The Institute(s) for Microbiology had to produce plague vaccine and to perform animal experiments for plague diagnosis 18). In addition, experiments on tularaemia should by carried out 19). The vaccine was prepared on the basis of information compiled by Boecker 20), which based partially on information provided by Dr. Hojo from Japan and by experts from the Institut Pasteur, Paris.

The establishment of the institute in an old castle was extremely difficult, especially since the reconstruction project was classified only under the lowest priority grade although even the Chancellery of the Führer was involved in promoting the activities²¹).

When Hermann Gildemeister was able to report finally in December 1944, 'Vaccine production has been started'²²), the Ministry of Interior, Reichsärzteführer Conti and Himmler requested to enhance the production of plague vaccine and to report every two weeks on the amounts produced²³). Despite of the technical difficulties and despite of a serious lack in manpower 60 000 charges and 76 litres of plague vaccine could be produced in the first three months of 1945²⁴).

In April the Red Army occupied the Sachsenburg and the institute was completely dismantled²⁵). As no documents are available dealing with the dismantling of the facility the degree of its completeness at that time is not known.

The low-priority grade of the Sachsenburg reconstruction activities and difficulties in recruiting sufficient personnell and equipment indicate that the completion of the

¹⁵ Haubold und Schreiber 1945: "Richtlinien für die Benutzung der 'Sachsenburg' durch die Forschungsstelle für Auslandsmedizin u. Siedlungsbiologie" vom 8. März 1945. BAK R86/4210 FOL.1-:203-204, 1945.

¹⁶ Gildemeister, H. Schreiben an den Präsidenten des Robert Koch-Instituts, Herrn Prof. Gildemeister vom 9. Oktober 1944. Betr.: Monatsbericht Sachsenburg. BAK R86/4210 fol.1-:123, 1944.

¹⁷ according to several documents filed in BAK R86/4210 fol.1-

¹⁸ Dienstanweisung für das Pestlaboratorium des Institutes für Mikrobiologiein Schloss Sachsenburg. BAK R86/4210 fol.1-:184-193, 1944.

¹⁹ Boecker, [E.], Reisebericht zu V. 783 / 44 [vom Juli 1944]. BAK R86/4210 fol.1-:107-108, 1944.

²⁰ Boecker, [E.], Über Pest-Impfstoffe. BAK R86/4210 fol.1-:30-1-30-11, 1944.

²¹ Gildemeister, H., an Prof. Dr. E. Gildemeister, 9.7.1944. "Betr.: Monatsbericht Sachsenburg". BAK R86/4210 fol.1-:103-104.

²² Gildemeister, H., an Prof. Dr. E. Gildemeister, 9. Dezember 1944. Betr.: Monatsbericht Sachsenburg. BAK R86/4210 fol.1-:153-154.

²³ Bieber, [Ministry of Interior] an Prof. E. Gildemeister, 22. Dezember 1944. Betr.: Institut für Mikrobiologie. BAK R86/4210 fol.1-:167, 1944; Conti, L., an Prof. E. Gildemeister, 11. Januar 1945. BAK R86/4210 fol.1-:168; and Haubold, an Herrn Prof. E. Gildemeister, 18.1.1945. BAK R86/4210 fol.1-:171a

²⁴ Gildemeister, E. 1945: Schreiben an den Herrn Reichsminister des Inneren vom 20. Januar. BAK R86/4210 fol.1-:169; Gildemeister, H. Telegramm an Präsident Gildemeister, Berlin, vom 11.2.1945. BAK R86/4210 fol.1-:177, 1945; and Gildemeister, H. Telegramm an Präsident Gildemeister, Berlin, vom 15.3.1945. BAK R86/4210 fol.1-:194a, 1945.

²⁵ Geheimrat Lentz 1945: Schreiben an die Firma Max Kohl AG, Chemnitz, vom 19.10. BAK R86/4210 fol.1-; 209-210.

institute was not regarded decisive for the progress of the war. Besides that, not a single hint could be found in hundreds of documents dealing with the institute²⁶) in support of Schreiber's claim of Sachsenburg's alleged involvement in BW activities. The non-participation of the facility reveals also from the fact that the Sachsenburg documents, which seem to be rather complete, do not contain any indication for a possible role of BW coordinator Blome in planning, establishing and work of the facility. Regarding the accomodation of Blome's group including storage of plague bacteria no hint can be found in these documents either, although H. Gildmeister and his deputy reported until March 1945 regularly on all events taking place in the castle. Not even Blome's name is mentioned in any of these documents.

Blome also reputiated Schreiber's claims and stated: 'I was never at Sachsenburg. I do not even know [i.e. not have visited] it and my associate Dr. Gross did not work at Sachsenburg"²⁷).

On the contrary there is at least on indication that H. Gildemeister and his deputy consciously prevented an involvement of the institute in BW activities: In February 1944 a Dr. Riedel appeared in the castle without notice who was ordered by the Military Medical Academy to work at the institute. According to notes sent to President E. Gildemeister²⁸) H. Gildemeister and his deputy Dr. Bauer managed successfully to prevent Riedel's joining the Sachsenburg staff, although their was a great demand for skilled coworkers. Presumably the reason for Riedel's non-acceptance was that he was involved in Berlin in "delicate experiments" including work on aerosols and viruses. The matter was sensitive enough that it could not be described in detail in writing but had to be explained to President Gildemeister orally only. In order to prevent Riedels employment in Sachsenburg not least because of the "delicacy of R.'s special topic" H. Gildemeister proposed to "ask his former chiefs (Prof. Kliewe (?) [sic] and Prof. Ranke)" about him (emphasis added). They seemed to have be successful since Riedel's name does not appear in any Sachsenburg document after 16 February 1944.

Air Forest Protection Command (Proving Command 40)

Dissemination of insecticides from aircraft had a long tradition in Germany for control of forest pests. When German troops conquered eastern and south-east Europe aircraft was used also to counter malaria in these regions under supervision of Dr. Zumpft of the Bernhard-Nocht-Institut for ship and tropical diseases²⁹). But pest control by aircraft was also a cover since 1925 for secret attempts to disseminate CBW agents (see section 'R&D'). Whereas Zumpt provides even technical details of his anti-malaria actions and refers also to Mrugowsky regarding the evaluation of a certain insecticide, he does mention neither Colonell von Borstell, chief, Air Forest Protection Command, nor pharmacologist Dr Hans Seel, although the command obviously provided the planes used for countering *Anopheles* under participation of Seel³) (who later became a coworker of Blome, see below).

²⁶ BAK R86/4210 fol.1-

²⁷ Cross-examination of K. Blome by Public Prosecutor Mr. Hardy on 21 March 1947, Official Transcript, vol. A 61-64, pp. 4780-5055, SAN see especially p. 4811.

²⁸ Bauer, H., 'Betr.: Versetzung von Dr. Riedel nach dem Mikrobiologischen Institut'. Aktennotiz [submitted to President E. Gildemeister] vom 15. Februar 1944. BAK R86/4210 fol.1-:27, 1944; Gildemeister, H., an Prof. E. Gildemeister, 16. Februar 1944. BAK R86/4210 fol.1-:28, 1944. Reprint:IN FILE Ref Number:695 Ref Number:698

²⁹ Zumpt, F. Flugzeugeinsatz zur Stechmückenbekämpfung. Der Kolonialtierarzt. Beilage zur Deutschen Tierärztlichen Wochenschrift, no. 8, pp. 1-2, 1944.

³⁰ Seel, H., an Reichsführer-SS, z.Hd. von Herrn SS-Standartenführer R. Brandt, 21.0kt.1944. BAK NS19/3016:1944.

³¹ Seel, H., 'Über den Flugzeugeinsatz zur Malariabekämpfung' *Deutsches Ärzteblatt,* vol. 74, p. 6, 1944