APPENDIXES 8 THROUGH 19 TO THE HAMBURG POLICE PRESIDENT'S REPORT ON THE LARGE SCALE AIR ATTACKS ON HAMBURG, GERMANY, IN WORLD WAR II

Contract No. NOO228-67-C-1519 OCD Work Unit No. 2536D



NRDL-TRC-68-48 ملي



AD 681075

STANFORD RESEARCH INSTITUTE

MENLO PARK, CALIFORNIA

Reproduced by the CLEARINGHOUSE for Federal Scientitie & Technical Information Springfie d Va 22151

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.



December 1968

1

APPENDIXES 1 THROUGH 7 TO THE HAMBURG POLICE PRESIDENT'S REPORT ON THE LARGE SCALE AIR ATTACKS ON HAMBURG, GERMANY, IN WORLD WAR II

Prepared by:

Carl F. Miller

SRI Project No. MU-6464

Contract No. NOO228-67-C-1519 OCD Work Unit No. 2536D

Prepared for:

OFFICE OF CIVIL DEFENSE OFFICE OF THE SECRETARY OF THE ARMY WASHINGTON, D.C. 20310

Through:

CIVIL DEFENSE TECHNICAL GROUP U.S. NAVAL RADIOLOGICAL DEFENSE LABORATORY SAN FRANCISCO, CALIFORNIA 94135

This document has been approved for public release and sale. Its distribution is unlimited.

OCD Review Notice

This report has been reviewed by the Office of Civil Defense and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Office of Civil Defense.

ABSTRACT

This document presents information on air attacks and on civil defense preparations and accomplishments in the city of Hamburg, Germany, up to the time of the large scale attacks that began on July 25, 1943. A map summary of bombed sites; numerical and graphical summaries of the air attacks; a map of security police groups, sectors, and precincts; and a diagram of the organization and structure of the security policy are presented. The bulk of the document consists of a chronology of police bulletins, pamphlets, orders, and organization plans for emergency service situations. A civil defense system was developed in response to preconceived and observed effects, from the covering of windows to the preparation of shelter rooms, to poison gas protection, to blast protection, to shelter habitability, and finally, to the recognition of fire as the major hazard to be faced.

December 1968

APPENDIXES 8 THROUGH 19 TO THE HAMBURG POLICE PRESIDENT'S REPORT ON THE LARGE SCALE AIR ATTACKS ON HAMBURG, GERMANY, IN WORLD WAR II

Prepared by:

Carl F. Miller

SRI Project No. MU-6464

Contract No. NOO228-67-C-1519 OCD Work Unit No. 2536D

Prepared for:

OFFICE OF CIVIL DEFENSE OFFICE OF THE SECRETARY OF THE ARMY WASHINGTON, D. C.

Through:

CIVIL DEFENSE TECHNICAL GROUP U.S. NAVAL RADIOLOGICAL DEFENSE LABORATORY SAN FRANCISCO, CALIFORNIA

This document has been approved for public release and sale. Its distribution is unlimited.

OCD Review Notice

This report has been reviewed by the Office of Civil Defense and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Office of Civil Defense.

NRDL-TRC-68-48

ABSTRACT

This document presents information on attacks and on civil defense activities in the city of Hamburg, Germany, during and after the large scale attacks that started on July 25, 1943. Many eyewitness reports of events during the air attacks from July 25 to August 3, 1943, are quoted. Numerous illustrations show attack damage sustained by the city as well as civil defense activities initiated to counter the effects of the attack. A collection of police bulletins and newspaper articles from the period July to December, 1943, document the restoration of the civil defense forces and the implementation of police security measures to prevent looting and disease epidemics, to identify missing persons, and to restore public utilities to the city. Expert medical opinion is presented on the dangers of epidemics caused by corpses and on the causes of death from the attacks as revealed by autopsy findings. A descriptive and profusely illustrated section gives detailed information on the performance and use of air raid shelters.

FOREWORD

This volume is one of a series that describes various aspects of damage sustained and civil defense measures taken by the City of Hamburg, Germany, in the air raids during World War II. The titles of the volumes constituting this series, together with a brief indication of their contents are given below.

The volume entitled, "Summary of Damage Inflicted by Air Raids on the City of Hamburg in the Period July 25 to August 3, 1943," presents statistical information compiled under the direction of the Hamburg Police President. Figures are given on the air attack times, strength, and targets; bombs and leaflets dropped; losses of population, livestock, vehicles, and equipment; emigration; property damage for each of 13 civil defense sectors; damage to public services, transportation, and utilities; property damage by the type of property, such as residences, establishments, ships, and railways; enemy planes shot down; and forces employed to counter the effects of air raids.

The volume, "Appendixes 1 Through 7 to the Hamburg Police President's Report on the Large Scale Air Attacks on Hamburg, Germany, in World War II," is more detailed than the preceding volume and presents a map summary of the bombed sites; numerical and graphical summaries of the air attacks; a map of security police groups, sectors, and precincts; and a diagram of the organization and structure of the security police. The bulk of the volume (pages 39-271) presents police bulletins, pamphlets, and orders; news reports; and organization plans for a major catastrophe.

The third volume in the series, "Appendixes 8 Through 19 to the Hamburg Police President's Report on the Large Scale Air Attacks on Hamburg, Germany, in World War II," concludes the supporting material begun in the preceding volume and includes maps, photos, and eyewitness reports; descriptions of civil defense problems such as police security measures, rebilleting the population, identification of missing persons, public health measures, and restoration of public utility services; identification of the causes of death of bombing victims; and information on the performance and use of air-raid shelters. A summary of building coverage and fuel loading (kilograms of wood) for the two conflagration areas on a block-by-block basis is given in the volume entitled, "Examination of the Building Density and Fuel Loading in the Districts Eimsbüttel and Hammerbrook in the City of Hamburg as of July 1943." Building classification methods are defined, and procedures for detailed computation of fuel loadings are presented. Statistical information, before and after the air raids, is given for population and housing. A method for classifying buildings according to their susceptibility to damage by fire is suggested in the Appendix.

"Fuel Density Data for Individual Lots in the Einsbüttel and Hammerbrook Districts of Hamburg, 1943" was distributed only to those persons who had a need for fuel loading and building coverage data on a lot-bylot basis. An additional 2,300 pages of even more detailed data, from which the published data have been derived, are retained by the Office of Civil Defense as an ultimate source of individual building structural information.

The translation of these volumes has preserved the format of the original German documents and was prepared under Stanford Research Institute Project MU-6464 (OCD Subtask No. 2536D) on agreement between the U.S. Office of Civil Deffense (Research) and the West German authorities. The translation was made by Mrs. Edith Molton, and some minor editing has been done to increase clarity, preserve connotation, and maintain consistency with some of the supporting detailed data. Because of prior patent rights on certain photographs and data, no part of these reports may be reproduced for publication without prior permission from the Office of Civil Defense.

PREFACE

by

Carl F. Miller

The translated version of this German document was prepared by Mrs. Edith Müller Molton. Considerable care was taken in preparation of the text to retain the form and flavor of the original German text and to minimize any attempt to rewrite the report in modern style.

Although a table of Contents has been added to enable the reader to find material on the various subjects that are discussed in the appendixes, a few comments are given here to summarize the contents of several of the appendixes.

The first seven appendixes present information on attacks and on civil defense preparations and accomplishments up to the time of the large scale attacks that started on July 25, 1943. While the central theme of collected materials appears to be 'hat of substantiating a case for adequate preparedness of the civil defense capabilities of the city of Hamburg, certain types of information about the functions of the systems evolved and their effectiveness are presented. The material was gathered quite rapidly within the period from early August 1943 to early November 1943. A good deal of repetition of subject matter occurs throughout that makes the reading somewhat lengthy; however it clarifies the positions taken by those in authority regarding their approach to civil defense preparedness and to the means of protecting the population.

Below are listed, for each appendix starting with Appendix 7, subjects that receive attention in the discussion. To conserve space, the subjects are given by a single word, a phrase, or a sentence.

Appendix 7: Police Bulletins, Pamphlets, Orders, and Organization Plans for Emergency Service Situations (Before July 1943)

Shelter construction. Shelter use. Most casualties from people in the streets and in poorly organized shelters. Escalation of emphasis on protective measures: blackout procedures, the shelter room, poison gas protection, chairs, toilets, window closures to protect against flying debris, beds. heating and ventilation, the fire watch, special construction (cost and labor distributions), packed luggage, sand and sand boxes, water and water containers, fire extinguishers, bounty on extinguishing fire bombs, clearing of the attics, removal of wood in attic floors, more fire watches. (Thus, the system developed in response to preconceived and observed effects, from the covering of windows to the preparation of shelter rooms, to poison gas protection, to blast protection, to shelter habitability, and finally to the recognition of fire as the major hazard to be faced; a recognition of the advantage of extinguishing the fire bombs rapidly came early).

Appendix 10: Eyewitness Reports of the Air Attacks on Hamburg from July 25, 1943 to August 3, 1943

The material of this appendix gives a description of life within the fire storm; contributions are from survivors.

Appendix 12: Reconstruction of the Air Defense System (and Lessons)

The main danger in air attacks is from fire. A glorious performance by the civil defense organization, but more must be done the next time. More sand. More wet sand. More very wet sand (for the phosphorus bombs). More water and water buckets. Remove carpets and drapes. More people out of shelter on fire watch. Put out fire bombs and forget the high explosives. Goggles and gas masks. More portable fire extinguishers. More tearing hooks. More splinter-protection beams for the shelter ceiling. Clear duty to save homes first (except for women and children) from destruction by the enemy. Shelter evacuation procedures. Emergency exits and escape routes to public squares and parks. Use wet clothing or blankets and crawl out. Energetic, forceful, decisive, and prudent leaders needed. No telephones. Messenger service. Aboveground pipelines. Motorized pumps. Water, gas, and electric services not to be counted on. Motor fuel reserves. Food and water for shelters and fire fighters. Fire watches to live on ships. All must work. Clean the streets. Dynamite the gutted buildings. Bury the dead, both human and animal. Keep children out of craters and mud puddles. The survivors are tougher, more experienced, and stronger. Heroes. Sorrow. Bravery. Fellowship of war; all are the same in the face of death. Population bonded by catastrophe. The ultimate fruits of destruction: a brighter future. (The listed subject matter clearly indicates differentiation between the important technical findings and the interpretation placed thereon by the news media.) Draft of emergency squads. Public shelter admittance cards. Who should go to shelter.

Appendix 13: Security Measures

Looting. Rumors. Reclamation and salvage of property. Re-entry to burned areas. Collapse of damaged structures. Traffic regulations.

Appendix 14: Relocation of Population

Ø

Rebilleting of homeless. Women with children must leave. Workers and civil defense people must stay. Food and lodging in short supply

Appendix 15: Dangers of Epidemics, Causes of Death

None from corpses (most areas uninhabitable). Bodies carry no disease organism. Decay rapid (rats do not touch). Fly population decimated. Death in shelters due to carbon monoxide poisoning. Death in street due to breathing hot air. (More recent explanations emphasize the thermal effects, similar to heat prostration, as the major cause of death in both situations; but perhaps the true cause(s) of most of the deaths was a combination of the effects of the heat, presence of poisonous gases and smoke, depleted oxygen content of the air, and other factors.)

Appendix 16: Census of Missing Persons

Census office. Registration. Foundlings. Guardians. Lost and found personal property. Proof of death. Clothing identification cards. Photographs of the dead. Death and provisional death certificates. Identification tags.

Appendix 17: Public Health Measures

Cleanliness is the first order of the day. Boil the water. Boil the milk. Free vaccinations. Medical service at the rescue stations. Dig latrines. Bury decayed garbage. Fight flies. Covered containers for food. Do not pollute canals and rivers.

Appendix 18: Technical Emergency Service: Restoration of Public Utilities

Electric power. Gas. Water. Damage repair of boilers and distribution lines. Riddled tanks, destroyed regulators, broken pipes.

Salvage operations. Cannibalization. Dig emergency wells (drinking water first). Tankcars. (Repair crews of private companies were not able to cope with the rapid restoration of electivity, gas, water, and telephone services; the TES was formed to accomplish this task and was responsible for the rapid restoration of these services after the air raids on all the German cities.)

Appendix 19: The Performance of the Air-Raid Shelters

Private shelters. Public air-raid shelters. Bunkers. Tunnels. Entryways. Exits. (Major emphasis is on the response of the shelters to the overpressure from high explosive bombs and on exits for evacuation without hindrance from debris cover. The loss of life in the specially-constructed shelters or in other shelters where early evacuation to a safe place was possible was very small.)

CONTENTS

PREFACE

APPENDIXES

vii

v

8	MAP OF AIR ATTACK ON HAMBURG IN PERIOD OF JULY 25 TO AUGUST AUGUST 3, 1943	
9	A PICTURE REPORT OF DAMAGES CAUSED BY THE AIR ATTACKS ON HAMBURG FROM JULY 25 TO AUGUST 3, 1943	5
10	EYEWITNESS REPORTS OF EVENTS DURING THE AIR ATTACKS ON HAMBURG FROM JULY 25 TO AUGUST 3, 1943	57
11	MAP OF PILOT STATIONS	123
12	RESTORATION OF THE CIVIL DEFENSE FORCES	127
13	POLICE SECURITY MEASURES	189
14	REBILLETING THE POPULATION	201
15	EXPERT OPINION ON THE DANGER OF EPIDEMICS CAUSED AND REPORT ON CAUSES OF LEATH OF THE BOMBING VICTIMS IN AIR ATTACKS ON THE NIGHTS FROM JULY 25 TO AUGUST 3, 1943, IN HAMBURG	209
16	IDENTIFICATION OF MISSING PERSONS	
17	PUBLIC HEALTH MEASURES	
18	REPORT OF THE TECKNICAL EMERGENCY SERVICE REGARDING ITS EFFORTS TO RESTORE PUBLIC UTILITIES TO THE CITY	200
	OF HAMBURG	269
19	INFORMATION ON THE PERFORMANCE AND USE OF AIR-RAID	283

хi

•

Appendix 8

MAP OF AIR ATTACK PATTERNS ON HAMBURG IN PERIOD OF JULY 25 TO AUGUST 3, 1943 THE AIR ATTACKS ON HAMBURG FROM JULY 25 TO AUGUST 3, 1943 Air Routes and Assembly Points for Enemy Aircraft



Route of Approach Route of Departure Assembly Point

Alert Limits at Air Speeds of 400 km/hr.

Extension of Alert Limits at Higher Air Speeds.

 \bigcirc

 \bigcirc

Appendix 9

A PICTURE REPORT OF DAMAGES CAUSED BY THE AIR ATTACKS ON HAMBURG FROM JULY 25 TO AUGUST 3, 1943







The Burning City



Burning Tower of St. Katharine's Church



The sun was hidden for days by a cloud of smoke from the air attack. This picture shows the city hall tower damaged by fire.

9



























Damaged Bridges and Blocked Canals in the City





Damaged Bridges and Blocked Canals in the City

21











Busses Employed to Move the Population

•




Destroyed Traffic Installations



Destroyed Traffic Installations



.



Gutted Police Department with Cultural Landmark "Gortzsches Palais"



Gutted Police Department with Cultural Landmark "Gortzsches Palais"

A REAL PROPERTY.



•



Gutted Theater and Movie Houses





Gutted Theatres and Movie Houses







Lohmuhlen Hospital

34

1.11



Gerhard Wagner Hospital



Eppendorf University Hospital

MAP OF MAIN THOROUGHFARES OF HAMBURG

The heavily marked thoroughfares were completely impassable for traffic during the first few days after the major air attacks. Following are some photographs showing these streets after debris clearance.



- 1. Hoheluftschaussee Highway to Kiel
- 2. Rothenbaumchaussee and Muhlenkamp Highway to Segeberg
- 3. Mundsburgerdamm, Hamburgerstrasse; Highway to Oldesloe-Lubeck
- 4. Steindamm, Wandsbeker Chaussee; Highway to Lubeck
- 5. Sievekingsallee, Autobahn; Highway to Lubeck

- 6. Hammerlandstrasse; Highway to Bergedorf-Berlin
- 7/8. Harburg, Bremen, Cuxhaven
- 9. Bergstrasse; Highway to Elbchaussee-Wedel
- 10. Eimsbuttelerstrasse, Fruchtallee; Highway to Pinneberg-Elmshorn













Posters





Posters







Persons Killed on the Street



.



Person Killed on the Street





Recovering Bodies





Recovering Bodies













Appendix 10

EYEWITNESS REPORTS OF EVENTS DURING THE AIR ATTACKS ON HAMBURG FROM JULY 25 TO AUGUST 3, 1943 Twenty-third Police Precinct

Hamburg, August 25, 1943

REPORT ON THE RESCUE OF PERSONS FROM CERTAIN DEATH BY ASPHYXIATION IN AN AIR-RAID SHELTER

During the night of July 24-25, 1943, in which the enemy brought untold horrors to our beautiful Hamburg, two of my colleagues in the police force and I were assigned to rescue endangered persons. After our precinct house had been damaged by high explosive and fire bombs to such an extent that the rescue of material possessions was out of the question, our police precinct personnel initiated actions to rescue residents from burning buildings and bring them to safety. Without cessation, we sent women and children hurrying through the streets to reach the Elevated Train Station at Emilienstrasse where there was comparative safety.

A sergeant approached me and pointed out that about 150 persons had taken shelter in the Public Shelter at 136 Fruchtallee. The Heusshof was on fire, and the people in the shelter there needed to be checked on. Together with Reserve Master Sergeant Pourlenski and my colleague Nordwald from our precinct, I left for the above-mentioned shelter. When we arrived, the second story of the Heusshof was on fire, but the occupants of the shelter located under the Heusshof did not seem to be in any danger. About 90 foreign workers of various nationalities were in the shelter, as well as about 60 German citizens, mostly older men and women and children. The lights had ceased to function. The German people in the shelter were hopeful that the air attack would soon be over and that they would be able to return to their apartments. The foreigners, on the other hand, were very restless, especially the Frenchmen. Our citizens, however, after being reassured by us, were not influenced by them. The responsible air-raid warden, Mr. Hahn, was constantly reassuring the people in the shelter.

After we had ascertained that for the time being there was no danger to the shelter occupants, we went back out into the street where we resumed our previous task. I told the shelter inhabitants that we would keep an eye on them and would return if it became necessary. This explanation seemed especially reassuring to them.

After a while, the fire in the Heusshof building was getting stronger so that the ground floor had begun to burn. Together with my comrades I again went to the building. By now it had become absolutely necessary to evacuate the shelter and to direct people to the Elevated Train Station at Emilienstrasse. The ceiling began to heat up, and through the air vents, fumes had begun to seep into the cellar. Worst of all, heavy smoke had begun to filter in. The emergency exit could not be used, because the wooden boards there were on fire. We decided to evacuate the cellar immediately to save the people from certain death by asphyxiation. The foreign workers were urged to pick up the children in their arms and to assist the women out of the shelter. Our orders were obeyed without question.

All persons present were asked to use the center of the street and get to the elevated station as quickly as possible. Thus, the shelter was evacuated in a very short time. Now and then there was a brief delay when the flames flared up in front of the cellar exit, but cur women were very brave; they put cloths and blankets around their heads.

My colleagues were tirelessly moving the people to the street. I remained in the cellar and supervised the departure. In the meantime, the fire increased in intensity. The movie house located next to the Heusshof had started to burn. Stay in the shelter became more and more intolerable. Sweat broke out all over my body, and my eyes burned from smoke and heat. I made the rounds of all the cellar rooms once more to make sure everyone was out. After receiving no answer any longer to my repeated calls, I left the shelter, presumably the last person to do so. I reached the outside only with the greatest difficulty because of the flames from above, especially since the exit at the cinema was blocked by a firewall. I gained the street by climbing over a collapsed wall. A short time before, Reserve Master Sergeant Pourlenski had used the same route with the last occupants of the shelter.

We were overjoyed to be able to save these poor people. The airraid shelter itself withstood the attack and remained intact, but the people would have been killed by the intense heat. To my deep regret, I learned the next day from the air-raid warden, Mr. Hahn, that two bodies were found in the shelter. One was a Frenchman, and the other an elderly German citizen. They must have crawled away and remained in the cellar without our knowing it; I was not able to find anyone when I left the shelter; however, it was very dark and thick smoke had filled the rooms.

It should be mentioned that the evacuation of the shelter took place after the attack was over.

> (Signed) Kalix Master of Security Police No. 5142

46th Police Precinct 40th CD Precinct Marmannstrasse Bunker Hamburg, August 31, 1943

ACTIVITY REPORT

When the air alarm sounded on July 27, 1943, 1 ordered three men to patrol the precinct and I did the same. Within ten minutes after my return to the police station, the first bombs were falling. After a while--I cannot remember the exact time--the tower watch came to me at the station and reported that the sector building was already on fire. Soon we had a report from the sector that the b. ilding was on fire all the way down to the first floor. The Sector Commander and some of the officials had rushed outside. Shortly thereafter, the Sector Commander ordered the evacuation of the stations (sector and precinct) which order was passed on by me with the call "Everybody out!" At the time, I was in the hall of sector headquarters and urged everyone to leave the building without haste. I discovered that the telephone operators were leaving their cubicles without thinking and in great haste. I stopped them and had them wrap wet blankets around themselves; otherwise, they would have been burned. Finally, only two or three men and myself were left at headquarters. We stood a few moments before the cellar exit to make sure that we were the last ones out, then I ran back up the stairs, across the yard of the fire station, and around the tower to Billborner Brückenstrasse in the direction of the Round Bunker. On my way, I saw only burning buildings and heard the terrible howl of the fire storm, which, in my opinion, made people forget all reason and act purely by instinct. In front of the bunker, I found a large group of people who had already taken complete leave of their senses. I took a hand immediately and got several small children into the Round Bunker above the heads of the crowd. I had to proceed rather ruthlessly because several men tried to get into the bunker before the women and children by force. Because of the tremendous heat that emanated from the board fence surrounding the open square, the people acted in complete panic and only with the greatest effort could they be kept in some kind of order. When, after some time, I went to the door on the water side of the tower to try and restore order, several bodies were lying on the square. I was already so much affected by the heat that I became dizzy and I was pulled into the tower by several people.

After the fire storm abated somewhat, I went out again and walked around the precinct in the direction of the Branshofer Locks. On this journey, the full impact of the brutal attack was impressed upon me. I found bodies at the Fire Fighting Station at Billhorner Röhrendamm

and in Billheimer Canal Strasse and later on in front of the air-raid shelter at Billhorner Röhrendamm 24. When I returned, the evacuation of the tower by ship from Flügeldeich had begun and I could lend a helping hand.

> (Signed) Scheer Master of Security Police

Sergeant of the Security Police (i.R.) Bey Headquarters Bunker Commander Civil Defense Bunker Frankenstrasse 38

Hamburg, August 1943

ACTIVITY REPORT

Attack of July 27-28, 1943. Alarm at 11:30 p.m.

Shortly after the alarm, I arrived at the bunker where I met Deputy Bunker Commander Pfeiffer. I went with him through the rooms of the bunker and ascertained that they were all heavily occupied, and still more people were coming in.

Everything was still quiet, and I used this time to go around the block Heidenkampweg I-Frankenstrasse 38-Torweg, and asked the people standing outside to go to the shelter.

On the way back, on Heidenkampweg, the searchlights suddenly flared up on a wide front in an easterly direction and general flak fire began. The first flicker of fires could be noticed.

I rushed back to the bunker and herded the curious gathered outside into the shelter, cleared the gas sluices, closed the steel doors, and posted military personnel in front of every one of the numerous doors with the order to let nobody out and to check incoming people for phosphorus traces.

I asked Pfeiffer to remain near me. We went through the rooms several times and calmed down the people who jumped up and became restless when the first bomb explosions were heard. I pointed out the sturdiness of the bunker and soon I had gained the confidence of the people.

Inquiries on my part ascertained that all hell had broken loose on the outside. Everything was burning with a terrible evenness, and one could hear the rumble of the rather low flying Tommies. The house to which one of the exits on the canal side led was already on fire, and extinguishing the fire was impossible. High explosive bombs were falling in the immediate vicinity and drove the people trying to fight the fire back into the bunker. A woman was taken unconscious from a burning staircase and cared for by a nurse's aide. In the meantime, more and more people came out of the burning houses to join us and they were all tested for phosphorus. Some of the people had thrown off their clothes. They were in no danger of catching cold, since it was nice and warm in the bunker already. The air in the bunker became constantly worse. The electric lights had failed early in the attack. I had all unnecessary candles extinguished and the halls cleared. This made things even more crowded in the bunker, and the air became even worse. Earlier, I had assigned military personnel and strong civilian persons to work on the air cleaning apparatus. They were most willing to do this and put all their efforts into the task. It seemed important to me to show the people that we were doing something to prevent panic.

Pfeiffer, whom I had asked to count the people present, counted up to 700. The bunker was simply toc crowded, and people were lying against each other rather than standing or sitting. A few hysterical women suddenly began to scream. Hot water was leaking through some cracks in the concrete ceiling. I lied to them telling them this was because they were using hoses to extinguish the fire above us.

Everyone was very thirsty. Of course, most of the people had arrived in the shelter without provisions despite the fact that they had been urged for years to take something with them to the shelter. Drinking water was finally found in a burning house on the canal and also in an industrial basement onto which one of the emergency exits opened. In the meantime, the canal side of the bunker got hotter and hotter.

A patrol whom I had sent to the precinct station came back without results and in a weakened condition. The fire storm would not let him proceed further than Hammerbrookstrasse.

I went on patrol myself in the direction of Heidenkampsweg; however, I could not go any farther because of burning debris. Despite a steel helmet and a blanket, the heat almost mad · me senseless and my throat was so dry that I could not call out.

Early in the attack, men from the district group and I had taken command of the shelter occupants and we worked well together. We now tried to fight our way through the cellar to get to Heidenkampsweg underground. We soon realized that we were completely cut off as long as the constantly increasing fire storm was in progress. I ordered a hole dug into the wall on the canal side to crawl out. I would not let them make a large hole, but only permitted a crack at first. This was enough to show us that the fire had spread down to the cellar in the house next door and everything was in flames. The room became hotter and hotter, and smoke came in through the crack. I ordered the cellar cleared, after I had tried to close the hole with a cloth. Unfortunately, it was so overcrowded by now that it became unbearable in the shelter. The first faintings occurred. Remembering my old experiences from heavy bombardment
at the Somme (in World War I), I advised people not to lie on the floor because I was afraid that carbon monoxide might have crept in. The smell in the cellar induced nausea, especially on the canal side.

I called together some determined people to try and find another exit. The same SS-man Engel who had tried the patrol to the precinct station before, offered to swim to the bridge at Heidenkampsweg. He was gone a long time. In the meantime, people swam through the canal to us and we took them in through the industrial cellar.

By now the fire had been burning for hours without diminishing. Once more, Pfeiffer and I tried to find an exit through another part of the industrial cellar. We were just in time to receive people crawling in from House No. 40 through a newly created exit hole. Without us, who knew the terrain, these people would have never found their way to us, and would have remained under the debris of the melted industrial cellar. The upper side was already so soft that you could not step on it any more. At the time, it was still standing however, and we never fully realized the danger as we were working too frantically to find a way to get the 700 people out of the shelter. We convinced ourselves that the exit on this side too was completely cut off. The smoke we swallowed caused intense headache, and sweat soaked through our uniforms.

Once again I ran out of the exit, after our SS-man Engel had returned, and in Frankenstrasse near Heidenkampsweg I met a major of a Civil Defense Regiment. I described our situation and took him back to the bunker with me. Our connection with the outside world was established. Several more people from the Civil Defense Regiment came to us. Now we proceeded to clear the cellar.

The main staircase could not be used; the doors were red hot and the stairs threatened to catch on fire any minute, although fire fighters were trying to stop it.

I led the first group of volunteers leaving the shelter to show them the way. Unfortunately, right in front of me two house fronts (Nos. 42 and 44) collapsed. I told myself "Good Night," but I was only lightly hit by some stones; however, I now found that my group of people had disappeared. They had all run back when I disappeared in a cloud of dust and smoke. I cursed roundly and brought the people back out. Then 1 established an uninterrupted human chain that I kept intact and watched that the people took the one possible route out. This was rather a difficult task. I had to be ruthless with some stupid people who insisted on trying to run back into the fire. There was the constant threat of the walls collapsing about me at any moment. However, I had to stay at my post or I could not direct the people leaving the shelter.

Major von Pidoll was of the greatest assistance. He bandaged the wounded, put clothes on the naked, and showed in every way that as an old combat soldier his heart was in the right place. He and his people then helped clear the self-protection shelter, in which endeavor some other civilians also assisted. To carry the unconscious people across the soft pavement was no easy task, especially in view of the debilitating heat in the shelter.

After I had made the rounds of the cellar once more, accompanied by Pfeiffer, I left the cellar as the last person. It was high time!

About 30 to 40 burn injuries and broken ribs could not be avoided. However, everyone got out alive to Heidenkampsweg and from there on to Stolten Park.

> (Signed) Bey Sergeant of Security Police (i.R.)

Master Sergeant of Security Police (i.R.) Arthur Schmidt

Hamburg, September 3, 1943

ACTIVITY REPORT

During the night of the second attack (July 27-28, 1943), I was assigned to be in charge of the public air-raid shelter Spaldingstrasse 146/48 as the Chief Official Shelter Monitor. There were about 400 persons in the shelter.

The high explosive bomb hits could be heard clearly in the shelter, but except for a very few, the people in the shelter remained calm and orderly. When a high explosive bomb exploded close by, the electrical lights went out, and the strong blast shook the building. The storm lanterns were lit at once as an emergency measure. I calmed down the people.

After a while some men appeared and asked for fire-fighting personnel, and I assigned some able bodied men, who went along willingly. More men were assigned a second time; however, these returned after a short while and explained that they were powerless to extinguish the fire.

I went outside myself and ascertained that small fires were to be seen at the rim of the roof. I again reassured the people who asked many questions. I actually expected that the whole house would be in flames shortly. After about 20 minutes, a man from an Emergency Squad reported that the fire had reached such dimensions that the shelter would have to be evacuated.

I ordered the evacuation of the shelter and showed the citizens the direction in which they could reach safety. They were directed in the direction of Nagelsweg toward the public park. A great many had to be urged to leave the shelter, because great heat was beginning to be felt in the street. When the last citizens left the shelter they called out to me that I should go with them to Heidenkampsweg. After a short time I ran after them, but because of the fire storm I could not catch up with them. Since it seemed hopeless to get out of the fire storm, I fled to the cellar of the restaurant "World's Corner," located on the corner of Spaldingstrasse and Hammerbrookstrasse. I could not stay there because the racing fire swept into the room. With some others seeking shelter, I ran into a staircase in Spaldingstrasse where other citizens had taken shelter. To be safe from flames and showers of sparks, we closed the front door. However, we could not remain here either, because burning

wood and pieces of glass fell through the skylight. To find a way out, I ran to the Spaldingstrasse Athletic Field. Here the barracks of the Air Force were burning, which generated so much heat that it was impossible to get through. So as not to be burned, I raced back to the staircase, and in the storm my cap was blown from my head.

Back in the staircase I pondered how to find a way out. I decided to try my luck in the direction of the railroad crossing Hammerbrookstrasse-Norderstrasse. When I got out into the street, I had to leave it as fast as possible because the heat was unbearable and the fire storm raced through the streets. In order not to be burned to death or suffocate in the street, I decided to find some cellar in Spaldingstrasse, and I quickly ran into the doorway of Spaldingstrasse 150, where there was a self-protection shelter in the yard that had an iron exit door. When I got into the shelter, some citizens were just getting ready to leave the shelter. I told them that at the moment it was useless to try and flee. They returned after about three minutes. In the shelter were women and children who were all moaning. I could not stand it for very long in the front room. Since there was no other water available, I wet my handkerchief in the toilet bowl and held it in front of my mouth. Then I visited the backrooms. Here several people were lying on the floor.

In one room I found a skin filled with water. I wet my whole uniform because it was unbearably hot in all the rooms. When I got to the last room, I saw several women and children on the floor. Since I was by then completely exhausted I lay down with them, and kept on coughing and moaning. I lay there until 10:30, when another man and myself found a hammer with which we broke first one wall and then another. Through these openings we fetched three women, four children, and four men whom we brought into another room that had a big door leading to the North Canal. Here the air was cleaner.

We saw a boat with soldiers at the Hammerbrook Bridge and we called to them for help. The soldiers heard us and at about 1:30 p.m., they picked us up with the boat.

I had a severe case of smoke poisoning and burns in both eyes. I was treated at Rescue Station 49 and was referred for further medical care to St. George Hospital. From there, I was transported by military vehicle to Bergedorf. In Bergedorf a hospital train was waiting to take on the wounded and to bring them to a reserve hospital in Eschwege in Thüringen. After my recovery, I returned to my unit on August 23, 1943.

> (Signed) Arthur Schmidt Master Sergeant of the Reserve Security Police

Sergeant of Reserve Security Police Kumierczyk 30th Civil Defense Precinct Hamburg, September 6, 1943

REPORT ON THE RESCUE OF 280 OCCUPANTS OF THE SHELTER CAFFAMACHERREIHE 1/5

During the night of July 24-25, 1943, I was in charge of the public air-raid shelter Caffamacherreihe 1/5, Industrial Palace. As soon as the alarm sounded, the shelter filled with 280 persons. These were mostly families with children and a few single persons. Strong flak fire had already begun, and I stayed at the door of the sluice to be able to survey the situation better. Suddenly, a fire was reported in the house Caffamacherreihe 28, and the emergency squad was alerted. I was in the process of opening the gas sluice, when suddenly a bomb (direct hit) dropped on the Industrial Palace. The air pressure lifted the sluice door from its hinges. The benches with the shelter occupants were thrown all over, and the electric lights went out. I immediately lit the reserve petroleum lamps and with the help of some brave men and with a forceful manner, I restored calm.

Visibility in the room was zero, since the air was thick with a layer of dust. The entrance to the sluice was cut off by fallen masonry. I immediately checked the remaining exits, which led to the yard toward Caffamacherreihe and saw that these too were blocked by fallen masonry and wooden beams burning brightly. They could not be used.

Now I went to the wall breakthrough that led to the open onto Speckstrasse and pushed this through. Here flames were thrown at me from the houses on Speckstrasse, and this way too was completely blocked at present. The stairs leading to this exit were removed by me since there was danger that the wooden parts would catch fire. We were completely surrounded by fire on all sides and were forced to wait until we could find a way after the block of houses on Speckstrasse had burned down.

Toward 9 p.m., this opportunity presented itself. After moving aside burning beams and masonry, an exit could be cleared toward Speckstrasse, and I was able to bring all persons to safety along this narrow path. The path that had to be cleared was about 100 meters long, and many personshad to be carried since they fainted from the intense heat. All present assisted one another and persons who showed signs of fainting were revived with water or other refreshment.

The behavior of all present was exemplary, and I did not note a single case of panic. The occupants completely entrusted themselves to me and my troup members, and there were no incidents. After I again checked all rooms thoroughly, I left the shelter as the last person.

(Signed) Kumierczyk

Hamburg, August 5, 1943

Fire Brigade 1/IV

REPORT ON MY ACTIVITIES DURING THE AIR ATTACKS JULY 24-25 AND JULY 27-28, 1943

Air Attack During the Night of July 24-25, 1943

On July 24, 1943, I started my two-week recuperation leave. During the air attack in the night, I went on the roof of my residence at Süderstrasse 319. The house, as well as surrounding buildings, was hit by stick fire bombs. I extinguished two stick bombs and then ordered the self-protection service to look after things. In the back of the house at Süderstrasse 323, the rafters were on fire. I gave orders to several political leaders to form bucket chains and start fighting the fire. After I had the impression that I was no longer needed there, I took my bicycle and went to my fire station to make myself available for service, since damage could be seen all around. I did not get very far on bicycle, because the streets were hardly passable because of bomb craters, fallen masonry, and fallen trees. With great effort, I was finally successful in reaching my duty station, Firehouse 1. I took over the leadership of my brigade and departed with my Emergency Squad at 1:43 a.m. in the direction of Repsoldstrasse. Regarding my further activities during the night, see attached Experience Report.

Air Attack During the Night of July 27-28, 1943

During the air attack in the night of July 27-28, 1943, I was in the shelter of Firehouse 1. Shortly after the start of the attack, I went onto the roof of the main fire watch to survey the situation. When I left the shelter, heavy rock dust was noticeable and a strong storm was howling. From the roof, from which most shingles had been removed, I had an excellent view of the surrounding area. Larger fires were visible. High explosive bombs fell in short intervals, which shook the firehouse down to its foundations. I then reported my findings to Captain Mack at the radio station. I again went onto the roof, accompanied by Master Pieper. I now found a fire in the rafters of the house at Berliner Tor No. 8 and immediately went to the air-raid shelter to get forces. I asked for four volunteers to fight the fire, because high explosive and fire bombs were still falling. Immediately Sergeants Ruter and Bärer, Master Sergeant of the Civil Defense Police Wittekind, and Master Sergeant Moldenhauer volunteered. The storm had by now attained the proportions of a hurricane, mixed with showers of sparks and brick dust. It was hardly possible to remain on one's feet.

With the abovenamed men, I now took a line from the hydrant to fight the fire at Berliner Tor 8. It was found that the line had no more water. The fire with lightning speed had already worked itself down to the third floor. High explosive and fire bombs were still falling. Burning stair parts were already falling into the staircase. I went to the air-raid shelter to get the people out. With my men I was able to rescue all residents, about 30 people, partly very old and frail. After the last resident had left the shelter, the staircase collapsed and the entrance to the shelter was blocked.

Next. I alerted all teams to come to the street to save people and, where possible, to fight the fires. The fire storm had now reached indescribable proportions. Not a word could be heard, the heat was unbearable, and the rain of sparks hard to withstand. By now, one shelter after the other was being systematically evacuated. In the streets Berliner Tor, Beim Strohhause, Kolbergstrasse, Hohestrasse, and Alexanderstrasse, about 250 to 300 persons were rescued. The people would leave the shelter only under greatest pressure. When people were brought to the entrance, they tried to run back at once. You had to grab them and talk tough to them. Many had to be carried since they were fainting. About 500 people wandering about in the fire storm were led to the rooms of Firehouse 1. During the rescue operations, Master Sergeant Dorn reported that in Wismarerstrasse many people were trapped in an air-raid shelter and were screaming for help.

Immediately I went there with my brigade. In one house, which burned in all stories, some people called out who had been buried by a high explosive bomb. We could talk to them easily. Suddenly the cellar ceiling collapsed, and it was only by the greatest luck that none of the brigade was killed. I then ordered one fire-fighting group to the Bathhouse Lübecker Tor to start a water supply, because rescue of the people was made impossible now through the collapse of the cellar ceiling. The swimming pool at the bathhouse contained 900 cubic meters of water. We started the fire-fighting attack with engine company 13/IV. Several hoses were directed against the engineering school, the bathhouse, and the residential houses.

Fire-fighting was for all practical purposes impossible because of the radiating heat. We had to keep spraying each other in order not to burn. The bodies of the vehicles began to burn. I tried to activate the self-protection service, but nobody was available. Without help, we could do nothing more.

I tried to get help. I took along Gas Sentry Rössler and a civilian and tried to reach the firehouse through the burning streets. In Wallstrasse, my companions did not want to go on and sought shelter behind a

pillar for advertising posters. I now tried to get through alone, but it was not possible. I went back the way I came and now tried to beat a path through Lübeckerstrasse and Steinhauerdamm. My companions could not go on and stayed behind. On the corner Steinhauerdamm/Lübeckerstrasse, the fire storm was so strong that I was thrown down several times. Once I could hardly get up again. People were nowhere to be seen. I dragged myself to the fire house and collapsed in front of it. Members of the armed forces carried me into the fire house.

After they threw several buckets of water over me, I recovered and took part in the fire-fighting activities at the firehouse, which was by now seriously endangered by the burning houses on Berliner Tor and the Marine Barracks behind the firehouse. In the firehouse itself, more than 100 persons had found shelter by now. I drafted able bodied men and put them at the disposal of Master Pieper. Master Pieper made every effort to save the station building. We are indebted to him and the men like Master Sergeant Rüter, Sergeant Bruns, as well as personnel of Departments 91, 92, 93, and 94, that the fire was kept away from the fire house and that it was maintained as a haven for the many people quartered there.

> (Signed) Stankowski Master of the Fire Protection Police and Squad Leader of Brigade 1/IV

Fire Brigade 3/X

Hamburg-Wellingsbüttel, August 15, 1943

REPORT ON RESCUE OPERATIONS DURING THE NIGHT OF JULY 27-28, 1943

Around 3:15 a.m., while we spread the hoses, a normal wind was rising, which within a very few minutes became a cyclone. (Storm would be too mild a term!) It rained fire, so to speak. I happened to be across from the burning Fette Lumberyard under a ladder and saw how large wooden parts (parts of roofs, boards, beams) flew through the air. In no time, the street was full of burning wooden parts, which raced with unbelievable speed through Vogelweide. The furniture rescued by the tenants was standing on the street side away from the fire and was ignited immediately. What could possibly be moved was moved by the storm. It was impossible to hear a word.

The tenants had been in the midst of trying to save their furniture, and some had opened the windows to throw things out. The wind grabbed the window frames, unhooked them, and they too were beginning to fly through the street. The so-called fire rain was driven through the open windows into the apartments and here set fire to the blackout curtains and drapes. The streets were devoid of people within a few minutes. I, too, had to leave my post, since planks from the scaffold blew down and started burning. I ran to the water container because vehicles had stopped there. Now a tree about 50 cm thick fell across the street Holsteinischer Kamp and came to rest on a LF 25 and the engine of a light brigade of 21/VI; the latter was crushed. Through planks laid across the crater it was possible to bring some of the vehicles across the street into Marschnerstrasse and to safety. A few brave men saved the LF 8, which had caught fire, by slapping it with wet blankets. Also, a police car that was already in flames was saved.

The fire storm continued unabated and constantly changed directions. Many men had sought shelter in the entrance hall of houses so as not to be hit by falling debris. Working with Hose Commander Burmeister and a few brave men we were able, with saws and axes, to free the LF 25, and eventually the LF 8, which was located in Uferstrasse, was freed from the tree.

Calls for help could now be heard from all directions. The command was given: "Take all ladders from the vehicles and save human lives." Everything else was abandoned in order to heed the calls for help. Even though every one of us had considered his life over a few minutes before, as soon as he heard the cries for help, he was again ready to help. Fortunately, the houses all had only three floors and could be reached with the ladders. It certainly proved a great help that tubs and buckets with water were kept in the staircases. In many cases, it was easy to extinguish the fires in the halls of the apartments. In most of the cases the flames from the back rooms struck the corridors, and the women were afraid they could not get through. I myself had this experience three times. One man, who could not wait till the ladder reached his window, jumped to the street from the second story, and then turned around and wanted to go up on the ladder erected in the meantime to get his suitcases. The number of people rescued cannot be ascertained, partly because about 70 men assisted in rescue work and partly because at the same time rescue work was in progress in Wolksdorferstrasse, Vogelweide, Heinskamp, and Marschnerstrasse. A conservative estimate would be about 80 persons, who were saved either through the staircase or through ladders.

Because of the fire storm, the picture was drastically changed. Even had it been possible to confine the fire sites during the first alert, assuming an encircling action had been possible, within 45 minutes a conflagration would have resulted against which we would have been completely powerless.

The following example will show the unpredictable course of a fire storm: In Heinskamp, three or four trailers loaded with coke were standing in the street; before the fire storm they were not burning; after the fire storm they were completely gutted, and you can see the remains of wagon and coke to this day.

Despite the fact that the brigade was on duty day and night since July 25 and only had an hour off here and there to rest, it performed with complete willingness and was equal to the claims made upon it.

> (Signed) Tamm Group Leader 3/K

> (Signed) Höltje District Captain

First Sergeant Boje Fire Department, Precinct IV

Hamburg, September 2, 1943

ACTIVITY REPORT

During the second attack on July 27-28, 1943, our house (No. 70) was hit right in the beginning by a phosphorus bomb. The fire raged on the third floor. I assumed the offensive. When I arrived on the mezzanine, a second bomb hit. Pieces of wood and plaster were thrown down the staircase, and I myself was thrown down to the main floor. To keep the entrance clear and usable, I moved bicycles standing there to one side. Since the fire raged behind our houses in Wendenstrasse, I tried with Sergeant Artmann to bring boxes, baskets, and suitcases with belongings stored in the part of the cellar threatened by fire to the forward cellar. The flames threatened the gas sluice. The window was boarded with wooden box lids. During this time, the staircase collapsed. The fire by this time had a high velocity. My effort to get out on the Wendenstrasse side failed because that staircase was already on fire.

The situation now became unbearable. We tried to break through the firewall to the neighboring cellar; however, we found that the neighboring cellar was also on fire. Rescue of the tenants of two houses sitting in the air-raid shelter was therefore impossible, but a long wait was inadvisable too because the danger of asphyxiation was already great. The fire pressed with such force against the cellar exit on the Wendenstrasse side that three men could not hold the door shut. While we held the door. I asked that the occupants take blankets and coats and pull them over their heads, and each two adults leave the shelter with one child. All occupants had great confidence in my orders, but they had no idea what was ahead of them and how they would have to fight their way through a flaming hell. Mr. Baden, who was bandaged and walked with crutches, was assisted by his wife but collapsed. I tore him from the flames back into the cellar and later on carried him out of the shelter with the help of another person.

I went back to the air-raid shelter again, found my wife and Mrs. Dungehold, and tried again to get out of the shelter with the women. The cellar stairs were littered with burning suitcases and bags. Then we went across the closed grate and into the fire storm. We were in the midst of a burning hell. It was not possible to break through to the next air-raid shelter. To find a second person to rescue Mr. Baden was not possible; he had to be left to his fate for the time being. We tried to get through the burning Teutonenweg to Sorbenstrasse, but here too there was no escape. We finally decided to get down on our knees and press against the schoolyard wall, with our backs to the fire storm. I repeatedly urged everyone to remain in this position because this was our only chance. The fire in the houses on corner Sorbenstraase and Cimbernweg could not last more than a few hours. Both schools, Wendenstrasse and Sorbenstrasse, were in flames. The heat rays and the possible collapse could not endanger us here because the wide schoolyard was in between. Through the burning warehouse and auto park as well as through burning houses in Sorbenstrasse, we were exposed to flying debris and fire storm. To last through two hours in the cellar and another five hours at the wall till 7 o'clock the next morning was only possible because of my constant urgent exhortations to the approximately 20 people with me. Many tenants went back into the fire storm or did not follow us in the first place. I found them the next morning burned to death at the corner of Wendenstrasse along the schoolyard wall.

With burns on hands and feet and with eyes swollen shut by the heat we found a way out and finally landed at the Elbe Bridge. Here we were put into motorboats. We were discharged at Zollenspieker. Here Dr. Peters of Hamburg gave first aid to the wounded. The first plate of soup that was handed to us was a restorative. Because Zollenspieker was overcrowded from the first attack, we were brought across the Elbe. There we were loaded into trucks and distributed in the neighborhood. In the evening we were quartered, without belongings, in private homes. Here transports for Bavaria were put together every day. On July 31, I first regained sight in my right eye; on August 2, in my other eye. My hands were bandaged. Since I had blisters on my feet, I could not wear boots and had to wait patiently for a few days.

> (Signed) Boje Sergeant of Fire Department

Sergeant of Civil Defense Police Dietrich Ambulance Corps Group 1/III

Hamburg, July 25, 1943

ACTIVITY REPORT

A rescue troup of five men of the Ambulance Corps 1/III pushed into the sea of flames at Schaarsteinweg to execute a rescue. The houses on this street were already in flames from roof to basement. Thick fire and smokescreens blocked the view and gave the impression of a complete wall of fire. Burning beams in the middle of the street strengthened the impression of a closed wall of fire. By going around single fires and jumping over fire sources in the street, the troup arrived at the rescue site; however, they were unable to effect the rescue. On the way back, it was ascertained that in the gaps between the flames there were at least 20 persons at various spots who, in the belief that they were completely enclosed, did not want to move either backwards or forwards. These people were in Schaarsteinweg for quite some time (about a half to one hour). All persons were still ambulatory although they had smoke injuries and burns. However, Schaarsteinweg was hardly suitable for a continuing stay in the middle of the flames. The troup was then able to persuade about 10 to 12 men to join them and get out of the sea of flames under the troup's direction. This group dissolved at the fire house in Admiralitätsstrasse, where from the waterside absolute safety was assured.

Experience has shown that in fires of this size many people remain to die because of the picture they get from smoke, sparks, and ashes that they are confronted with a solid wall of fire and they are so overwhelmed that they do not even make an attempt to get out. They remain at the spot that is temporarily less endangered and eventually fall victim to the spreading fire. Search parties are often very successful and are able to lead many startled and confused persons out of the flames and to safety.

> (Signed) Dietrich Sergeant of Civil Defense Police Ambulance Corps 1/III

Stellinger Chaussee 36/38 Hamburg-Lokstedt, August 11, 1943

EXPERIENCE REPORT

During the severe terror raids by the British Royal Air Force on Hamburg on the night of July 27-28, 1943, I was with my wife and 15-week old baby in the air-raid shelter at Hirtenstrasse 46, Hamburg 26. I was assigned to this shelter since the shelter we used before at Hirtenstrasse 51 had collapsed during the attack in the night of July 24-25.

A few minutes after the first flak fire was heard, a rain of fire bombs descended on our house. A short time later, a heavy high explosive bomb fell in the immediate vicinity, shaking our building and apparently collapsing the upper stories.

My request to the few men present to go outside with me to see what was going on was not heeded, so that I had to go out alone. When I opened the cellar door, the flames from the hall of the house swept toward me. I jumped through, but I could not reach the street, since the furniture that we had saved from the previous attack on Saturday from the houses across the street was burning in the street. I hurried back to the cellar, got a long fire-hook, and with this pushed aside the burning furniture pieces that were immediately in front of the door. Then I saw that all neighboring houses, especially Nos. 46 and 48, were burning down to the ground floor. A second high explosive bomb, which fell at that moment very close by, completely destroyed several houses, among them No. 48, which had already burned out in the upper stories the previous Saturday. Again I hurried back to the cellar. Cries from the neighboring cellar at No. 48 could now be heard. I broke the opening to the neighboring cellar with an axe, so that the people sheltered there, who for the most part were already exhausted, could come to our cellar. In the meantime, the lights had gone out, and through the many new people added to our shelter and the smoke streaming into the shelter, panic erupted in our shelter. The people threw themselves on the floor, one on top of the other. I repeatedly pointed out the danger of our cellar collapsing, announced the path to be taken on leaving the shelter in the direction of Ohlendorff Park, and repeatedly urged the people to leave the cellar. Nobody, however, not even the few men present, made the slightest attempt to leave the cellar.

I then decided to get the people out of the cellar by force, and grabbing two people, I dragged them across the burning hall to the street

and across Ohlendorffstrasse which deadends into Hirtenstrasse. On the way I was hit on my right foot by a stick fire bomb. In a comparatively short period of time I was able to bring about 25 women and children, who were in part already in an exhausted condition and who would never have gotten out of the cellar alcne, out to the open. I finally got everyone to the Ohlendorff Park, which is situated between Horst Wessel Strasse and Hirtenstrasse.

As the last persons, I fetched my wife and 15-week old baby from the cellar. We were hardly 50 meters away from the cellar, when the houses behind us, including No. 46, collapsed from a high explosive bomb. I was certain, however, that no one had remained in our shelter at No. 46, since I was the last one to leave the room.

Because of the spread of the fire, I could not reach Ohlendorffstrasse with my wife and child. We ran straight ahead in the direction of Hammerlandstrasse. At the junction of Meridianstrasse-Hirtenstrasse, several people fell, in my opinion due to the whirling storm, screaming to the street. I could not help them immediately, because I had my child. At Hirtenweg I discovered a storehouse and office building, which at the time was the only one that had not caught fire in the whole street. Here I broke down the entrance door and found shelter for my wife and child. I brought three more women who had been lying with burning clothes at the corner of Hirtenstrasse and Meridianstrasse into the storehouse, one after the other, after I tore off their burning clothes. When I made a renewed try to fetch more people, I was thrown to the floor from the air pressure of an exploding high explosive bomb. I fell on top of a fire bomb and injured my right hand. (Because of this injury I have been under doctor's care since August 8). Since I lost consciousness, I could not return to the warehouse on my own. On the plea of my wife, I was carried in by men who remain unknown to me. Ten minutes after I received a drink from a woman, I was in good shape again.

In the meantime the warehouse, too, had caught on fire and after a short time, one wing collapsed. With the help of a soldier, I was able to save another man from one of the rooms. With the continued assistance of this soldier, I broke down all the doors to the neighboring rooms to create possibilities to dodge the fires. In one of the coal cellars, we discovered a trapdoor through which we could get to Ohlendorff Park. We got it open and were able to pull out most of the people who had already congregated in the cellar from above. Because the warehouse collapsed very soon, we were unfortunately not able to get all the people out.

On the way to a large water puddle created by strong rain in Ohlendorff Park, the clothes of some women were ignited by phosphorus. By quickly dragging these women to the puddle, they too were saved, although they received some burns.

After a two-hour stay in the water puddle, we could not remain there any longer because of the fires from the country houses in Ohlendorff Park. By crossing Horst Wesselstrasse we finally reached a house in Schwarze Strasse that had not caught fire yet, from where, after about two hours, we were brought to Bergedorf by the Civil Defense Police.

I went along on the truck because my wife, due to a severe case of smoke p isoning, was no longer able to take care of our baby who was also close sphyxiation. I had lost almost all eyesight due to smoke and phosp in Bergedorf, I found quarters with my family and was taken care of my the NSV.

> (Signed) Schäfer Sergeant of Security Police

Hamburg, August 1943

REPORT OF EXPERIENCES DURING THE TERROR RAID OF JULY 27-28, 1943

Our apartment was located at Grevenweg 83, Mezzanine, Hamm, right behind the Canal Bridge. After the alarm was sounded, we immediately went to the shelter; however, we had to leave after one half hour of bombardment, since thick smoke was seeping into the shelter. The cellar exit to the yard was already buried, so we had to make our way through the house entrance. The evacuation of the shelter, despite the severity of the damage, took place without panic and was completely disciplined. Everyone was serious and calm. The house was in flames from the attic to the entrance door.

Outside all hell had broken loose already. The only solution was to find cover. We therefore went to a little comfort station under the Grevenweg at the end of the Canal Bridge. This comfort station consisted of an anteroom, three toilets, and a room for the attendant. The outer door of the station had already been torn off by Saturday's attack. After a few minutes the whole station was overcrowded with about 80 to 100 people. My husband and I found shelter in the middle toilet.

During the first ten minutes, the air was all right, but then it got to be hotter and hotter. The first cries of "We are suffocating" and "Water. water" could be heard. What could we do? Should we die by asphyxiation or risk death outside in the sea of flames? My husband did the most obvious thing. He stepped up on the toilet and examined the water tank. To everyone's relief, the tank was full of water. The other two toilet tanks were empty. My husband then stood for half an hour on the toilet rim and wetted cloths in the toilet tank, without thought of himself, although it was unbearably hot so close to the ceiling. He cut large rags that were handed to him into pieces with his pocket knife so that everyone had one cloth. We all hoped that the worst would be over by now because water was our only help.

But the worst was yet to come. To our misfortune, a large phosphorus canister fell directly on the threshold of the comfort station. (The front door had been missing since Saturday.) The people in the anteroom now gave way to an indescribable panic. The inner toilet doors were torn off and used as cover in front of the canister. After a few minutes, these too were burning brightly.

Terrible scenes took place, since all of us saw certain death in front of us, with the only way out a sea of flames, and we were caught like rats in a trap. The doors were thrown on the canister by screaming persons and more smoke and heat seeped in. In the meantime, the water in the tank had been used up. My husband, using his last strength, split the connecting pipe in the hope that it would contain water. He wanted to flood everything. However, this was in vain. He was completely worn out, and we crouched next to the bowl. The other people in the anteroom sat down too, and some fainted and never woke up again. Three soldiers committed suicide. Since the flames threatened to engulf us, I begged my husband to beat these back with our blanket--besides our papers the only thing we saved--but he was no longer able to do so. So I did it. My hair began to singe, and my husband extinguished it. We then decided to take a chance on possible contamination and wetted our cloths in the toilet bowl. Even this water was evaporated in a few minutes. What now? Our hearts were racing, our faces began to puff up and we were close to fainting. Perhaps another five or eight minutes, and we would be finished too.

Upon my question: "Willy, is this the end?" my husband decided to risk everything and try to reach the outside. We were lost in either case. I took the blanket, and he the little suitcase. Quickly and still carefully so that we would not slip on the corpses, we reached the outside. I in front, my husband behind. One, two, three we were through the wall of fire. We made it. Both without burns, only our shoes were singed. But our last strength and courage was gone.

At the Canal, we lay down flat on the ground, since a few centimeters above the ground there was danger of asphyxiation. People swimming in the canal wetted our blanket for us. After a few minutes, a woman joined us who thanked my husband for his self-sacrifice. This woman and a few other persons who were still alive in the comfort station had followed us outside. According to our estimates, not more than 15 to 20 people escaped with their lives.

Here at the Canal a woman was lying down whose arms and legs were burned except where she still wore silk underclothing. The cries of pain of this woman became unbearable, and my husband got up and ran around looking for boards to raise the burned limbs and so ease her pain.

Toward 9:30, the people swimming in the Canal wanted to get out of the water. But how? The rescue operation was very difficult, because the water was very low and there were some very heavy women in the Canal. My husband on one side and I on the other pulled these people out by the hands. We helped approximately 20 people out of the canal. One of the women thus rescued was due to have a baby in a few days. Since scarcity of water was the greatest worry even out here, my husband and I took turns trying to break the hydrant with a heavy iron stick to get drinking water. However, this undertaking did not succeed.

When toward 11 p.m. another alarm was sounded, we fled in the direction of Hern and along the Autobahn, where we eventually reached an Army kennel. Our eyesight became poorer and poorer, and when we reached the kennel we were totally blind. Here at the Army dressing station, we received first aid, but our eyes got worse and worse until we reached a party school where some very helpful nurses took care of us. Here we received our first real helpful treatment. During the first night, a family named Wilmers in Barsblittel took us in and were most kind; they fed us, put us into a clean room, and did everything they could for us.

Our greatest worry was our eyes, since we could not see anything at all. We were afraid we would remain blind. Besides, my husband developed chest and abdominal pains caused by the heavy phosphorus fumes that he inhaled when he was in the comfort station.

On Thursday we left Barsbüttel, and by Friday noon after a long ride-part of the way riding on the lowest step of a freight car--we reached my home at Remscheid in the Rhineland.

But here in Remscheid we did not have any luck either. During the first night (Friday to Saturday), we witnessed a severe attack on my hometown. Four heavy high explosive bombs exploded in our immediate vicinity. The whole attack took about three-quarters of an hour.

After my husband had recuperated fairly well for a few weeks, we decided to return to Hamburg in the hope that we would manage to keep alive a little longer.

(Signed) Erika Wilken

EYEWITNESS REPORT ABOUT THE TERROR RAID DURING THE NIGHT OF JULY 27-28, 1943

Of the 35 tenants in our house, only 11 persons were present in the air-raid shelter during the air raid. There were seven women, mostly ellerly; an old man of 80; and three other men. The shelter had been very well fixed up in the last few weeks. It had been moved from a room toward the yard and at ground level to a cellar room toward the street and was now below street level.

During the first half of the attack, I could make my interded rounds of the house to make sure that the house block Brekelbaumspark-Eiffestrasse-Ausschlägerweg-Borgfelderstrasse was not hit too hard. This block was under my care as Party Cell Supervisor. Apparently no high explosive bombs had fallen in the streets of my block. I could only spot very few fires from the roof. The morale in the shelter was high, and the people were calm.

In my estimation during the second half of the attack, our block was hit by about 12 to 15 heavy high explosive bombs and by a great many phosphorus bombs. At about 1:30 a.m. I took five women who were wandering dazedly around the streets into our shelter. At 1:35, during a hurried round of the property, I discovered that the upper parts of the house were not burning yet, but part of the roof was uncovered and the upper part of the back of the house had collapsed. Windows and doors had been thrown out. The house fronts across the street were on fire and also the business establishments within our block. The neighboring house, Brekeluaumspark 2, had received a direct hit on the side facing Borgfelderstrasse, and the roof was on fire. During the time of my round, heavy high explosive bombs and phosphorus bombs were falling in short intervals. It took all my patience and powers of persuasion to keep the women in the shelter.

Within the next ten minutes, everything happened at once. The coal cellar facing the yard had been ignited by flying sparks and by a phosphorus bomb that landed in the yard, so that within a short time a strong blast of heat came at us from two directions, and a little later, smoke as well. At the same time, the spot where the roof had been torn off must have been hit by a phosphorus bomb, since liquid fire and smoke came from the direction of the attic. In the second and third stories as well, fire caused by flying sparks and phosphorus spray had started. An effort to extinguish the fire in the cellar failed because of insufficient water supply.

Continued stay in the shelter was not possible because of the increasing heat, so I urged the women to seek shelter in the hall of the house. Several SA and civil defense policemen who were hurrying to a rescue station with some injured persons called out to the women huddled in the hallway to leave the house and go to the nearest rescue station before it would be too late. However, none of the women had sufficient courage to leave the hallway. A short survey on my part showed the following: All houses across the street were on fire to the third floor, as was the house to the left, Brekelbaumspark 2. A fire storm was developing and driving the burning phosphorus particles through the street. To avoid certain panic, I proceeded ruthlessly, with the help of a neighbor who was on leave, to lead the elderly people and women to the rescue station, where all arrived unhurt. Since by this time there was only one bucket with water available, all that could be done was for everyone to wet a handkerchief or towel, or spray blankets with water. The women were very worried about their things (coats and clothes) and did not want to leave their luggage behind.

I estimated that about 250 persons, mostly women and children, were already at the rescue station, The Hindenburg High School, so that there was hardly any room left for us. The behavior in the bunker--with a few exceptions--was calm and hopeful.

In the meantime, the left flank of the school had been hit by a high explosive bomb. The bunker ceiling held however. The roof and upper part of the school had ignited and were burning. The supply of fresh air was minimal and at about 2:30 a.m., it ceased altogether. Because of this, the heat in the bunker became unbearable. A few minutes later the physician in charge of the rescue station ordered it evacuated. In his opinion, we would be baked like apples in the bunker if we stayed. He would not take the responsibility. The order to leave the rescue station was repeated by him in the following words: "You must try to reach Ohlendorff Park."

At first the persons present followed his urging calmly and willingly; however, when they saw the burning streets, several tried to return to the bunker. Since I was pushed to the rear of the bunker with four women from Brekelbaumsplatz, I did not witness the iirst scenes that occurred when people started to leave the bunker, but I found all the people who had left it before me bunched together into groups right in front of the bunker. Everyone tried to find shelter from the fire storm and flying sparks. Most women wore clothes that caught fire easily. Several had been persuaded by the heat in the bunker to take off their coats and outer garments. Only a few had taken the opportunity to dempen scarfs, towels, handkerchiefs, and blankets. The majority of women, although they had been warned against it, were lugging their heavy suitcases and dropped after about 50 to 100 meters because of a combination of heat, exertion, and shortness of air. The fire storm was so strong that hats were torn off heads and whirled through the air like burning fireballs, and even little children, running around alone, were bodily picked up from the ground and thrown through the air for several feet. Only when we reached the slope toward Oben Borgfelde did the draft lose its force.

About 50 meters before the junction of Burgstrasse and Borgfelder Strasse, the slowly moving train of people came to a halt. Here the remains of several phosphorus canisters were burning at several spots. Cries of "We cannot get through here!" and "Ohlendorff Park is on fire!" were heard. The women who were with me, among them my wife, were so exhausted by their 200-meter run with the heavy suitcases that they had to rest for a moment. I used this opportunity to take a woman with four children across the dangerous spot. I made two runs to do this. When I returned from the second trip, burning parts of a collapsed house fell into the part of the street that had still been free. The route that had been passable up to this time was now also cut off by fire. In the same way, the path to Oben Borgfelde was no longer usable. The people streaming back were advised by the physician in charge of the bunker, who had stayed with us, to take cover along the slope to Oben Borgfelde. I could not persuade the women remaining with me to abandon their suitcases and to take a quick run over the burning debris. They were benumbed by the heat and, partly because of clumsiness (overweight), they were not able to make the run. I therefore searched for the widest part of the Borgfelder Strasse in order to get the most protection from the heat and the fire storm.

The time passed slowly. One fire after another found new nourishment in the houses and was made more intense by the fire storm. The sweat and soot glued our eyes, noses, and mouths shut. Despite the burning heat, we suffered chills, and many experienced nausea. Tongue and lips were swollen. The cries for help and water faded slowly. Many fellow sufferers, bemused by the heat, i ad lain down along the slope to sleep and never woke up again. The try by one man during a fit of madness to throw himself into the burning house temporarily brought life to the mass of people. About 6 a.m., the well that had been dug on the passenger island at the Anschlägerweg streetcar stop was found; it was dug deep enough so that some water was available. For the stronger people who kept alive till then, this was their deliverance. For others, including my wife, it was too late. Between 7 and 8 in the morning, the street barricades were burned down so far that the people still alive were able to make it to safety in Ohlendorff Park and toward the Berliner Tor.

(Signed) Paul Peters

Hamburg, August 1943

EYEWITNESS REPORT ABOUT THE AIR ATTACK JULY 27-28, 1943 ON THE CITY DISTRICT OF HAMM

A half hour after the alarm, I saw the flare-up of the first target designation bombs above the city district of Eilbeck. The direction of the planes' approach and the increasing engine noises pointed to an attack on Hamm.

Immediately I went into the air-raid shelter. Shortly before I reached the cellar, the house was shaken by the detonation of several phosphorus fire bombs. At the same time, the explosion of a high explosive bomb occurred and pushed aside the splinter protection from the shelter window. Because of this opening, the street, which was lit up by fires and flying sparks, was visible. Right afterwards, one of the tenants who had remained in one of the upper stories called: "Fire Protection Squads get ready, the third floor is on fire!" Immediately I and the other men present ran into the staircase and saw that the building from the third floor on down, as well as a restaurant that was located on one side at ground level was in flames. Attempts to fight the fire were unsuccessful. The continuing air attack forced us to return to the air-raid shelter.

As soon as we had reached shelter, we noted the hits of about 10 to 15 bombs. All doors of the shelter were torn open. The electric lights were out. Without being told, several men tried to open the wall breakthrough. Nobody could possibly know that this was the wrong thing to do. Air drafts and flying sparks raced through the cellar and straw bundles that were used to stuff civil defense beds began to smolder. After we had stayed in the shelter for a while, I suddenly realized the danger of smoke poisoning. I therefore urged all present to leave the shelter. The only exit remaining, through the staircase, was quickly used. Everywhere there were burning wooden pieces. The fire on the ground floor in the restaurant was contained by the closed doors. All the people now gathered at the entrance to the house. A mighty fire hurricane raced through the streets. We could still hear the impact of the phosphorus canisters and the machine gun fire of the low ilying airplanes. The fire was answered by short blasts from the flak guns.

Driven by the increasing heat, we could not stay in the doorway any longer. Some of those present tried to reach the bunker in the next street. Since this path was unknown to me, I suggested to my family that we run against the fire to reach a wide street and through there gain the open air. However, we had to interrupt our run at the next house. The roaring, racing fire hurricane made our intention impossible. Since this staircase was on fire, as were the next one and the one after that, we were happy to find shelter in the fourth house. The stairwell was full of people seeking shelter. In one of the apartments, I found a bathtub full of water and therefore had opportunity to wet my uniform. The members of my family as well as others present, followed my example and dipped blankets and towels in the water. I ordered the women to put wet cloths over their hair. Everyone followed my instructions calmly. No excitement was evident.

Everyone feared the next few minutes. Since the apartments on both sides of the stairwell were now on fire and to remain there in the heat and smoke was no longer possible, we left the house over heaps of burning debris that was stacked at the front door about 70 cm high and ran as fast as possible toward a construction site. The howling fire storm forced us to use our last strength. Our suitcases had to be abandoned. I noticed that many of the refugees did not survive the run. It was not possible to help them. I myself was hit twice by burning debris. Once I was hit in the back and thrown to the ground; however, I could get up and continue to run. My first stop was at a mound of earth at the construction site. There I heard my wife calling me some distance away. We had lost my parents-in-law. When I looked around for a more protected spot, I saw many people lying down flat on the ground with their heads hidden in their arms. We got up once more and ran to a pile of white gravel, which was lying in the middle of the site. We crawled into the heap and covered with a wet blanket. Then I heard a little boy cry: "I don't want to burn, I don't want to burn!" I crawled to him and brought him back and put him under the blanket with us. Upon my later questions he said, and I quote verbatim: "My mummy is lying dead on those stones, my little brother Manfred lies there too, he is burnt too." His father is at the front in Russia.

While keeping a constant watch during the five hours we lay in the gravel pile, I saw many people turn to living torches. About three meters from us a woman caught fire and endangered us too. Since I had the little boy lying across my body, my wife got up and tried to extinguish the fire. The attempt to extinguish it with a cloth was not successful in the short time available in the still raging fire storm. She tried next to pull the apparently dead woman to another spot. But her strength gave out. Besides the skin stuck to her hand. By throwing gravel we gradually extinguished the fire. In the meantime the houses burned without letup. Every one that collapsed made us breathe easier. Visibility, due to the rain of ashes and our painful eyes, was very poor. Extremely tired, I dozed off several times, but my wife woke me each time. Through animated conversation we kept ourselves awake and again and again removed burning wood and sparks from the blanket. After the houses collapsed upon themselves, some survivors got up and rendered assistance. The first water was obtained from a nearby bomb crater. I warned against drinking it. So we used it to wash out our eyes and wet our lips. By now I could survey the construction site. About 150 people had sought shelter here, but only 15 to 20 were still alive. After my wife found her parents (they had survived the night on the other side of the gravel pile), we wandered to Billstedt, taking an out-of-the-way route. I turned the little boy over to the care of a Red Cross nurse whom we met on the way accompanied by an officer of the party.

(Signed) Heinrich Johannsen

Hammerdeich 95, I Hamburg, July 28, 1943

REPORT ON MY ACTIVITIES DURING AND AFTER THE TERROR RAID ON HAMBURG THE NIGHT OF JULY 27-28, 1943

During the terror raid on Hamburg the night of July 27-28, I was totally bombed out. On that night I was assigned as fire watch to the civil defense service; in addition, my father had appointed me as his deputy block warden shortly before his trip to Rerik in Mecklenburg. In this capacity I started my rounds, properly equipped with steel helmet, gas mask, holster, and pistol. My three younger siblings immediately went with other tenants to the surface bunker at Hammerdeich.

After the start of the attack and the first detonations of high explosive bombs in the immediate vicinity, the front door of our house was torn off its hinges by the immense air pressure from the detonation and thrown into the stairwell where I was standing. The attack accelerated sharply, and the detonations of high explosive bombs increased. Among others, the fish oil plant located across the street from our house received a direct hit and immediately went up in flames. Fire fighting was unthinkable because high explosive and fire bombs fell without letup. I had trouble in reaching the bunker. I was thrown into the entrance of the bunker, rather than entering it under my own power. In the bunker, some 3,000 people had found shelter, mostly women and children, many of them infants.

The bunker was surrounded by burning houses. It had to be sealed airtight during and for hours after the attack to prevent seeping in of smoke, phosphorus gas, and sparks. The small amount of drinking water available was soon used up, because the temperature in the bunker was very high as a result of the countless fires around the bunker and the high number of occupants. Food was not available since most of the people had not taken anything with them. Oxygen in the bunker was getting so thin that a match would not burn (we had already spent ten hours in the bunker). This presented danger to everyone. Several women had fainted. Also, two women gave birth prematurely because of the shock and excitement. The bunker held firm, however, even though there were several low flying attacks by the terror bombers.

Something had to be done for the survival of the bunker occupants, so I took the initiative when the time came to take action about the abovementioned needs and dangers. Armed with a steel helmet, gas mask, water canteen, and wet blanket, I beat a path through the burning debris of the houses and after advancing for about one and a half kilometers, I discovered a water pump that was undamaged as if by a miracle. I filled my canteen and returned to the bunker. First the children were given drinking water. I made this trip to the water pump seven times in all and divided the water among the people in the bunker. While reconnoitering for food, I discovered an oxygen depot with some undamaged bottles. Drafting another man to help, I got four bottles of oxygen into the bunker and emptied them, which led to a noticeable freshening of the air. Many women who had fainted revived, and the physical condition of the occupants improved considerably. Now there was still the question of nourishment. Again I took three male occupants of the bunker, including an infantry soldier, and went to look for food. After a walk of about two kilometers, always between burning houses and collapsed buildings, we came upon a bread factory where bread was doled out. We filled six boxes with bread. Now we had the problem of transporting the bread to the bunker. In the yard of the bread factory there were two Mercedes trucks (bread trucks), unfortunately without drivers.

In view of the urgent need for food of the bunker occupants, I decided to use these bread trucks to transport bread to the starving bunker people. Since I have all the necessary driver's licenses, I drove the break truck back to the bunker, with many hindrances all along the way. I divided the bread as justly and evenly as possible. I now wanted to return the truck to the factory, but the people in the bunker pleaded with me to use it to take them out of Hamburg, because everyone had the desire to find safety after this horrible attack. I decided to heed their pleas and take the responsibility for the continued use of the bread truck. Until July 30, almost without interruption, I transported injured persons, women and children, after obtaining the necessary permits from appropriate police and welfare departments. After returning the bread truck in perfect condition, I took my three younger sisters and brothers, who were completely exhausted, together with the belongings they had saved, to my aunt in Rerik, Mecklenburg.

(No signature)

Hamburg, August 25, 1943

EYEWITNESS REPORT

Fire Captain of the Reserve Hagedorn tells about his experiences during the night of the attack:

During the first night (July 24-25), several houses were on fire in Hirtenstrasse. These houses were still burning on Monday morning. At about 5 a.m. I tried by myself to extinguish the fires by carrying buckets of water from the cellar and wetting the roof. Finally the Voluntary Fire Departments of Nettelnburg and Billwärder arrived and extinguished the fires, which had been temporarily checked by out-of-town fire companies during the night.

During the next attack (night of July 27-28), my house (Hirtenstrasse 38) was hit at about 12:55 a.m. by the first fire bombs, apparently phosphorus bombs. The roof as well as the top story immediately caught on fire. During all the other attacks, I had always been either in the top story or in the attic to extinguish any possible fires at once. This time it was impossible because of the constant falling of high explosive and fire bombs. Every three or four minutes, there was another attack wave. The fire bombs in some cases were only one or two meters apart. It was simply impossible to go upstairs and just as hopeless to try and fight the fire.

When I went up the cellar steps at about 1:15 a.m., several high explosive bombs fell in the immediate vicinity. The front door was thrown into the stairwell; at the same time, fire sticks fell into the front part of the entrance hall, so that a fire started in the entrance. The neighboring houses, Hirtenstrasse 40 and 42, and the house across the street, No. 49, were totally destroyed by high explosive bombs. Our own house, Hirtenstrasse 38, was damaged in the upper stories. We were thrown all around in the cellar. Shortly thereafter, the wall breakthrough was opened from the house next door. The people from next door came in, together with much dust, heat and smoke. The emergency exit from our cellar was torn open by a high explosive bomb, and dust and heat entered from there. We now broke open the wall breakthrough to House No. 36. The cellar there was difficult to reach because it lead through a boiler room. In the neighboring house, burning wood pieces fell through the light shaft. The cellar was full of smoke. Obviously it was impossible to go farther.

Our own shelter now started to heat up from above, from behind, and from the sides. It became clear to me that the only thing left was flight. I ordered all blankets to be wetted to cover head and face. At about 1:30 a.m., I went with my daughter through the burning entrance into the street and asked all the others to follow me. There was already a strong fire storm and flying sparks in the street. The fire storm blew in the direction of East-Northeast and drove us to the Thörl Gardens. Dead bodies were lying in the street and I noticed they were all face down.

In Hirtenstrasse the houses were burning right and left down to the third story, and I mean all the houses without exception. The houses in Hammerlandstrasse and the country houses in the park were also on fire. At 1:40 a.m., the fire storm gained greatly in intensity. We sought shelter under a big tree on the meadow in the park. Tree branches were constantly falling on us, trees were uprooted and fell over. The heat was unbearable, as were the flying sparks. Again and again we had to wet our cloths in a little puddle and lay them on eyes and mouth. My cap, which I had drenched, was bone dry after ten minutes. We stayed in the park until 7:30 a.m., and then fled out of the burning district to my truck garden to the east of the city.

Later on, one other couple from our air-raid shelter arrived in the park. The other 38 persons from our house apparently did not have the courage to run through the fire out of the house. They were burned in the cellar. The fire reached the air-raid shelter later on and burned all wooden parts. The bodies were completely charred.

Certified:

(Signed) Schliemann Lt. Colonel of the Fire Protection Police

EYEWITNESS REPORT

During the air attack of July 27-28, 1943, I was in my apartment at Billstrasse 91.

About 20 minutes after the alarm, high explosive bombs began to fall. The time until then we used to fill all available containers in the shelter with water. From the heavy shocks I could tell that the high explosive bombs were detonating nearby. In the beginning there were pauses in the bombing, during which we looked for fires. Shortly thereafter, there were already large fires, especially in the uniform manufacturing plant at Bullerdeich. This must have received a direct hit, for you could hear the hissing of water vapors from far away.

At around 2:25 a.m., we noticed through the open windows in the cellar next door that a frightening number of fire bombs had landed in the yard and in the houses. I had the impression that all the house fronts went up in flames at the same time. However, I did not notice any smell of phosphorus. Flames licked at the rear of the houses, especially in the three top stories. The wind apparently contributed to the spread of the fire to the neighboring windows. One did not know where to begin dousing the fires.

After the water main went out, we had no more water to fight the fires. The constant fall of high explosive bombs, which detonated in the immediate vicinity, and the glowing stubs of the fire bombs made any stay outside the house impossible. All houses in Billstrasse were on fire, and a great many had already collapsed. We tried to get up to the attic of our house, but the stairs could not be used. Also the heat was unbearable. The still exploding high explosive bombs drove us back to the shelter. Here everything was calm because the people in the shelter were not aware of the danger as yet. This made the tasks before us much easier.

There were about 15 women, 10 children, and four men in the air-raid shelter. The men were aware by now that the only thing we could plan for was to evacuate the people from the shelter. Smoke and heat seeped into the shelter despite closed doors. Evacuation of the shelter had to be done quickly, if we did not want people to be asphyxiated. Wet cloths over mouths and noses made it possible to breathe for a while. Then we smashed the wall breakthroughs on both sides, because the people in the back of the house had their escape cut off and by bringing them to us they were safe for a little while. The smoke now penetrated all the cellars, and the heat became unbearable. On all open cellar windows, we posted watches who were supposed to prevent the flames from beating in.

I tried now to find an escape route toward the Rothenburgsort Railroad Station. I started on my way with wet cloths around me and my clothing completely drenched and made sure that the route was still passable. After my return to the shelter I asked all the people to leave the shelter in the direction of the railroad station. However, they did not have the courage to run through the fire. I dared to try and brought my wife and five-year old child to the house across the street so that we could get to the station in stages. When I made the second trip with my two-year old daughter in my arms, I saw that the house where I had taken my wife and child had collapsed in the meantime and was on fire. I had to get back to the shelter under the most trying conditions, and I fell to the ground several times. Unfortunately, I had to face the possibility that my wife and daughter were buried under the debris. We tried a rescue operation with several men that failed. Upon my return to the shelter I found great unrest because the people were suffering from the strong smoke and unbearable heat. The suitcases were lying in the halls and barred the exit and the wall breakthroughs. It took great effort to calm the people and to move the luggage to the sides.

A soldier in the shelter tried in the meantime to reach the canal that led past about 75 meters from us. The path led past three burning fivestory houses and through an enormous bomb crater that must have been at least 15 meters across. Unfortunately, a large warehouse was burning on the other side. As soon as the attack was over, we started to lead women and children one by one to the canal. We were successful in this, even with the old people. The air-raid warden of the house Billstrasse 91, one political leader, and a soldier from our house distinguished themselves by unusual bravery. The rescue was only possible because we doused the children with water and wrapped their heads in wet towels. I left the shelter as the last man with my two-year old daughter and made sure that no one was left behind in the cellar (three air-raid shelters).

Arriving at the water, the rescued people stood in the water up to their hips and some up to their necks, regardless whether they were children or adults. The cloths around heads had to be wetted constantly to keep people from getting burned. A terrible fire storm and rain of sparks raged above the water, which made the stay there very difficult. A soldier swam across the canal and obtained a rowboat. With this he started a shuttle service and eventually brought everybody to a playground near the Green Bridge where they were safe.

At about 10:30 a.m., we finally reached Billerhuder Isle, with our eyes swollen shut. The blackened clothes, covered with soot and dirt, showed what hardships both children and adults went through during this difficult night.

August 1943

(Signed) Vathke

Excerpts from a letter by Louis Haupt, formerly of Boitzenweg 11, Hamburg, now living c/o Arthur Neumann, Elbestrasse 38, Aussig, Sudetengau, dated August 11, 1943

During the attack of July 27-28, 1943, I was completely bombed out and lost my wife and seven of my children. The following tells how I managed to save myself and my six-year old boy:

The tenants of Boitzenweg 11, as well as my family and I, were all in the air-raid shelter. I went to look if any fire bombs had been thrown. When I got outside, the whole house was burning already. Since I had three suitcases with linen and clothing in my private cellar, my wife told me: "Go quickly and get the suitcases." I ran back and my son Gerhard ran after me. My daughter Lieselotte was five steps behind and called, "Papa, papa."

At this moment, a bomb hit in front of the air-raid shelter. My son and I were sealed into our cellar and could not get back. My daughter was separated from us. I broke my way out of the cellar and tried to look for my family, but I could not get anywhere, since everything was on fire. So I went through the back over a fence, broke down the door of the neighbors' chicken house, and climbed across the next fence onto Grevenweg. I had just arrived in the cellar and asked for a drink of water, when here too a bomb dropped.

I then fled with my boy through fire, always up and down the streets, over Grevenweg to Hammerlandstrasse-Burgstrasse and finally arrived at the Federal Health Insurance Office. This building was kept standing by the strenuous efforts of the self protection service.

At ten o'clock the next morning, I returned to my apartment, but I could do nothing there. Then I went to the public bunker at Hammerdeich and asked for my family, but in vain.

At 1 p.m., I started with my boy to reach my land at Billerhuder Isle, Parcel 578. The land had received a direct hit, and my belongings and my house, which I had built according to specifications, 18-1/2 square meters in size, had vanished. I then went with my son to Mittlerer Landweg, Moorfleth, to the Restaurant Garber where I met acquaintances. We stayed the night in a tent. On July 29, I went to the site once more, but could not get to it yet. At night we slept again in a tent at Garber's.

Here we experienced the third raid on Hamburg! On Friday, at noon, we went with horse and wagon to Bergedorf, from there to Lüneburg-Uelzen, and from Uelzen by automobile to Hannover. Here I fetched my daughter and together we went to Bamberg. Here we spent the night and then on to Aussig/Sudetengau, where the parent: of my daughter's fiance live. We have been here since August 3.

Today, August 11, my son arrived from the service. He explained that on Sunday he met with another soldier, Mr. Marzi, at Boitzenweg 11. Both of them, together with a civil defense official, dug out the air-raid shelter and went into the cellar with flares. Here all tenants were piled in a heap, charred and unrecognizable. My son thought us all lost; he went to seek out his sister Ursula and from her he learned that his little brother and I were saved.

I was a driver of an elevated train in Hamburg for 17-1/2 years. Since I suffered such terrible losses, I asked to be allowed to stay here till the end of the war, so I can be with my remaining children. I found a job here with the streetcar company.

I am completely finished and desperate. These losses are too much for me to bear.

Schwedenstrasse 69 Misdrey, August 6, 1943

Dear Mr. Schneer:

I hope and pray that this letter will find you alive and well. Little did we think that our being together in the office of the Building Association on July 27 should be for the last time.

It certainly was a horrible night, July 27-28, 1943. Shortly before 10 p.m., the alarm sounded. Since nothing was heard until 12:45, we were already waiting for the all-clear. But then the attack came. Fire and high explosive bombs began to rain down in a constant stream. The lights in the cellar went out. Stones flew against the cellar window. At first we stayed in our shelter, wetted some towels and held these in front of nose and mouth since we could notice smoke. Then we heard knocks from No. 36 asking us to break down the wall since they had gas fumes. After we broke down the wall, the people from No. 36 came into our shelter. The room was now too small, so we had to get air. I went out into the hall and saw that all hell had broken loose. In the yard and on the street raged a hurricane of sparks. It was unthinkable to go outside. All houses of the neighboring streets and cross streets were on fire from the ground to the roof. Back to the cellar and try to get out through No. 40! But it was the same there. A prolonged stay in the shelter could only be catastrophic. I then decided that we had to leave the shelter. We wetted woolen blankets, put them over our heads, and ran through the sea of flames to an open square behind our houses. Here, too, there was a swarm of sparks, so that a prolonged stay would have meant burning to death. So we went farther toward the athletic field at Louisenweg.

It was a path through purgatory. If my wife and I had not had the woolen blankets, we would not have made it. At the athletic field, we collapsed and stayed on the ground. We had inhaled too much smoke. After a while I noticed that I was burning. I said to my wife that we had to get up and go on, because I was on fire. When I got up, my blanket tore off and rolling up like a burning cylinder blew away. My hat was torn off my head. Staggering and in a fog, I started walking to find a safer place, and in my crazy state I saw her walking in front of me. In reality she had been too weak to move and was still lying at the same spot. I changed my spot once more as I noticed that the bushes behind me were beginning to burn.

I would have never thought it possible to sleep on the bare cobble stones. But I learned it during that night. Every once in a while I tried to open my eyes as well as I could--they were swollen shut and encrusted from the strong smoke and burned--and I could still see the gables of the burning house. It was a horrible sight to see all the houses burning all around the athletic field. Toward 7 a.m., things began to be a bit livelier on the streets. You could hear autos honk in the distance and commands being shouted: "Everyone who can walk should go to Hammerpark, since there will be military transports from there."

I had lost my wife; I did not know if she was still alive. I searched the athletic field, and looked at the dead and sleeping people. Mr. Schneer, it was terrible. Not able to stand on my legs and with my eyesight almost gone, I could only manage to keep my eyes open for a very short period at a time. Under these conditions, I searched for my wife. After I had searched the field twice, the older son of Mrs. Stempel called to me. He told me that my wife was alive and that she was looking for me. She should be at the sand box. "No," I said, "I've already looked there." When I could not find her on the field, I supposed that she had gone to the collection site, so I went there too. Tired to death, I dragged myself past many bodies--many completely naked, others charred--and over the debris of collapsed houses to Hammerpark. The first thing was to find a place to sit and sleep, sleep, sleep. I was no longer conscious of what went on around me. I must have sat like this for two hours, when someone said to me: "Where is Dora?" With great difficulty I rose from my spot. I went along the row of waiting people and finally found my wife. We could just cry out, nothing else. We were happy to have found each other again, even if my wife had burns on her legs and I on my left hand. All our belongings I had to throw away my briefcase at the athletic field and my are lost. wife her handbag. I do not know who from our house escaped death in the flames; I do not think many escaped.

When toward 9 o'clock the English started dropping bombs and we could hear machine gun fire, we started marching despite our injuries and landed first in Jenfeld. There, toward 3 p.m., we received the first nourishment and first aid for our injuries. From there we went on to Rahlstedt. Here we were quartered for the night. Since we could not stay in Rahlstedt, we were taken to Lübeck by mass transport and from there on to Stettin. We did not know where to go, so we decided to let fate take us in hand. In Stettin we stayed two days with my brother-in-law and then on Sunday we went to Misdrey a/Wollin to my sister. Here we wanted to heal our wounds first and then see if we could get back to Hamburg. We have no news of any kind from our children, even though we sent them telegrams, postcards, and letters. I believe there is a great delay in mail delivery from Hamburg and vicinity.

My wife wrote to Mrs. Petersen in Netzka, Brandenburg, from Stettin and told her about our fate and asked about her husband. Today we had a letter from Mrs. Petersen. She has no news from her husband and is very unhappy.
When we ran through the sea of flames, no one could help anyone else. The heat was too great and the hurricane of sparks too terrible. We ran and ran and called "come along." It was impossible to stop.

Mr. Schneer, I would like to know who from our house is still alive. We met Mr. Trehder on the Autobahn and Mr. Döpper in Rahlstedt. Otherwise we have not met any people we know except Stempel. It is terrible to be cut off from Hamburg and from one's children and relatives.

What was left standing in Hamm, Hammerbrook, and Rothenburgsort? I could not see much that morning, but what I did see looked like a picture of total destruction.

Please write to me again soon and with best regards to you and your wife.

(Signed) B. Hausenberg and Wife

REPORT OF GREENGROCER JOHANN BURMEISTER, FORMERLY LIVING AT WENDENSTRASSE 297, HAMBURG 26, REGARDING THE ATTACK OF JULY 27-28, 1943 (TAKEN AS OFFICIAL MINUTES)

Shortly after the start of the attack, two air mines dropped near our house, one onto the factory of Bossen & Burghardt and one onto the factory of Fr. Karnbach. Our house was also damaged. In addition, fire bombs were falling, and our house caught fire. After a short time, there was danger of the staircase and the skylight collapsing.

I persuaded my wife, my 17-year old son, and my 16-year old daughter to flee with me and as a start we escaped through the fire to the school across the street. My wife, unsure on her feet because of obesity, fell over a dead man at the school entrance.

Since the air-raid shelter was overcrowded, we went into the gas sluice. The intensity of the attack and the heat increased to such an extent that I feared that my family and I would die at the school. We decided to flee again and seek shelter somewhere outside. After we doused ourselves with water, we ran, stumbling over dead bodies, to the wharf at Grevenweg, and there into the comfort station. Without the energetic help of my son, I would not have been able to get my wife there.

At the wharf, more and more people streamed in from all sides. The comfort station became overcrowded and the door started to burn. Also many citizens started burning and jumped into the canal. Horrible scenes took place at the wharf. People burned to death with horrible suffering, some became insane, many dead bodies were all around us, and I became convinced that we too would perish here. I crouched with my family behind a large stack of roofing material. Here we lost our daughter. Later on it transpired that my daughter had jumped into the canal, almost drowned, and was saved by a First Lieutenant of the Army and returned to us early next morning.

Please spare me from having to describe further details.

Hamburg, August 9, 1943

EYEWITNESS REPORT

Mr. Verleih, residing at Mittelstrasse 114, tells about his adventures during the air attack of July 27-28, 1943.

We went to the air-raid shelter at 11:50 p.m. Shortly thereafter, a rain of high explosive bombs came down. When we had been in the shelter about a half hour, I looked out and crawled to the entrance hall. Our house was not on fire, but all the neighboring houses were. A little later, our house caught fire too.

High explosive bombs kept dropping. Altogether bombs were dropped for three quarters of an hour. A direct hit caused the door of the emergency exit to fly into the shelter. The protective beams above the emergency exit were burning. Also the house now burned on all floors, and burning pieces were falling into the stairwell. I opened the door to the street. Sheets of fire raced through the street toward Landwehr. I now urged everyone present to leave the air-raid shelter. The people did not want to go out into the fire storm; I had to put some of them out. Seven people remained in the house and went farther down into a lower baking room. What happened to them we have not been able to find out yet.

On the street our passage was hindered by flames that leaped halfway across the width of the street. Now all houses were burning, and you could feel the rays of the heat. Step by step, we advanced against the storm in the direction of Hammerpark. With me, 17 other people struggled toward Hammerpark. Bombs were still falling. In Hammerpark, we hid under busnes and were protected somewhat against the fire storm this way. After about 30 minutes I went back to our house. The heat was so terrific that I could not get close to the house. After another hour, the four-story house collapsed. There was still a strong fire storm raging, but it was not as hot. I, together with other tenants. then wandered on foot across the Autobahn to Braak, where we arrived as the first refugees and were received most kindly.

Hamburg, November 1, 1943

An acquaintance of mine, Mr. Schirmer, residing at Hamburgerstrasse 95, Hamburg-Barmbeck, relates his adventures during the attack in the night of July 29-30, 1943.

I was alone in my house at Hamburgerstrasse 95. At 12:15 a.m., I saw that Hamburgerstrasse was lighted bright as daylight. The whole street was covered with fire bombs that were spread about five meters apart. A quarter of an hour later, the houses on the opposite side of Hamburgerstrasse were on fire from the ground floor to the roof. To the left, some houses were also burning. In between there were some houses that were not burning at all. The flames from the burning houses leapt to the middle of the street. The show windows of the Karstadt Department Store were on fire.

At 1:05 a.m., I felt a strong shock, so that I slid along the floor in the air-raid shelter. The shock originated from the first high explosive bomb that hit Karstadt and landed in the air shaft. Right afterward the Karstadt building began to burn strongly. At around 1:10, I found myself on the stairs, when the Karstadt store was hit by the second bomb.

At 1:20, when I wanted to go into the street, people came toward me, about 30 persons, among them a wounded member of the security police. These people came from the main shelter of Karstadt. At this time, a part of the Karstadt building in Rönnhaidstrasse collapsed; so this means about 15 to 20 minutes after the first hit. I do not know if the collapse was occasioned by a new bomb, since I did not hear another bomb.

At 1:40 a.m. the people continued on. Soon after a new group of people came out of the Karstadt building. They did not want to go on, but to remain in my air-raid shelter. At this time, I noticed that Hamburgerstrasse toward the Mundsburg was totally dark, and you could not see very far.

At about 1:45 the front of the Karstadt building in Hamburgerstrasse collapsed. I did not hear another bomb at this time either. About ten minutes later, I wanted to go to the air-raid shelter of House No. 99 and saw that the Karstadt building in the Deseniss Strasse had collapsed. This collapse blocked the entrance to the air-raid shelter under the Karstadt building, so that people could not get out of the shelter any longer. I went back to my house and saw that the houses Deseniss Strasse 3 and 5, belonging to my block, were on fire. I got several men from Hamburgerstrasse 97 and went with them to the shelter in No. 95. Altogether, there were about 35 people there. Then I went to House No. 95 upstairs (to the second floor). The house did not burn, but I could see that the houses behind us in Heitmannstrasse were all in flames. Around 2:45 a.m., the neighboring house No. 97 was on fire on the second floor and the roof. This, however, could not be seen from the street at first.

At about 3:15, we decided to leave the house because the fire was coming closer from both sides and we realized that we could not remain there. I brought the last water down. We wetted the clothing of all persons, and wrapped wet blankets and handkerchiefs around our heads. At 3:30 we left the house, which was not yet on fire. We ran along beside the debris of the burning Karstadt building toward the Wagnerstrasse Railroad Station. It was very hot on the street, and a strong rain of sparks whirled toward us. The storm was blowing toward Hamburgerstrasse from the direction of Mundburg. It was difficult to proceed against the storm. From the Tödt Clothing Store, which was completely in flames, a tremendous heat wave rushed toward us. People threw away their suitcases and pocket books in order to save their lives. On the short trip to Wagnerstrasse Railroad Station, about six or seven minutes, the sopping wet handkerchiefs had become bone dry. At Wagnerstrasse Railroad Station it was considerably cooler and quite bearable.

At about 4:30 a.m., I tried to return to my house. The Tödt Clothing Store was completely gutted, but was still emitting great heat. The heaps of debris of Karstadt were completely burned out. House No. 95 was partially burned out, the other part apparently had not been really caught by the fire. On the other hand, Houses No. 97 and 99 were completely burned out. The houses must have been gutted in a period of one to one and a quarter hours.

At around 7:30 a.m., a woman came to the Wagnerstrasse Railroad Station asking for help for her parents who were still in the shelter of the Karstadt building. By that time, the fire storm was mostly over. With several other men, I tried from Rönnhaidstrasse to get to the personnel bunker of the Karstadt building from the north. The entrance door in Rönnhaidstrasse was on fire. We climbed through the entrance door of the bunker and ran down the stairs. In the stairwell, it was very hot and the air was bad. One could hardly breathe. On the first stair landing old men and women were lying on top of each other. They all moaned, had burn injuries, and were completely apathetic. With the greatest effort I persuaded a few of them to climb up the stairs. Since this method took too long, we drove the people upstairs by beating them and we rekindled their will to live by telling them that upstairs ambulances were waiting to take them away. We got about 26 people out in this manner. I then went into the cellar where it was very hot. As I found out later, coke was burning in the cellar. I also noted that the big iron safety doors leading to the large shelter were red hot.

We searched all the rooms in the personnel shelter. I went up the stairs in the Desenissstrasse but I could not get out from here. I then went back through the cellar to Rönnhaidstrasse and left the bunker this way.

At about 8:15, we were back at the Wagnerstrasse Railroad Station. At that time two trucks with pioneers arrived to bring us water. Then all the wounded were transported with these trucks.

> (Signed) Schliemann Lt. Colonel of the Fire Police

Civil Defense Police Warden Haht Animal Rescue Station Farmsen

Hamburg-Farmsen, August 1943

REPORT ON THE EVENTS AT THE RACE TRACK FARMSEN DURING AND AFTER THE MAJOR AIR ATTACK DURING THE NIGHT OF JULY 27-28, 1943

A short time after the alarm sounded, the men of the Civil Defense Veterinary Service, with the exception of three assigned elsewhere, were gathered in the shelter of the race track clubroom. Everything was quiet during the first half hour, but then all hell broke loose. The electricity was destroyed by a high explosive bomb. Severe bomb hits could be noted in the neighborhood. In between you could hear the raging flak fire of the batteries and machine gun fire from the enemy planes.

An occasional survey outside could not uncover any other damages besides the destroyed electrical lines. It was between 12:30 and 12:40 a.m. that we noted fire burning brightly in Stables No. 3 and No. 5.

First all men were used to help the stable watches evacuate the horses from the threatened stables Nos. 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 1, and 2. There were approximately 230 horses, which were now driven onto the race course, including the two horses taken over on July 26 from Rescue Station III. The animals, made wild by the fire, were racing around the race course, neighing all the time, and they constantly tried to get back to the burning stables. Two-thirds of the men were necessary to keep the horses from breaking out of the race course. This was finally accomplished by using wagons, carts, and beams to block the entrances. After this was accomplished, most of the manpower was available to protect Stables No. 8, 9, 10, 11, 12, 13, and 14, which were not burning yet. By continuous dousing of the roofs and of the connecting passage between Stables 7 and 8 for several hours, the building was saved.

In the meantime, the apartment on the first floor of the clubroom and the Stables No. 1 and 2 had become a solid sea of flames. It was only due to the fortunate fact that the wind shifted toward the east that Stables 14 and 15 were not set afire by the burning pieces of wood, which were driven through the air by the wind. During the whole time, more than 200 horses neighed and charged about the race course, galloped like mad, and tried again and again to break out.

After the upper story of the clubroom and Stables 1 and 2 were burned out and the spread of fire was no longer a danger, the men were reassigned to save what they could from the lower part of the clubroom. Part of the men formed a chain from the pond to the house to open a way from the north by dousing. The rest of the men fetched clothing, bedding, blankets, and boxes with groceries out of the endangered rooms and brought them outside. Everyone worked until a collapsing chimney, a heavy safe, and a large washtub fell through the ceiling, and the lower rooms were ignited within a very short time. Much equipment, all wardrobes, all files, and many private belongings burned. From the lodgings in Stable No. 5, nothing could be saved. In Stable No. 5, the following were destroyed: two single axle trailers with equipment, 10 civil defense slaughtering outfits, two veterinary bags, two service bicycles, 21 other bicycles owned by the men, and all heating supplies. On July 29, 20 beds with bedding and many clothing articles that were stored there before the attack were saved, and temporary quarters were furnished with this equipment in the betting hall of Grandstand I.

In the night of the attack about 200 horses were saved, 26 horses burned to death on the race course, and two horses had to be killed.

On the farm across from the race course, ten horses were burned to death.

During the major attack on July 29-30, 1943, in Stable 35, 12 horses burned to death.

After the attack, the following were disposed of: 90 horse cadavers, three cattle cadavers, 235 pig cadavers, and 50 cadavers of small animals.

(Signed) Haht Warden of the Civil Defense Police Unit Commander Animal Warden of the Civil Defense Police LutherAnimal Rescue Station BillstedtHamburg, August, 1943

REPORT ABOUT OPERATIONS AT ANIMAL RESCUE STATION V (BILLSTEDT)

During the attack night of Tuesday to Wednesday, July 27-28, 1943, Billstedt was hit. From my observation post, I could ascertain that large farm houses were hit in Oejendorf also. Since there are lots of cattle at Oejendorf, I immediately went there by bicycle to get a first hand picture of the situation and to give assistance. I immediately took part in rescue operations. Luckily all large animals (about 200 head) that were still chained were saved. Only the horses of Farmer Schomaker were already asphyxiated by the smoke. All small animals were saved. During the rescue operations, the French prisoners of war distinguished themselves especially.

After the greatest danger was past I returned to Rescue Station V to get the people of my unit, so that the injured and phosphorus-burned animals could be treated expertly. In the meantime, orders had arrived from the sector that several dead animals had to be picked up and brought to the disposal station. During this task, we also removed phosphorus splashes from living horses, treated them, and brought them to a refuge. These were the five horses of the farm Hähn-Hahn. On the next day, we picked up another four masterless horses, which were brought to pasture for the time being and then given to Farmer Rottgard in Oejendorf to help with the harvest. All horses were later on returned to their owners. During this time, horses and cattle from the villages Ochsenwärder, Kirchwärder, Reitbrook, and Curslack were treated by us.

Our main task--because other manpower was not available--consisted of digging out and removing horses and cattle that had died in Hamburg. We recovered about five to 22 horses daily and these were turned over to the disposal station or buried. This task was most difficult, since most of the horses were buried under the debris, the streets were not passable, and we had to get the animals, which after all weigh 1,500 to 2,000 lbs each, out of the debris without any auxiliary means. In addition, some of the horses had already begun to decompose. They had to be dissected and loaded in parts, and the odor of decomposition was sickening.

To date, we have recovered 200 large animals. In this way, Animal Rescue Station V, which was also assigned to assist in Sector IV, played an important part in preventing the outbreak of an epidemic. Our work started at 4:30 a.m. and ceased only at the onset of darkness.

In this difficult period, the seventh Executive Order of the Civil Defense Law regarding veterinary kits proved to be especially valuable. The Commandant entrusted me with the implementation of this measure, and I equipped 709 animal handlers with veterinary kits. With these, the animal handlers were able to treat their animals on an emergency basis, especially since there was no possibility to call help by telephone.

> (Signed) Fritz Luther Animal Warden of the Civil Defense Police

Stellingen, August 30, 1943

Carl Hagenbeck

REPORT

In the time period from July 25 to August 3, 1943, the zoo was attacked only on July 25. The alarm was sounded at 12:32 a.m. Six to seven minutes later, all 36 men of the fire watch had manned their posts and were asked by telephone if all was in order, which was affirmed.

Fifteen to 20 minutes later, we could hear the detonation of heavy high explosive bombs in the vicinity. At about 1 a.m., the whole zoo, especially the parts that had larger buildings, was covered with an enormous number of stick fire bombs. All fire bombs falling in the buildings were extinguished by the fire watches, with sand and with small fire-fighting equipment. Shortly thereafter, the second series of bombs fell and among it was a large number of phosphorus bombs. Also, 16 high explosive bombs and four air mines fell on the territory of the zoo, so that the fire watches had to interrupt their fire-fighting activities to seek shelter. When this bombing was over, every fire watch had plenty of work and everybody was astonished that no help whatsoever arrived. We could not ask for help since the telephone was destroyed early in the attack. Since large and small fires had developed in various buildings, everyone had his hands full and could not even think of helping someplace else.

As usual, right after the attack the C-hoses available in the buildings were immediately connected to the fire hydrants, but since the water line broke down, these were of no use and the fire watches had to rely on tubs and buckets of water that had been prepared beforehand. They were successful in extinguishing several fires, such as in the elephant house, the kangeroo house, the giraffe house, and Villa H.H. The fire engine that was put into action at the main building worked very well at first and you could clearly see progress in the fire fighting. Unfortunately, the motor ceased working a while later and it took some time to make it work again.

Completely burned to the ground or else destroyed by direct hits of high explosive bombs were: the main building, both restaurants, the cattle gallery, the bird sanctuary, the inspector's house, the zebra stable, the deer park office, administration buildings (Krohns Hof and Krögers Hof), the baboon rocks, the monkey bathhouse, the rhesus monkey rocks, and the aquarium. The remaining several buildings were destroyed by air mines and partial fires to such an extent, that while they can be repaired temporarily they cannot be maintained in the long run. Four of my employees lost their lives while trying to save the zoo. Five restaurant employees were killed in the zebra house where they had fled from the restaurant. During the night I lost around 100 animals, mostly beasts of prey.

The most destructive results, aside from the fires, were achieved by the air mines. One was a direct hit on the boxing run. Among others, the walls between the outside cages of the beasts of prey and the inner cages were torn apart and the floor was partly demolished. The fact was that the beasts of prey could not be left in the fireproof outer cages because of the destruction of the sliding doors and the walls. The Siberian tigers that were in the outside cages crawled under the floor where they were later shot. With the exception of two jaguars that were in the outer cages and were shot, all other predators burned to death in the predator house. Three wagons of beasts of prey were saved, but on the second day, when they were on the way to be transported from Hamburg to Vienna, they fell victims to the second attack at the Hamburg Railroad Station.

Bisons, red buffalos, and other horned cattle were locked in their houses. The bisons and the old buffalo cow were buried in the house. The young buffalo cow was shot the next morning. The bull escaped through the destroyed fence of the zoo and got on to Kaiser Friedrich Strasse where a police sergeant shot him.

The elephants were freed of the front chains at the beginning of the attack, and the back chains could be loosed with a hand motion by the keeper. After the fire, which attacked the hay on the floor, could not be contained any longer, the animals were led to the undamaged outside grotto. This evacuation went according to plan and very calmly, even though there was heavy gunfire outside. All the elephants gathered around the leader cows and crowded close together. They were not at all panicky as would have been expected during this chaos.

Our most remarkable experience was that all animals, whether they were injured or not, were completely calm and did not seem to have the urge to escape as long as they were in their accustomed quarters, even when the fencing was completely destroyed. For instance, a malicious wild stallion that attached himself to a freed circus horse, was led by the latter to a paddock where he began to play with the circus horse, even though he had lost an eye. Wild cattle and yaks, usually very aggressive, had bomb splinters in their intestines that were not noticed immediately. Both animals let themselves be led very calmly to the place where one wanted them. Eagles and other birds of prey stayed in their cages even though they were destroyed.

Because there was not one box, board, or piece of equipment left after the total damage, the repair of the remaining grottos and cages and the catching of animals running around loose was impossible for the first days and weeks.

It should be borne in mind also that a large part of the personnel who lived outside the zoo had personal total damage too, and many fled with their families.

All measures put in effect for the fighting of fires, as for instance sand piles, boxes of sand, about 800 bags of sand, 60 barrels with 200 liters of water each, about 180 buckets of water, and the civil defense hand fire extinguishers proved to be especially helpful, particularly since the water line broke down. The bags filled with sand were most helpful; we cannot have too many of them. Since in our facility, the storing of these bags is especially difficult, as they are chewed on by rats and mice, the supply has to be constantly replenished. We found that storage on benches was most effective.

For the predator houses, it is best to reinforce the wooden outer cages, including the doors to the runs, with iron mesh. Experience has shown that these withstand the air pressure from air mines and high explosive bombs, as well as the fire, as long as the heat developed by the fire is not too intense.

Our principle of open outside grottos proved to be most practical in this catastrophe. While wooden and wire fences and enclosures were thrown around, the moats kept intact. Without the grottos, a much greater part of the animals would have gotten outside the zoo.

Hay reserves in animal houses should not exceed a one day's supply. The supplies should be kept on meadows, or in houses that are expendable. Catch apparatus and boxes as well as repair material should also be stored as far away from the houses as possible in various places. All of these things were distributed in six different places in my zoo; however, they were always close to larger houses or small sheds that were easily ignited.

Experience showed that every fire watch is on his own and must make his own decisions. All my people discharged their tasks within their capacity to the fullest extent and with great energy.

(Signed) Kolzmann

Hamburg, in the year 1943

IMPRESSIONS OF THE TIME OF THE MAJOR AIR ATTACKS JULY-AUGUST 1943 By Gretl Büttner, Civil Defense Reporter in the Local CD Office

The attacks roared across Hamburg. There was hardly a pause. Again and again, new approaching flights were reported. Every hour was filled with worry: "The next attack! The next attack!" Even though alerts between air attacks were soon rescinded, the fact that they were given in the first place was enough. All forces were performing at such a pitch that the thought of sleep never entered anyone's mind. Forty-eight hours would pass till one laid down to rest up, but after an hour one got up again. Thoughts worked feverishly. There was never any rest.

During the first night of attack, many of us had already lost our belongings. With every new attack, our comrades lost home and security. The duty station at the demolished City Hall became our "Home." There we worked, ate, slept, when possible; there you were not alone, but bore the hard fate with many others and bore it with patience. The feeling for the losses one suffered did not come till much later. At the time, the brain was filled with so many other thoughts. At the time, the world seemed to be standing still. Everything revolved around the one important fact: life or death. All who lived through the horrors of July-August 1943 in Hamburg have lived through a version of what one might call the "end of the world." Slowly and hard to comprehend, out of the bomb-torn nights; out of the burning, glowing, smouldering ruins; out of the charred bodies of the fallen and the cries of pain of the wounded; the face of heli could be seen, and the end, even one's own, was ever-present.

We all felt close to one another during that time. Sometimes we would take each other's hand while we stared with burning eyes into the flames surrounding us. We could not take it all in just then, and the proximity of the others was a help and provided a bit of confidence.

We could not do anything against what was happening to us. We did not think that we would all of a sudden be poor and without a home. But we suffered that this city that we loved was being destroyed, that thousands of people were dying, and that we could not stem this terrible rolling fate. I am sure a soldier from the front would have seen everything in a different light. He was acquainted with the things that were new to us, the things that our untiring women and girls could not know. So it is all the more admirable how they stayed at their posts and worked, worked, worked. Their hands were shaking when they sat for hours at the switchboard or at the typewriter, especially when a new attack rolled over the city and new hits shook the bunker. But we knew that with the loss of much of the labor force, we had to double our own efforts.

* * * * *

During the night of July 25, 1943, when the first terror raid over Hamburg took place, I was at the Anschar Hospital. About a half hour after the start of the alarm, due to high explosive bombs falling nearby, doors and windows were torn from their hinges, and in an unbelievably short time everything around us was in flames. We were afraid at the time that the hospital too would start to burn. Since telephone connections were severed very early in the attack, I asked for a rain cape from one of the nurses (since there was one of those cloudbursts that often seem to develop where there are widespread conflagrations) and immediately upon the all-clear, I made my way to the local civil defense duty station, originally with the thought to get help there to prevent the hospital from catching fire. For this trip to the bunker, which ordinarily took about 10 minutes, I needed almost an hour. Everywhere the streets were blocked by burning debris. There was a conflagration at Gänsemarkt. The Hohe Bleiche, the nearest way to the duty station, was a sea of flames. Passage was impossible, since I had neither gas mask nor steel helmet, because of the prevailing heat, the dense shower of sparks, and the constantly falling glowing stones and wood pieces. I found a cloth somewhere that I drenched in water and wrapped around my head. Then I tried to reach the bunker by way of Grosse Bleiche or Neuen Wall, but it was impossible.

I now no longer sought the way to the duty station with the intention of getting help for the hospital. There there was no hope was evident to me from the completely devastated inner city. I began to fear for my comrades, who, according to the view I had, must be enclosed in the fires. Therefore, I had to make a try at all costs to reach them. Finally, I made my way through Post Strasse to Adolf Hitler Platz and tried to reach my destination over Altenwall-Rödingsmarkt. The first part of Altenwall was passable, but then I ran into difficulties. The biggest hindrance was not the heat, which was still bearable, but the blockage of the streets by burning debris. At Altenwall, I met a man (incidentally the only human being that I met on my journey) whom I asked if I could reach the City Hall this way. You could see absolutely nothing. One just stumbled in a dense veil of smoke and sparks. This man told me that the City Hall was on fire. He could not advise me of a path to get there. I went on, and until Rödingsmarkt everything went fine, but there I got such a completely changed picture that I had to think about where I really was. Debris, nothing but debris. Constantly I stumbled over the power lines hanging down. Smoke and sparks nearly blinded me. My feet pained from

the constant stumbling and falling, and the wooden soles of my shoes were long gone. Besides, it got hotter all the time. Then finally, I reached the vicinity of City Hall. Here, too, everything was in flames. Flames licked at the City Hall Tower--it looked as if a huge neon sign had been put on there. All the surrounding houses burned. All you could see was fire, no matter where you looked. I remember that I stayed at the same spot for several minutes to try and decide how I could get any farther. Houses collapsed, and smouldering beams rattled past. Heat and reflection from the fire made me dizzy. I could not get back, because that path was blocked now too. So I went on, this time literally through breathtaking heat. I had to use the entrance to the Neuwall side, which at that time was still clear, but was blocked later on. This entrance was within the fire clouds that the wind drove over from the burning houses across the street and it was also on fire. Then I had it made. A few minutes later, when I arrived, completely blackened by soot, at the duty station, General von Heimburg announced that the bunker could not be left at the present time since all exits were blocked. We were enclosed in the conflagration. Everywhere in the halls of the bunker, refugees crouched with their bundles, and mothers rocked children on their laps. Many slept, mouths wide open from exhaustion. The temperature in the duty station rose consistently.

Toward morning, women and girls first and later on men too left the bunker. Across the burning Kaiser Wilhelm Strasse to Karl Muck Platz, from there down Gorch Fock Wall, across Stephansplatz and Moorweide to headquarters. For some of the girls, it was a difficult journey. Their thin shoes tore and hung in shreds, and the hot, sharp stones were painful. One fell again and again and had to be helped up. Lieutenant Schneider and Lieutenant Krause, who led the procession, had their hands full to lead their charges to safety. I separated from them at Karl Muck Platz to return to the hospital and get my things. There I soon learned that my parents' home had burned down to the foundation.

* * * * *

The night of the second major attack arrived. The warning station reported the approaching flight of large units, and new flights were approaching all the time. With the horror of the first attack still in our minds, we were prepared for a lot, but not for what really took place. During that night, tens of thousands of people lost their lives. Conflagrations of unbelievable size developed in a very short time. Fire storms of hurricane proportions raced through the affected parts of the city. Reports that here and there people were buried under debris or were trapped by the hundreds within the conflagrations piled up. Despite all efforts on the part of the responsible leadership to lead endangered people out of the sea of flames in time, death had a horrible harvest. For many months to come bodies of the victims or what is left of them, will be recovered.

* * * * *

When, during the attack, you left the bunker by the back exit and stood on the small steps above the canal, the most horrible impressions presented themselves. The explosions of the bombs were roaring. Everywhere the night was changed to day by the fires. On the other side of the canal, beams crackled and broke and fell into the reflecting water. Like a picture of hell, the coke that had been stored in the houses across from us glowed for weeks afterwards. The whole town, as far as the eye could see, was on fire. Huge mushrooms of smoke rose higher and higher towards the sky, magically illuminated by the fire that spread out like a blanket. During the last night of the attack, the raging of a thunderstorm blended with the roar of the bombs, lightning with the shine of the fire. And amid the destruction, there was the pealing of a church bell; that was the most moving of all.

Strange were the days that followed these nights. It never was daylight due to the dark smoke. An eery twilight persisted, depressing the wandering people even more. Those faces! Grey, dead-tired, and still strained to the utmost. Inflamed eyes, scabby lips--even in the faces of little children there was something very old, not fear; something different, like boundless exhaustion.

* * * * *

During these difficult times, I was on the road in the car of the Chief of the Restitution Service, Lt. Colonel Dr. ing. Maack. During those trips through glowing streets, every nerve was strained. It was not always simple and it took all the driving skill and the steadfastness of Dr. Maack to get through all in one piece, where you could easily have gotten hopelessly stuck. In those days, a few heaps of debris did not matter. We passed over them, and Dr. Maack's car performed miracles. But sometimes, it just wouldn't go on, and we had to back up or turn around in a ridiculously limited space, and sometimes the path behind us was blocked by failing debris. Wherever it was necessary, we stopped. One time we met some mixed-up people who had fled into a streetcar. To the right and to the left, the rows of houses were burning, and they thought they would be safest in the middle of the street. Dr. Maack got them out, rescued them from the terrible force of the heat rays, reassured them, and finally put them into an automobile that was fortunately parked nearby and that someone could drive.

Dr. Maack was everywhere. And everywhere we ran into soot-covered men in torn, burned uniforms. Firm as a rock they attended to their tasks, even though you could see their exhaustion on their faces. But who thought of their own comfort, when everything was in the balance for Hamburg. From the many eyewitness reports received since then, it can be seen what the men of the police, police reserves, and civil defense did in those days and how many thousands of people owe their lives to their timely rescue work. Facts show what they have accomplished.

Wherever Dr. Maack appeared, always with a few fitting words, the men bucked up. It was the same picture everywhere. He never lost his accustomed calm and saved every situaticn. In the burning quarters of the technical emergency service, vehicles had to be saved, among them a caterpillar tractor that bore the name "The Wild Ass" and not for nothing. Amid heat, smoke and sparks, the driver tried to bring this "ass," which was bucking in all directions, to safety. But this was only accomplished when Dr. Maack appeared as a pilot.

Unforgettable also is the following incident: Dr. Maack had the intention--to bolster the fire protection police after a severe attack-to drive down the exact fire line. So we got into the car. I had a map of Hamburg on my knee. Dr. Maack called out the streets and I marked our path on the map. We always kept to the right side of the fire and went as close as was possible, sometimes into the fire; then we had to find the way back. The windows of the car were tightly shut so that flying sparks and heat rays would not endanger us. We were on the way for two hours, drove by columns of refugees, saw one street after another go up in flames, and house after house devastated. It had become morning long since, but everywhere there was still darkness in the burning parts of the city. Somewhere in Wandsbek, the car finally gave out for the first time. You could hardly see your hand in front of your face, the soot smeared the windows, and a large piece of wall had gotten under the front wheel. Despite all our efforts, pushing and shoving, we could not dislodge it. If Dr. Maack had had a strong man instead of a girl to accompany him, things would have been simpler. We tried to pull the car with all our strength to a relatively safe position and continued our journey on foot. The precious map I had put in the jacket of my uniform to protect it from the constant rain of sparks. Dr. Maack carried our steel helmets, gas masks, and everything else we had with us. Where could we find a vehicle now that would take us back to the duty station? Finally we came upon a civil defense station and after a lot of discussion obtained two bicycles. We continued on the bicycles, always worried about a flat tire, over debris and low hanging wires and underneath burning buildings. Everything went along pretty well until we arrived at a destroyed bridge. The bicycles had to be abandoned, a civil defense policeman was ordered to

return them, and then we climbed down the embankment where the bridge led across originally and climbed up on the other side. We went quite a way on foot until Dr. Maack spied a car already fully occupied and driven by a political leader. The car was stopped, and after a brief explanation we squeezed in and then we went to the bunker, where Dr. Maack made his report to General von Heimburg immediately.

* * * * *

After the heavy raids on the districts of Rothenburgsort, Hammerbrook, Hohenfelde, Borgfelde, Hamm, and Eilbeck (fifth attack on July 27-28, 1943), Hamburg was faced for the first time with this situation: Corpses of people who had tried to escape the sea of flames and had left their shelters covered the streets by the hundreds. What was the cause of death has not been ascertained to this day. I saw the pictures the first time when we went to see two colleagues of mine, who had lived in Hammerbrook and died there, when after the strenuous tour of duty of the previous days and nights they had gone to their homes to get a good night's sleep. We never saw them again.

The heat of a summer noonday lay on the "dead city." With the smell of smoke was mixed the sweetish odor of putrefaction. Ruins everywhere, as far as the eye could see. Debris on the streets, collapsed house fronts, farflung stones on curbs, charred trees, and devastated gardens. Over it all a bright blue sky, little white clouds, and a bright sun. This made the picture of endless grief and terrible devastation even more noticeable. And always the sound of new buildings collapsing and the crackling of the ravenous fire still feeding could be heard.

Poor, beautiful, beloved, raped city! One was without words. Tears came to one's inflamed, burning eyes. This view was enough to cause a helpless, trembling horror. Hammerlandstrasse was full of people. They crouched on the steps of the slope, they sat leaning against trees, they lay on the pavement moaning for help. And dead bodies everywhere. Many had been pulled into grotesque positions by the intense heat. Slowly the look went from the crazy positions to the faces that did not look human anymore. Open mouths, bulging eyes--faces that showed the last unresolved spasm.

Through the streets of the dead, we went on to Hammerbrook. Soon we had to leave the car. The last part of the way we went through small, narrow debris-laden streets on foot. On a little open square near Boonsweg--I shall never forget the sight--there lay hundreds of men and women, soldiers in uniform, children, old people. Many had torn the clothes from their bodies shortly before their death. They were naked,

their bodies seemed unmarked, the faces snowed peaceful expressions, like in deep sleep. Other bodies could hardly be recognized; they were charred, torn to pieces, and had shattered skulls.

And we went amongst the wildly thrown together bodies to find our colleagues. We looked into all the faces, like into a mirror! A mirror of the unbelievable and the inconceivable. What was reflected in their eyes, what did the cramped fingers hold, what did the open lips cry?

There an old woman lay. Her face was peaceful, soft, and tired. Her white hair was gleaming. Her naked, emaciated body lay in the sun, which it did not feel anymore. And there, a mother, a child on each hand. They were all three lying on their faces. And there, a soldier, with charred stumps for legs. There a woman with a torn body, on whose bulging out intestines the flies were feeding. And there a child, clutching a bird cage in his hand. And there, detached from the body, a boy's foot with a black boot; a small, brown girl's hand with a blue ring . . .

The heart almost stops beating at such sights. Only the fear of fainting keeps you upright, the fear that one would sink--without consciousness--in the midst of this flood of bodies.

We went back, escaping only with great effort, back to living people, to voices, to moving eyes. I would have liked to run, fast and breathless, across the debris. Shivers came in the midst of the heat of the day. The odor of decay clung to us and to our clothes and also to our hearts.

In Dobbelersweg, in a small narrow street, a soldier stood in front of a collapsed house and blocked cellar, calling again and again in a strange high voice: "Mother, Ursula, Mother, Ursula." My companion went up to him and spoke to him. There could be no more life left here, why continue calling? But how can you say that to a person who stares at you with insane eyes? Can you rob him of the last tiny hope to which the human heart continues to cling? Can you talk of death which the other knows of already, but which for a little while he refuses to believe.

The soldier looked at us as if we were air. He came back on furlough today. He is looking for his young wife and his baby. They are in the basement and will hear him. He will dig them out for sure. He is strong, and his wife is waiting for him. Carefully we tried to persuade the man to follow us and drive with us to the city. But he did not even hear us. He turned away when we went on, and we heard him calling as we moved away: "Mother, Ursula!" On another street we saw a man looking among the stacked bodies. Tears coursed down his completely emotionless face. He had fled together with his wife from a shelter. They held each other by the hand. Then the woman fell, and in insane panic the husband had run on without looking back. Now he was looking for his dead wife and could not find her.

Children wandered around and called for their burned parents. Mothers sat at curbs and waited for their children to be brought to them. Many weeks after the terrible attacks they still wandered about, searching and hoping--and they were as if carved of stone.

Terrible was the fate of the dead, but even more terrible was the fate of the living. They would have liked to trade their lives for death. You could see it in their eyes, and, even if someday their eyes and hands and steps stop searching, their hearts never will.

Day after day and hour after hour, the trucks with their horrible freight covered with white chloride of lime, went to the cemeteries. Hundreds, thousands, tens of thousands were piled into mass graves. With naked torsos, eastern workers and inmates of concentration camps dug and dug in the searing, poisonous heat, and their spades weren't fast enough to create space for the bodies that kept coming. Juniper branches were burned and their sharp, stinging, pleasant smell floated over the graves Not even the terrible epidemics of past centuries, not even the Great Plague, killed ten thousand in a single night.

Day after day and hour after hour, the men of the civil defense police with the concentration camp inmates assigned to them brought up the bodies. First the corpses were removed from the street, then they started to dig out the open air-raid shelters where people who had not had the courage to escape the shelter in time fell asleep to death. There, where carbon monoxide had had its effect, the people sat peacefully around the table and lay just as peacefully on their civil defense beds. Where fire had seeped into the shelter, charred fragments, bone, and ashes were rescued. Horrible scenes of desperation and wild frenzy must have taken place. Scenes of which no one probably has any idea.

Corpses were found everywhere. We talked with many men of the police and civil defense police who would point to someone in the midst of the dug up bodies and say: "This was my wife! This was my mother!" "There are my parents-in-law!"

Like a nightmare it hovered over us all. Even those who did not actually go into these districts felt death everywhere. Breathing was difficult.

Beside Death, however, stood Life. A miracle happened in the "dead city." By the end of August and the beginning of September, the charred, burned trees sprouted new life; light green leaves dared to come out. So close to autumn, it was spring once again over the endless horrors. White lilacs bloomed in the destroyed gardens of the houses. Chestnut trees once more lit their white candles. And in this continuing life something mild and comforting, a change from helpless hatred to sorrow or resignation took place.

You not only saw the dark, accusing debris. You saw the future again and learned to hope again in the midst of the worst time of grief.

Like a mantle, like a protecting, sweet-smelling blanket, nature spread her strangest spring over the thousands of still bleeding wounds of the city. Hamburg was not dead. Hamburg must not die. This the spring proved and the newly awakened will and the unshakable hope of the people. Life stops at the graves, but does not tarry. Out of the deepest pain, the hardest will grows: Victory or Destruction!

Appendix 11

MAP OF PILOT STATIONS



Key:

- Federal Autobahn
- Federal Highways
- Major State Highways

Pilot Stations and respective CD Precincts

Appendix 12

RESTORATION OF THE CIVIL DEFENSE FORCES

Appeal to the Population

Two Newspaper Articles from the Hamburger Tageblatt

Service Orders

Circular Letter to Expanded Self-Protection Plants and Clippings from the Press

CD Orders of the Industrial Civil Defense Plants

The Police President

Hamburg, August 1943

TO THE POPULATION OF THE CIVIL DEFENSE REGION, HAMBURG

Thanks and Appreciation

The horrors of the last enemy terror attacks on our city are behind us. Daily duties and tasks are again being carried out. The tasks facing us are enormous; it is crucial to repair the damage and create provisions for the continued life and for the reconstruction of our Hamburg. It is already evident everywhere that the population of Hamburg is eagerly sharing in this work.

Profound thanks are in order to all Hamburgers, regardless if they were assigned to self-protection, expanded self-protection, or industrial civil defense, for their exemplary conduct and discipline, their courage and defiance of death, their willingness to sacrifice, and the solidarity that they displayed while still under the hail of enemy bombs and while waiting for the next attack. We remember with reverence the fallen and the wounded and find comfort in the certainty that their sacrifices were not in vain.

The tasks of the civil defense stations of state, perty, Federal Civil Defense Organization, and Armed Forces were tremendous and are still overwhelming. They could only be accomplished thanks to the exemplary conduct of the population, which did its duty without complaining despite the unavoidable difficulties they were facing because of the enemy attacks.

I herewith want to express my profound gratitude and appreciation to the population of Hamburg. I am sure that the Hanseatic spirit and will to live cannot be broken by new trials and that final victory is guaranteed.

Lessons Learned and Future Requirements

The massive terror raids that roared over Hamburg have shown again that wherever the self-protection forces are not prevented from carrying out their duties because of a dense rain of high explosive bombs, a quick and forceful effort will successfully contain fire bombs and the resulting fires. Many examples exist as proof of the fact that large parts of the population courageously and successfully defended their homes and their belongings. After a delay of five minutes, five fire engines are often unable to extinguish fires that at the beginning could have been put out with a bucket of water or a bag of sand.

From the experiences gained from these massive air raids, the following requirements emerge that I herewith recommend for your careful consideration:

1. The Air-Raid Warden and the Civil Defense Community

Air-raid wardens and the civil defense communities should work together to prepare houses again for civil defense. The selfprotection squads called up by the civil defense precinct must aid in this effort.

The air-raid warden must appoint, aside from the required selfprotection forces, a sufficiently large fire watch--composed primarily of men--who will undertake the protection of the houses under the warden's direction.

All male citizens who are appointed to this task are not permitted to leave the house during the night, except for professional reasons. They are particularly prohibited to go to the air-raid shelters in case of alarm.

In general, in every residential house, one fire fighter per floor is required; if more than two apartments are located on floor, another person should be assigned.

The Civil Defense Communities, under the direction of the selfprotection squads, must assist each other.

Constant surveillance trips must be carried out, even during the attack. If fire bombs have been dropped into the house, the selfprotection squad and the Civil Defense Community must start their activities at once. When high explosive bombs are dropped following fire bombs, shelter should be sought temporarily wherever possible.

Repeatedly fires have broken out later on because bombs believed to be extinguished were no longer watched and flared up again. Constant surveillance of doused fires is imperative.

2. Fire-Fighting Equipment and Its Use

The civil defense fire extinguishers have proved to be very efficient. The number of these extinguishers in larger spartment houses therefore must be raised to three or four. The agencies of the Federal Civil Defense Organization will initiate the necessary steps to facilitate this increase.

Usable or repairable equipment (civil defense fire engines, water containers, etc.) salvaged from destroyed districts will be put at the disposal of needy Civil Defense Communities.

Tearing hooks have also proved to be very valuable in fighting fires.

Water and sand supplies in homes must be increased even more, so that in case of failure of the water line, sufficient water will be available. Any possible container must be utilized for this purpose. Every occupied room, attic, cellsr, and stairwell must be equipped with sacks of sand and large amounts of water.

The civil defense equipment must be marked to avoid difficulties in returning borrowed equipment.

The fire-fighting equipment must be stored in the air-raid shelter or, in houses without a basement, on the ground floor, since otherwise it might be impossible to reach the equipment in case of need.

If a fire has developed, especially through phosphorous action, it must be covered with wet sand and large amounts of water. Accumulated debris from the bomb must never be allowed to remain in the house; it should be taken into the open immediately.

Be sure to wear your gas mask when fighting fires!

3. Attics

Fuel must be removed from the attic floor immediately, since it is difficult to extinguish. Through the fire mass eating its way through one floor after another, the whole building will be destroyed. The fuel, if at all possible, must be stored either in the cellar or in the open air. Balconies may also be used for storage. If the fuel ignites despite these precautions, it can easily be thrown into the street with shovels and extinguished there. Wooden leantos and partitions in the attics must now be removed ruthlessly and permanently, as ordered in my instructions dated April 6, 1943. The removed wood, because of its flammability, must not be stored directly against the house or air-raid shelter. Cellar rooms or rooms located on the ground floor and toward the center of the house are most suitable for storage. The wood stacked horizontally on the attic floor provides reinforced protection against penetration by fire bombs.

It is especially important that access to the roof is easy. Damaged ladders or ladders that were too short have frequently hindered effective fire-fighting operations.

It is advisable to cover the attic floors at on. " with a layer of sand as thick as possible, if the floor is strong enough to bear it, up to 2 cm thick. Water in sufficient quantities should be kept on the roof itself, because of flying sparks, and if this is not possible, at least on the attic floor.

4. The Apartments

Curtains and drapes should be removed, and carpets and rugs must be rolled up. These measures give a certain amount of protection against the tremendously strong showers of sparks.

Sand and water for fire fighting must be available in every room.

5. The Basement

It has proved to be absolutely essential that sufficient water and sand for fire fighting, as well as water for drinking, be available in the air-raid shelter.

Wall breakthroughs have proved valuable; however they should be used only in cases of extreme danger, and should not be opened before they are needed, because smoke or fire may seep into the shelter from neighboring houses.

The renewed walling-up of opened breakthroughs should be initiated immediately by the civil defense precincts. Walling-up with clay or mud can be accomplished by the self-protection forces.

Splinterproof beams have also proved effective; however, it is necessary that these can be moved from the inside. In every airraid shelter, a large beam should be available for this purpose. Window gratings often prove to be insurmountable obstacles to escape from blocked or smokg-filled shelters. They should be removed at once by the self-protection forces or by hired workmen.

Emergency lighting should be available in the air-raid shelters. If high explosive bombs are detonating nearby during an attack, the air-raid warden must make sure that the air-raid shelter is not damaged to such an extent that it might collapse. If necessary, he should order the shelter evacuated and, with his Civil Defense Community, take cover in a neighboring shelter.

6. When Should An Air-Raid Shelter be Evacuated in Case of Fire?

The air-raid warden must keep himself informed on the status of the fires in the neighborhood of his house by making frequent trips outside. If his own house, despite all efforts, cannot be saved and if conflagrations are discovered in the vicinity, the air-raid shelter should be evacuated immediately. The danger of being killed in the shelter in most such cases is so great that flight through burning streets is preferable. Escape routes and nearby shelter possibilities such as open squares and parks, should be investigated in advance. When the time comes, the Civil Defense Community must decide which escape route to use. Cloths and blankets soaked in water wrapped around the body and held in front of nose and mouth afford sufficient protection in escaping. Women should wear soaking wet headscarves to avoid having their hair catch on fire.

If immediate escape from the air-raid shelter is indicated, emergency luggage may have to be left behind. Experience has shown that suitcases, briefcases, and other belongings left behind in air-raid shelters in districts hit by fire storms usually remain intact.

In many cases, it was found that the asphalt, because of the intense heat radiation, was soft or even liquid. It is necessary therefore to put on sturdy footgear in case of air alarm to prevent burns on the feet.

If a fire storm is over or if the heat rays diminish, the extinguishing of fires, which burn comparatively slowly and floor by floor, should be taken up again by the self-protection forces.

Water for this purpose must be obtained through a long bucket chain. Often it only takes one forceful man who can organize the fire-fighting force and carry along others by his example.

7. Vicinity of the House

The wooden sheds, summer houses, rabbit warrens, etc., still remaining in backyards and gardens dangerously close to the house must be removed, since they might act as a fire bridge.

FCDO officials, self-protection squads, and civil defense forces have the absolute duty to preserve our homes against devastation by the enemy. In the hours of danger, the air-raid warden or other prudent and forceful persons will assume leadership, and all members of the Civil Defense Community must subordinate to them.

(Signed) Kehrl

Special Reprint from the <u>Hamburger Tageblatt</u> and <u>Hamburger Zeitung</u> of August 11, 1943

THE STRUGGLE FOR HAMBURG: HOW IT REALLY WAS!

Written at the instigation of the Police President of Hamburg right after the massive air attacks of July-August 1943

Countless Hamburgers, with the heavy hand of fate upon them, streamed into the Reich in those days. Men of many provinces of the Reich came to Hamburg to help the city in its darkest hours. For months to come, there will be special conversations and meetings taking place all over the Reich, in which we of Hamburg and our helpers from other places will be questioned by citizens who live in a German city threatened by massive air strikes such as those we lived through in Hamburg. These citizens set great store by our words. Even if we do not want to talk about it, the manner in which we accept our fate and the looks that we bestow upon those that are facing the possibility of a trial such as ours will be noted and will lead to conclusions. These conclusions, if correct, mean that the battle is half won in advance; but if erroneous, they will sow the seeds of future heavy losses.

Comrades in the Reich, for heaven's sake, when you see how the people of Hamburg, after all their misfortunes, still carry their heads high, draw the correct conclusions from this attitude:

We are entitled to hold our heads high! We have lived through an attack by the enemy the likes of which no other city has yet had to face. We fought bravely and did what we could. But you should be aware, Comrades in the Reich, that the enemy used everything he had for this battle in materials, in diabolic planning, and in treachery. So today we in Hamburg look back with the bitter, but proud realization that we stood like an army in the first line of defense. Behind us, however,

> WHILE WE KEPT THE ENEMY AND HIS MAIN FORCES AT BAY, COUNTERMEASURES WERE ALREADY BEING PUT INTO EFFECT.

When we see and hear how the civil defense effort, aroused by the experiences here in Hamburg, in other large cities of the Reich is being intensified with an enthusiasm unheard of a few months ago, then we say to ourselves that it was not all in vain! On the contrary, we call out to you Comrades in the Reich who have seen Hamburg: Don't lose your courage by what you have seen here!

This does not mean that you should close your ears when you hear about these days from Hamburgers. Let them tell you again and again just how it was. The never-ending roar of the enemy planes; the crackling and bursting of the bombs; and the fire storm, a hurricane that uprooted trees, toppled stone walls, and sent mushroom clouds high into the sky. Night turned to day in the light of the fire. The day remained night underneath the smoke. Torrential downpours developed out of the heat and the smoke.

Don't turn away when you are told of the bitter struggle and the terrible suffering of everyone! Try to realize what it means when the single fires turn into a conflagration, when the streets are blocked by a wall of fire, and strong men are felled by the heat rays. But also listen when you are told that hundreds, yes even thousands, fled to safety wrapped in wet blankets and towels, although every avenue of escape seemed cut off at first. Let us make it clear to you that this is a struggle that knows no mercy and no letup, and that demands from the civilians what up till then had only been asked of the front-line soldier.

But also look at the other side of the coin! You helpers from far away, count, while there is still time, the countless burned out stick bombs on any street corner of Hamburg! Count the exploded phosphorus bombs on your way! There are only a few. And then at the same time look for a place where a high explosive bomb hit! You really have to look for it, don't you? And Citizens in the Reich, think about it that not all Hamburgers are bombed out.

IN SPITE OF EVERYTHING, THERE ARE MANY WHO SUCCESSFULLY DEFENDED AND SAVED THEIR HOMES, THEIR PLANTS, AND EVEN THEIR WHOLE STREETS!

Be understanding of the fact that these people talk very little about it. In view of the unhappiness everywhere they have an almost superstitious fear of bragging about their own good fortune.

The enemy forced upon us a bitter struggle that usually is known only to the soldier storming a position under enemy fire or defending his foxhole under heavy bombardment.

The fighting soldier at the front often has to

TRUST IN HIS SOLDIER'S LUCK. WE, WHO DEFEND OUR CITIES, MUST DO THE SAME!

For instance, it is out of the question that a few high explosive bombs whose detonations are heard by a whole city district, should keep the civil defense forces in the shelters until the fires from 1,000 ridiculous little stick bombs have become so large that they cannot be extinguished any more. The true effective range of a high explosive bomb is usually limited to a single house, sometimes to a few houses. We have to take a chance on that. We really did this very often during that fateful week in Hamburg. Soldier's luck! How many have experienced it! Let us tell you of men who stood in their doorways watching for fire bombs and saw a high explosive bomb detonate a few meters away and they themselves remained unhurt. Of fire watches on the roof who swayed on their perches like ships in a storm, with bombs hailing down all around them, and still kept to their posts! Soldiers' luck! Soldiers' fate! Both must be taken into account by anyone who is in the thick of the fight, as we were in Hamburg.

IT IS A FIGHT MOSTLY AGAINST FIRE. IT IS A STRUGGLE IN WHICH WE MUST TAKE THE OFFENSIVE. THAT, COMRADES IN THE REICH, IS THE LESSON THAT HAMBURG IS TRYING TO TEACH YOU!

Let us tell you today that in this struggle, in which the enemy brings murder and fire to our cities, the last word has not been spoken. The struggle is still very much going on, and we only hope that the weapons of the enemy have been blunted. Then Hamburg's sacrifice will not have been in vain. And you, Hamburgers in the Reich, when you tell of your difficult days, always bear in mind that every one of your words may contribute to making the murder weapons of the enemy less effective. And the sooner this happens, the closer will come the time for us to rebuild our beloved city. The Police President

Hamburg, August 16, 1943

23

RE: Restoration of Civil Defense Preparedness in Self-Protection, Expanded Self-Protection, Industrial Civil Defense, and Special Administration.

Discussion of August 13, 1943 with the Police President - S 3 (L) in the Deutschlandhaus.

The following people took part in the above discussion:

Major of Security Police Richert, Captain of Security Police Hinrichsen, Captain of Security Police Reserve Bollenbach (Local Civil Defense Command).

Lt. Colonel of the Fire Department Dr. Schubert (Commander of the Fire Protection Police).

The Civil Defense Officers of the Groups and Sectors.

Major (Ret.) Harden (Industrial Civil Defense District Office).

Board Chairman of the Board of Public Works Dr. Schroeder (Civil Defense Station).

District Group Captain, Chief Grimm of Civil Defense, General Staff (FCDO).

Community Leader Party Member Roebe (Provincial Party Leadership).

Major Schlemm (Military Headquarters).

Member of Board of Public Works Buchholz and Member of Board of Public Works Peschkes (Community Administration Department of Public Works).

Also members of the federalized national railroads; the post office; the elevated company; and the gas, water, and electricity departments.

Special Subjects under Discussion

Gathering and regrouping of Civil Defense forces as well as inspection and replenishing of fire-fighting equipment of the self-protection, ICD, and expanded self-protection units and special administration.

Course of Discussion and Results

Opening remarks by Major of Security Police Richert: All experiences resulting from the major air attacks now behind us must be compiled and the necessary lessons drawn therefrom and put to practical use. Civil defense preparedness of personnel and equipment must be restored with greatest possible dispatch and further enhanced by all possible means.

The following details were then discussed and decided upon:

Self-Protection

Vacarcies caused by casualties among the air-raid wardens and their deputies, must be filled immediately, so that Civil Defense Communities are under continuous decisive leadership.

The remaining tenants, as well as persons newly quartered in evacuated apartments, must be assigned to civil defense service by the air-raid warden.

Where the Civil Defense Community must seek shelter in a public bunker in case of alarm, one fire watch must remain under any and all circumstances; this duty is to be assigned first to the air-raid warden. The Federal Civil Defense Organization is requesting the issuance of a police order to this effect.

Civil defense equipment must be checked over, and sand and water containers must be refilled as quickly as possible, supervised by FCDO officials (casualties in whose ranks will be replaced by the district group).

Civil defense equipment in destroyed buildings and plants that is still usable or can be repaired should be collected and apportioned to existing Civil Defense Communities as the need arises.

Sandboxes from destroyed districts must be moved to occupied districts. This should be done by the Department of Public Works.
Delivery of refills of sand has suffered from a shortage of vehicles to transport the sand. The local government is trying to make deliveries as quickly as possible--probably starting August 13, 1943. The vehicles needed for this purpose must be requisitioned from the authority for the use of motorized vehicles, SA Group Leader Fest.

Issuance of replacement sandbags by the sectors has already been ordered. The Federal Civil Defense Organization will procure additional amounts as needed.

As additional containers for water for fire fighting, garbage cans left intact in destroyed areas should be used. Public works board member Buchholz will order this and report on the number recovered.

The necessary replenishment of bandaging materials for civil defense medicine chests will be ascertained and reported by the FCDO. In urgent cases, the supplies of the civil defense police are available.

The removal of wooden partitions from attics should be completed with all possible speed.

The repair of damaged, but still inhabited, houses should be attempted first by the self-protection forces. The number of self-protection material supply depots and the available building materials, however, is not sufficient to meet this demand. Relief is to be speeded by all available means. Not every house that was defended and perhaps saved by the bravery of the tenants will remain inhabited. If such a house is located in a destroyed district, it may be impossible, amongst other things, to establish gas, water, or electricity connections. There might not be any shopping facilities so that evacuation of such houses may become necessary, as harsh as this might seem to the successful defenders of their homes.

The building of air-raid shelters will be continued in the inhabited districts. Main emphasis will be on the creation of emergency exits. The opened wall breakthroughs are to be closed again, because otherwise there might be danger from poisoning by smoke and spread of fire. Splinterproof beams will be removed from destroyed homes. As far as self-protection is concerned, do not wait and do nothing until official ordinances are issued.

The population should be urged by FCDO officials to put increased water supplies in basements, as well as blankets, coats, rags, etc., which when soaked in water often afford the only protection against burns when leaving the air-raid shelters of burning houses. The suggestion to prepare advance escape routes was rejected. Instinctive behavior at the time of emergency will no doubt achieve the best results. Storage of civil defense equipment and tools must be in the air-raid shelter, or at least on the ground floor, because access to them in case of fire might otherwise be impossible.

When emergency exits are blocked, splinterproof beams should be felled with the help of a crowbar. A crowbar must be kept in the shelter.

Air-raid shelters in burning buildings beyond saving must be evacuated because of the danger of asphyxiation.

In case of conflagration, an escape route should be sought diagonally to the fire storm by way of side streets. The shortest and most direct route is not always the saving one. Open squares offer the best protection. Many people saved themselves by crawling along the ground wrapped in wet clothing or blankets.

The FCDO recommended the dissolution of the self-protection emergency squads; however, this suggestion was voted down. In Hamburg, these squads are formed only according to need. The last remaining male should not be taken from any one house. We shall not always have blanket bombing. If fires develop everywhere, the squads should be dispersed. The squads must be kept under strict command of their leader.

The leaders of emergency squads should not be picked by theoretical criteria. Energetic, forceful, and decisive people must be chosen who in case of emergency can assume command and carry along their followers.

Regular inspection rounds during air attacks must be continued as heretofore. If fires have developed or if fire bombs have fallen into the house, the Civil Defense Community must go into action immediately. If high explosive bombs are still falling, cover should be taken instinctively wherever possible. Everyone should be ready to risk his life. As the soldier holds the line at the front, the self-protection soldier must try to protect the home front from destruction by the enemy.

It is considered necessary to equip the self-protection forces with protective goggles against smoke and dust. The transparent parts must be made from flameproof material. According to reports from the FCDO, the Volks Gas Mask sticks to the face after several hours of use.

Industrial civil defense, expanded self-protection, and special administration: The districts, in cooperation with the emergency fire service, must begin immediately to check the completeness and serviceability of all equipment in all plants. Missing or damaged equipment parts and replacement requirements should be reported. Fire protection installations in destroyed plants, to the extent that they are still usable, should be collected and turned over to other plants.

Deadline for the report on the above regulations is September 25, 1943.

It is planned that a permanent pipeline will be laid between important installations that have motorized fire engines and water lines located nearby. Until the material for these pipelines is available, hoses will be laid. If streets must be crossed the hoses may be laid into the street surfacing to avoid hose bridges that might hinder traffic.

Plants must again classify their personnel for civil defense service. Since numerous plants were destroyed, larger forces in the existing plants must be recruited. The civil defense forces of large plants will be housed in barracks wherever possible.

Plants should draft their entire personnel into civil defense service, divided into emergency squads of one officer and six men each. These squads must be prepared to render neighborly assistance to residential buildings in the vicinity. This is especially important in daytime attacks. The squads must be equipped with plant-owned equipment.

Fire watches must be posted in the plants as heretofore. They must make sure that fire-fighting activities can be taken up immediately and that dropped fire bombs are recognized at once.

During the last major attacks, shortage of motor fuel was frequently noted. Even fire watches were often not able to supply fuel to motorized plant fire engines. We should iry to have motor fuel in reserve for at least five hours' running time. Also large reserves of motor fuel should be stored in tank installations in the industrial civil defense plants. The State Department of Economics will work out a plan for this.

Fire Watches in the Harbor

About 50 percent of the harbor installations remain intact. To protect these, we need at least 1,150 fire watchers. The forces provided by the city district until now are almost completely lost to us by evacuation or emigration. Neither do the Armed Forces provide any manpower at present. A check will be made to see how many personnel the police department will be able to provide in the future. The harbor sector was ordered to free forces for fire watches first from the large harbor plants; e.g., the Blohm and Voss Wharf. Living communities will be created on board ships from the large firms. The forces in question will thus remain in the harb r and can be used as harbor fire watches. Other types of forms, e.g., shipping companies, will gather their work forces in the harbor and then provide them for fire watch service in the harbor.

Living quarters and shelter for the fire watches in the harbor are available in sufficient quantities.

The harbor sector will report on its arrangements with the firms by August 21, 1943.

Military Installations

The Army Command was asked to take measures for the military installations comparable to those ordered for harbor firms.

Miscellaneous

Lt. Colonel Dr. Schubert pointed out that all gossip about a rain of phosphorus is without foundation. A notice in the press to this effect was ordered. The industrial and plant civil defense leaders have already informed their personnel to this effect.

Plant personnel, who were on civil defense duty for prolonged periods, were repeatedly turned away from the feeding stations established by the party for the general population. Party Leader Köbe explained that it was not intended that feeding be selective, but that the amounts of food available were the determining factor.

A representative of the federal railroad reported that they are again 100 percent prepared for civil defense. Out-of-town forces of the federal railroad move in on their own initiative when a major air attack is recognized. The federal railroad urges that out-of-town assistance forces not be stopped and diverted to other duty, as has happened during past attacks. Feeding difficulties encountered during the first attack were eliminated during subsequent attacks. Most important, sufficient drinking supplies must be available in future. Large vessels and wells for drinking water are available. Civil defense headquarters will report by August 25, 1943, on locations where wells are not available and must be constructed. The gas company is working with all available means for the quick restoration of the gas pipeline network. A definite deadline cannot be given. The same is true of the waterworks. First, the long supply lines must be readied. Then, when the network of water collectors is put into operation, damage that was not recognized before will show up.

(Signed) Kehrl

Distribution:

Groups and Sectors	16
Industrial Civil Defense HQs	1
Civil Defense Station	1
FCDO District Office	2
Provincial Party Headquarters	1
Representative of Community	
Service	1
Military Commandant	1

Railroad, Fost Office, Elevated A.G., Gas Company Water Works, Electricity Co., 1 each 6 Police lists 2, 3, 8, 9 1 each 4

144

The Police President

Hamburg, August 24, 1943

RE: Use of Public Air-Raid Shelters, Civil Defense Bunkers, and Special Shelters of All Kinds

Public air-raid shelters, civil defense bunkers, and special shelters must be kept closed during the day and not opened until Air-Raid Danger 15 alert is sounded (or Air Danger 30, when serving a far-flung area).

To ensure nightly sheltering of the population, the above-mentioned civil defense shelters must be opened one hour before the beginning of the official blackout time.

To avoid use of the above-named civil defense rooms by homeless persons as permanent living quarters or by shady characters to hide in, attention is called to the Guidelines for the Admittance to Bunkers.

The issuance of admittance cards is herewith extended to the use of public air-raid shelters by the permanent residents of Hamburg.

Admittance cards should not be issued to self-protection personnel, who must remain behind in the houses as fire watches. Neither should admittance cards be issued to any members of self-protection emergency squads.

Special care must be taken to avoid issuing admittance cards to persons who have no permanent residence and who use the bunkers as places to sleep. Quartering of the homeless is the responsibility of the catastrophe service stations, the district headquarters of the social service, etc. Homeless persons must be referred to these agencies.

In the interest of hygiene and order in the air-raid shelters, bedding, mattresses, etc., must be taken along by the owners when leaving in the morning. Civil defense luggage may be stored in the bunker.

The bunkers must be cleared of users by 9:00 a.m. daily, so that they may be aired and cleaned.

These regulations supersede my order of August 22, 1943.

(Signed) Kehrl

Distribution C

145

The Police President

Hamburg, September 4, 1943

RE: Restoration and Reactivation of the Self-Protection Forces. Special Emphasis on Formation of Battle-Ready Self-Protection Emergency Squads.

I direct attention to my instruction sheet entitled, "To the Population of the Civil Defense District Hamburg," of August 1943 (copy attached).

1. The residential houses left unscathed by the severe air attacks on Hamburg in the time from July 25 to August 3, 1943, and those damaged and gradually being fitted for reoccupation must be preserved from further destruction with all forces and means at hand. I have already laid down the lessons and needs drawn from these air attacks in my instruction sheet of August 1943 (see above). It is the responsibility of the district headquarters of the Federal Civil Defense Organization and of every single official to see that the demands contained in this instruction sheet be made known to every person and met in the shortest possible time.

The police stations should work in closest cooperation with FCDO and support the work of the FCDO district offices and officials in every possible way. They must make sure that the full civil defense preparedness of self-protection forces and buildings is restored as quickly as possible.

By constant checks of the civil defense precincts, it is to be ascertained that the following basic needs are met:

- a. Classification of service-ready members of the Civil Defense Communities according to their tasks to be accomplished by the airraid warden, especially assignments for fire watches (house fire fighters, primarily men).
- b. All assigned solf-protection forces must remain in their air-raid shelters during air alarms.

Males assigned to self-protection service are expressly prohibited from going to public air-raid shelters during air alarms (bunker control).

c. In houses without their own air-raid shelters, sufficient fire watches under the direction of the air-raid warden must remain in the building to take over the defense of the house. A nearby air-raid shelter may be used by these fire watches if surveillance of their own houses is maintained and constant pa trols are made.

d. Water for extinguishing fires and sand supplies must be available in sufficient quantities in all parts of the building, including the air-raid shelters.

Where there are no bathtubs or other similar containers available, the house owners and tenants must be made to provide suitable containers, if necessary by levy of the house owner.

Water for fire fighting must be put in readiness by all forces of the Civil Defense Community working together, if necessary through assistance from neighbors, in places where the water supply is not yet fully restored.

e. Civil defense tools must be checked for completeness and usability and if necessary, repaired and stored in the air-raid shelter or, in houses without basement, on the ground floor.

The above points are the basis and prerequisites for successful use of self-protection in case of future air attacks.

2. In Number II, 1, of the above-mentioned Instruction Sheet, I have asked that the self-protection emergency squads assist the Civil Defense Communities in the restoration of civil defense preparedness. This means nothing more than organized neighborhood help, not only during air raids, but also in general in the present catastrophe situation.

Often there will be one or more damaged houses among buildings not touched by the air attack. Here it is important to transform neighborly thoughts into deeds and give the affected citizens help and assistance, so that they are not alone in their emergency situation. Here the leader of the self-protection emergency squad, usually the block warden of the FCDO, must prove himself the protector of the Civil Defense Communities under his care.

The self-protection emergency squads, established in Hamburg long ago, had numerous opportunities in the past air attacks to show how helpful they can be. Their combined efforts and, when the situation demanded it, their scattered attempts can be credited with the saving of countless buildings as well as the rescue of many endangered citizens from the threatening fires. Therefore, increased attention should be directed by the FCDO to the formation of energetic battle-ready self-protection emergency squads. In this connection, the following is decreed herewith:

- a. The self-protection emergency squads must be checked immediately regarding their still existing capabilities and, where necessary, must be replenished or formed anew. The precinct party leader and the precinct captain should cooperate closely in this endeavor.
- b. Special care should be given to picking a leader. Only men who are decisive, energetic, and prudent, regardless of their other assignments in the Civil Defense Community, must be appointed as leaders. FCDO block wardens primarily should be used.
- c. Changing Number IV, 2, of my ordinance, effective immediately, not only the leaders of the self-protection emergency squads, but also all members of the squad must be drafted by police order for civil defense duty in the emergency squads. The draft is to be effected through the precinct captain on the precinct party leader.
- d. The self-protection emergency squads, as ordered previously, must be quartered as a unit in an air-raid shelter within the selfprotection territory, where immediately upon the sounding of an alarm they must assemble and report to their squad leader.

The use of a public air-raid shelter or bunker is permissible only in exceptional cases and only if the shelters are located within the self-protection territory of the squad.

- e. The squad leader should keep a simple roll, which will afford proof of participation in the Service. Nonappearance must be explained promptly.
- f. Infractions against civil defense service requirements must be reported to the appropriate civil defense precinct. In cases of serious or repeated refractions, an indictment must be filed. In lesser infractions, the culprit may be warned by the precinct captain.
- g. The members of the self-protection emergency squads must be instructed in their duties and tasks from time to time by the civil defense precincts.

3. It is the primary task and clear goal of the police and FCDO duty stations to bolster the popular will to resist the terror created by the enemy, so that everyone will take up the battle against fire with full confidence in his own power and in the means at hand. The population must have the feeling and the assurance of being led competently. Catastrophes, such as the one that befell Hamburg a short time ago, have made our city the front line. We fight like soldiers here, and soldiers keep to their post and give the last of their strength to their task. Only with this attitude and devotion can successful resistance be achieved and the goal, namely, the protection of home against enemy terror, be reached.

Group and section commanders, all officers and noncoms, are responsible to me for the implementation of the above ordinances. I urgently request the FCDO district group Hamburg, together with all lower echelons, to fulfill their given tasks according to the shining example set by their numerous fallen comrades.

4. The groups and Air Defense Command VIII will report to me on the implementation of Number 2 above by October 1, 1943.

(Signed) Kehrl

Distribution:

FCDO down to precincts Provincial party command Reprint from Hamburger Tageblatt No. 218, September 5, 1943

HAMBURG AGAIN PREPARED FOR CIVIL DEFENSE

by Ernst Burkhardt

Written on the instigation of the Police President of Hamburg to supplement his Proclamation to the Population of Hamburg, dated August 1943.

No pamphlet on civil defense questions will ever command as much attention in the city of Hamburg as did the pamphlet with which the Police President, in his capacity as local Civil Defense Commander, addressed the population for the first time after the catastrophic days of the terror raids. It was addressed to all of us who have become acquainted with enemy terror in all its horrible reality and to an extent never before experienced by any city. We have suffered much and lived through much. So much in fact that it is often difficult for some of us to sort out the memories of the many and often incomprehensible impressions. But just as we, the people of Hamburg, gradually have to start building a new existence, the time has come for us to separate from the overwhelming events of the catastrophe those incidents that should be forgotten and those that we must not forget, because it will make us stronger in the future.

> THESE, THEN, ARE THE LESSONS WE HAVE LEARNED AND THE EXPERIENCES WE HAVE GAINED FOR FUTURE CIVIL DEFENSE AND FOR THE DEFENSE OF THE HOMESTEADS STILL REMAINING TO US.

"Nobody needs to tell us about that," some of us will say, "we gained experience the hard way!" How many times have we heard these words in the last few weeks, when people from Hamburg and out of towners discussed what must be done in the hour of danger. Our opinions on that subject were listened to everywhere in the Reich as attentively as never before, because Hamburgers today are considered authorities on such questions. But is each single person, who can after all only judge by his own personal limited experience, really an authority? Honestly now, has it not happened many times in the past few weeks that when two people talked about questions of civil defense, they arrived at two different sets of answers? Should you go to the shelter or not? Splinterproof beams or not? One person swears by the portable fire extinguisher. Another feels that in case of "his" fire, it was useless to even try to extinguish the fire.

Is it not understandable that these differences of opinion exist? Circumstances in one case were entirely different from those in another case. One person could reach the developing fire at once, the other not until much later, by which time the effective point of self-protection capabilities was passed. Truly, anyone trying to get a true picture of what really happened from all the different viewpoints would be perplexed. Soon he would realize that instead of hundreds, he would have to ask thousands of opinions, and that even these thousands might not give a true, clear, and unequivocal picture. You would not only have to investigate the debris and scorched remnants of one's own house and those of relatives and friends, but literally thousands of other fire ruins to determine whether stick fire bombs or phosphorus bombs, canisters or other incendiaries, flying sparks, or heat rays caused the destruction. And still the interesting question would remain of why some houses that received hits by stick and phosphorus bombs did not catch on fire and only sustained minor damage. Why was one in a row of houses destroyed, when the neighboring houses remained undamaged? And why, in one large apartment house, were the roof and upper stories destroyed by fire, but the lower floors remained tenable?

One should be able to find the answer to all this, but clearly this is impossible for any one person. Still, the answer is available, contained in the lessons and experiences that the local civil defense command has summarized in a few, but all important, pages in the new Civil Defense Proclamation.

THESE ARE TRUE FRONT-LINE EXPERIENCES,

these apparently self-evident and reasonable sentences. We expect that certain people, full of good will though they may be, will doubt this or that statement, pointing out their own personal experiences, which they will consider as outstanding and truly remarkable events. But this is not the point at present. We all have lived through a lot. The duty and the right of the responsible reporter is to see everything and be everywhere. We certainly took full advantage of this right. During an attack, we were not in the cellar or a bunker, but on the roof or in the open; we extinguished phosphorus bombs like everyone else; and hours later, with feet wrapped in bandages, on the periphery of the conflagration, blinded by smoke and flying sparks, and thrown to the ground by the fire storm, we had to find a circuitous route to the command bunker, where we saw more and heard more than can possibly be told now.

We walked the streets of death, and at the first quiet hour, we surveyed the city from a slowly circling airplane. We stood alongside our experts making tests of enemy aerial weapons in case something might still be learned from these things. We also know the approximate ratio of phosphorus and stick fire bombs that the enemy used during the attack. We did not overlook anything that was done by the enemy and by our side to help us recognize cause and effect. And for this reason, the new Hamburg Civil Defense Pamphlet is to us such an especially interesting and remarkable document. We were right there when these lessons from the battle for our city were formulated, which are now down in black and white. We know the men who carried these experiences out of the hail of bombs and through the walls of fire. We leafed through the countless reports on which this final report was based. No, indeed, what is now offered to the citizens of Hamburg as rules and guidelines for future tests of endurance, is not picked out of the blue! And when, in one place in the pamphlet, the possibility of a massive high explosive bomb attack is considered, we know what is behind it, namely the eyewitness report of one of our own policemen, who was himself in the middle of this particular hell; rescued hundreds of citizens; was carried out unconscious, wounded, and partially asphyxiated; and, then, as soon as he had regained consciousness, gave his strictly factual experience report. Men such as this one make no mistake about what happened and about the severity of that which the enemy might have in store for us in the future.

IT IS CRUEL, BUT IT IS THE WHOLE TRUTH

that everyone can read in this pamphlet to the citizens of Hamburg. You only have to read every word and every line of this pamphlet with the careful attention it deserves. Then everyone will find his own personal experiences contained therein. And he will find an answer to the questions that remained unanswered.

The reconstituted Civil Defense Community of Hamburg asks a lot of each of us. Especially from the men of our city! I believe everyone realizes how important it is that sufficiently strong fire watches--primarily men--are assigned immediately by the air-raid wardens. It goes without saying that these men must not leave the house commended to their care. It means that able-bodied men have no business in the bunkers in the future. The constant patrols of the houses must be carried out as heretofore, even during an attack. If fire bombs have fallen, selfprotection emergency squads and Civil Defense Communities must step into service immediately. When high explosive bombs follow, shelter should be sought as much as possible. Should the enemy make another such attack on us, we shall

FIGHT FOR EVERY HOUSE AND FIGHT HARD. THE MAIN DANGER IS FROM THE FIRE!

All other considerations must be disregarded--except if the emergency forces should be completely pinned down by a concentrated attack with high explosive bombs and air mines, which is almost always confined to a small local area. Undeterred by what has happened, we must make it clear to ourselves again and again that

SPEED IS OF THE ESSENCE WHEN FIGHTING FIRES -- EVERY MINUTE COUNTS!

After five minutes, five motorized fire engines often are not able to extinguigh fires that could have been doused with a bucket of water or a bag of sand in the beginning.

There is really no basic contradiction if in Lessons and Experiences it is pointed out that there will be some fires that just cannot be put out by any human effort. If it should come to this in your own home and if conflagrations are noted in the immediate neighborhood, the house and, most of all, the shelter must be evacuated as quickly as possible. Possible routes of escape through broad streets to open squares or parks must be explored ahead of time. Just as in fire fighting, everything depends on the leadership of a courageous and prudent man; in the same way, decisive leadership during the flight, when such is necessary, is indispensable. Nobody must be afraid to advance, even when the flames are already leaping into the street. Soaked cloths and blankets afford more protection in these times than faint-hearted people generally realize. To leave and escape TOO LATE is just as fateful in this case as in the case of fire fighting.

THEREFORE, EVERY MINUTE IS PRECIOUS!

What are minutes when the attack goes on? The one who listens at the cellar steps for the next high explosive bomb to hit the house might let a precious minute pass without realizing it or else a single minute might seem like an eternity. A person who has started to fight a fire will lose all realization of time. One is as dangerous as the other. Let us take the latter first. It may happen that in one rcw of houses, fire watches and house community seem close to bringing a fire under control. In a neighboring house, conditions may be less favorable for success. Perhaps there the fight against the fire will be given up too soon. According to human judgment, the moment to retreat has come. However, we are all human, and we all have different criteria. It is of the utmost importance that the fire crew distributed in the attic and upper floors, with success apparently close at hand, not be blind to everything else and spare a glance at the street at the neighboring houses. Otherwise it might happen that these bravest of the brave, victorious in their own home, might be cut off by the flames from neighboring houses or the whole street.

THEREFORE, IT IS THE DUTY OF THE COMMUNITY TO FIGHT THE FIRE AS LONG AS THERE IS A POSSIBILITY FOR SUCCESS.

"Let it burn," that's what some used to say in the past, "surely, human lives are more important!" Yes, human lives are more important when it means saving women and children, the infirm, and the aged from the flames. Today, however, after the catastrophe, our city has a different face and different criteria must be employed.

"FCDO OFFICIALS, SELF-PROTECTION EMERGENCY SQUADS, AND THE SELF-PROTECTION FORCES IN GENERAL HAVE THE CLEAR DUTY TO SAVE OUR HOMES FROM DESTRUCTION BY THE ENEMY!"

Thus the pamphlet to the population of today's Hamburg summarizes the lessons learned from the catastrophe. The vast majority of the homeless and those needing help are safe today. This frees us for a renewed struggle against the fire, for we did not remain in Hamburg so that our city would be left to the pleasure of the enemy!

IN DAYS PAST, WE DID NOT KNOW THE ENEMY YET. NOW WE KNOW HIM!

In those days, we did not know what it means to have no roof above us and no mattress beneath us. Today, we all know it. In those days, there was a shortage of men. Today--and this is one good result of our moving closer together--the fire-fighting forces can easily be strengthened in the existing houses. In those days, we did not know the danger from a conflagration, which threatens the brave and the faint-hearted alike. Today it is not a question any more of which is more important: Extinguish the fire in time and expose ourselves to some minor dangers, or take a chance on a sea of flames that has to be passed through in flight from the fire while the attack is still in progress.

In short, if the enemy should come again, we shall enter the battle with an entirely different outlook than before. It could not possibly be worse in the future than it was then.

HOWEVER, WE ARE TOUGHER, MORE EXPERIENCED, AND THAT HAS MADE US STRONGER! The Police President

Hamburg, September 1943

To the District Group X/l Federal Civil Defense Organization HAMBURG

RE: <u>Self-Protection Actions, Digging of Trenches in Truck Garden Colonies</u>, and Shelter in Public Bunkers

1. In almost all city districts, the recent air attacks have caused such widespread damage that, even utilizing full federal assistance, it is not possible to repair all damages in a short time. Therefore, self-protection forces from all segments of the population must be employed to a large extent. It is important to convert the thoughts of help into deeds and to assist fellow citizens who have suffered damages, so that they are not alone and without help in their time of need.

It is a point of honor with every citizen to offer the hand of friendship and assistance in repairing the damages. It must not happen that in cases where self-protection efforts are possible, nothing is done until official ordinances are issued. I therefore urge the district group, officials of the FCDO, air-raid wardens, and all members of the Civil Defense Communities to take an active part in self-protection reconstruction work.

2. I also urge all citizens who because of shortage of living quarters are forced to live in truck gardens or similar emergency quarters to start digging adequate trenches immediately. The necessary material (wood) will be provided by the AKE.

I wish to call attention to my announcement concerning the above, dated June 6, 1940. I expect every official of the FCDO to give wholehearted assistance. Technical guidance in the construction of these trenches and speedy implementation of this community measure in cooperation with the Federal Association of Truck Farmers is urged.

3. Through many letters received and through a thorough check by my own office, I have discovered that a large part of the population has lost confidence in the private air-raid shelters and to a large extent seeks out public air-raid shelters and bunkers. Largely, this stems from the

155

fact that in Hammerbrook and other city districts many people in private air-raid shelters were killed during the conflagration.

I would like to point out that now, as before, the private air-raid shelters afford extensive protection if the fire bombs and developing fires are fought quickly. Where people perished in the cellars (air-raid shelters) this was in most cases due to the fact that the danger was not recognized in time. The attempt to leave the air-raid shelter of a burning house was either not made at all or not made in time.

In my proclamation, "To the Population of the Civil Defense District Hamburg," I specifically pointed out that the air-raid wardens must lead the members of their Civil Defense Community out of the shelter in time, if despite all efforts the house cannot be saved and if row fires or conflagrations are noted in the vicinity.

The public air-raid shelters and bunkers are primarily allocated to those segments of the population who live in houses without basements. They are not available in sufficient numbers to shelter all the population. For this reason alone, the population must use their own shelters where available. The deciding factor should be that sufficient self-protection forces remain in their homes to fight the fires.

The population must be reminded again and again that otherwise the still remaining homes would be left to destruction by fire and the shortage of living quarters would be even more critical. It is therefore the absolute duty of every citizen who has a private air-raid shelter available to remain in his house during air alarm, as outlined in my instruction sheet.

The excuse that the danger of destruction of a private shelter through a high explosive bomb is much greater than that of a public bunker is not valid. It is well known that against a direct hit by a high explosive bomb, even the public shelters (e.g., pipe bunkers and the elevated tunnels used by the population after the catastrophe) do not afford 100 percent protection. Besides, the number of high explosive bombs dropped during an attack is infinitesimal in relation to the number of fire bombs dropped, and it should also be pointed out that direct hits are rare. Therefore, no reason exists for shunning the private air-raid shelters, especially improved for an emergency, in case of an alarm.

If the self-protection emergency squads formed and drafted by the police according to my ordinance S 3 (L)8 - 55, 10, 11, 13 - of Sept. 4, 1943, and the air-raid wardens in their Civil Defense Communities assume responsible leadership energetically and gladly and the Civil Defense

Communities stick together, there is no greater danger in the private shelters than before.

To the district group of the FCDO, I assign the responsibility to instruct and educate the population as well as the officials of FCDO, the leaders of the self-protection emergency squads, and most of all the airraid wardens in their duties according to the above descriptions and according to my proclamation. I urge therefore that complete courses be given to officials of FCDO and leaders of self-protection emergency squads to disseminate this information, so that these in turn can inform the general population and restore lost public confidence in the air-raid shelters.

Hamburg, September 22, 1943

The Police President

CIRCULAR LETTER NO. 21

To the Plant Foremen and Industrial Civil Defense Wardens of the Expanded Self-Protection Plants

The massive enemy terror raids now behind us have extracted severe sacrifices from our city in both human losses and in property.

The plants of the expanded self-protection service have suffered their share in this. They have their honorable share, however, in the selfsacrificing service of all the civil defense forces, who opposed the catastrophe with selfless devotion and were successful in saving many human lives, many buildings, and many industrial installations from the threatening flames and, in many cases, from total destruction. I have many examples before me of highest personal courage during those terrible hours and days and many testimonials to faithful performance of duty within the plants of the expanded self-protection service. It is both my duty and my desire to acknowledge this gratefully.

In recognition of proved devotion to duty and outstanding bravery war decorations were issued, at my suggestion, to 1,688 members of the Expanded Self-Protection Service, as follows:

1	Distinguished	War Serv	ice Meda	1, 1	st Clas	ss, with	Swords
120	Iron Crosses,	2nd Clas	s or Bar	s to	Iron C	crosses,	2nd Cl.
1,536	Distinguished	Service	Medals,	2nd	class,	with Swo	ords
21	Distinguished	Service	Medals,	2nd	class,	without	Swords
10	War Service Me	alsh					

It was not always possible to reward each deserving man and woman in each plant in this way. In many cases, the plant foreman, the expanded civil defense warden, or other plant member wears the medal awarded to him for the whole plant and realizes that this is the case. However, this honor carries with it the obligation for continued faithful performance of duty in the future. Reconstruction and removal of existing damages are now our tasks.

Experiences Gained from the Massive Air Attacks

A proclamation to the Population of the Civil Defense District of Hamburg is appended to this circular letter. The lessons and needs garnered from the terror raids and outlined therein generally apply to the plants in the expanded self-protection program as well. They must be evaluated without delay and observed in future air attacks.

Necessity for A Strong, Devoted Industrial Civil Defense Force

Aside from the need to defend our homes, the readiness of strong forces and sufficient fire fighting equipment for the defense of industrial plants is an urgent need. Experiences have shown that the preservation of homes and industrial plants by the efforts of self protection or expanded selfprotection was possible generally in those cases where courageous men took up the fire fighting immediately and bravely, except where circumstances were beyond human control. The plant superintendents and industrial civil defense wardens therefore must make it their business to use every opportunity to point out to all employees the necessity of strong fire protection. It is, of course, mandatory that plant superintendents and industrial civil defense wardens serve as an example at all times and in every respect. I have before me numerous examples stemming from the times of the catastrophe that this requirement is being met in most cases. Still I feel it is necessary to point out that it is unforgivable today, in the fifth year of the war, as in some isolated cases, for plant superintendents and other leading personnel to dodge their industrial civil defense service by offering flimsy excuses and leave the fire protection of their plant to the employees.

Care should be exercised to find quarters for the fire fighters that are suitable in every respect. Drafty, damp, or unclean rooms are not suitable for the quartering of fire watches. Reasonable requests by the fire watches in this regard must be complied with wherever possible.

Disposition of Fire Fighting and Rescue Forces of the Plants for the Protection of Neighboring Homes during Working Hours

Increased importance should be given during daytime air attacks to the protection of still existing homesites, since for the most part the male population is at work in plants during that time.

Therefore, it is necessary that the plants--primarily those in wellpreserved residential districts--draft all their employees for civil defense service during working hours. Aside from the forces assigned to in-plant service, fire-fighting and rescue squads from among the employees are to be readied and to be employed for neighborhood help in the surrounding residential buildings in case of daytime raids, since fires in neighboring buildings will endanger the plant as well. On the basis of this order, the measures to be taken in this connection by the different plants must be documented in the plant civil defense plan. The fire-fighting and rescue squads made up of one officer and six men each must be equipped with plant-owned equipment.

I also wish to especially point out the duty to offer neighborhood assistance outside of working hours. In this connection, it is necessary that outside of working hours the appointed fire watches and other firefighting personnel remain in the plants in complete numbers and fully prepared.

Checking of Fire-Fighting Equipment and Supplies

I again strongly urge you to check continuously the equipment and supplies located in the plants for fighting fires for readiness and usability. The existing water and sand supplies especially--including those in the cellars and air-raid shelters--should be increased and replenished constantly.

Training of Fire Watches and Fire Engine Crews

Experience has shown that the training of the fire watches as well as fire engine crews was not equal to the task in most cases. By repeated dry runs and training exercises, this shortcoming can be eliminated.

Engine crew leaders and machinists of the motorized fire engines must be educated in their tasks with special care. Plants that have motorized fire engines, if they do not have water containers of their own, must be well acquainted with the independent water sources in the immediate vicinity.

At all costs, a sufficiently large fire engine crew must be in readiness at all times. If there are not enough men in the plant to man the fire engine, employees of neighboring plants must be used. Guidelines for the mobilization of motorized fire engine crews within the expanded selfprotection service in industrial plants that have motorized fire engines will be distributed very shortly.

<u>Telephone Directory of Civil Defense Duty Stations and Availability of</u> <u>Messengers</u>

The civil defense telephone directories of all plants must be kept current so that in case of emergency, wrong or unnecessary calls will be avoided.

I wish to point out in particular that messengers familiar with the city must be kept in readiness so that in case of telephone failure these can take over the transmission of messages.

Fire Fighting

I wish to again direct your attention to the important fact that in smoke-filled rooms--even when wearing a gas mask--you must work in a crouching position.

Drafting Foreigners in the Expanded Self-Protection Service

Foreign employees may be drafted for service in civil defense according to Paragraph 11 of the Executive Order to the Civil Defense Law. In case of draft, they are considered equal to German citizens, especially as concerns treatment of personal and property damage.

<u>Safes for Valuables</u> (decree by the Federal Minister of Air Transportation and Commander in Chief of the Air Force of August 24, 1943)

In case of air attacks, it must be considered that safes that contain valuables are exposed to fire damage for prolonged periods of time. Safes of usual construction are not equal to this great strain. The ordinary steel-cabinets have not proved satisfactory during the fires. Better, but still not complete, protection is afforded by cabinets lined with ash, diatomaceous earth, or concrete slabs. Wall safes with padded doors, as well as underground vaults, have proved very satisfactory. It is therefore evident that safes, with the exception of wall safes and underground vaults, will need additional protection against fires caused by air attacks. Additional protection can be achieved by the following measures:

 Put safes in lower floors, if possible, in the basement. Also, if possible, erect safes in wall or door niches or in corners between massive walls.

- 2. Wall in the safe on all sides. The doors of the safes must be especially secured (fire doors).
- 3. Keep rooms that house safes free of flammable materials. Builtin partitions must be treated with fireproofing.
- 4. Documents, files, and the like that are being kept in safes, must be tied together and kept in the center of the safe. Important documents must be wrapped in fireproof material (fiberglass, mineral wool). Wooden boxes in the safes afford a small additional protection. Leather cases, suitcases, etc. on the other hand, do not give protection. Photocopies should be made of all important documents and kept in a less dangerous spot.
- 5. Most important of all, special caution is advised when opening the door of the safe. Most of the damage occurs not during the fire itself, but when the door is opened. The inside of the safe is only slowly being heated by the fire, but also cools off very slowly. Even if the safes feel only somewhat warm from the outside, much higher temperatures may be expected on the inside. When the safes are opened too quickly or too soon, the contents made of paper and similar materials might catch fire due to the exposure to fresh air. Therefore, safes that have been exposed to a fire should not be opened until they have cooled off completely.

It has also proved to be of a great help to put containers filled with water inside the safes.

(Signed) Kehrl

The Police President

From Hamburger Zeitung, July 29, 1943

The Reichsmarshal for the Hanseatic City of Hamburg, Party Member Hermann Göring, sent the following telegram to the Provincial Party Leader:

"Hearing of the massive air attacks that the Hanseatic City of Hamburg had to bear, I am with you and the much tried population of Hamburg with all my heart! My instant decision to fly to your city was thwarted, however, by the urgent request to be present at the Headquarters of the Führer. General Bodenschatz, my deputy, has reported to me about the horhible sufferings, as well as about the wonderful conduct, of the population of Hamburg. To contribute to the amelioration of your great needs, I have today ordered my Air Force Administration Officer to distribute the last remaining stock of Air Force booty to the bomb victims of the City of Hamburg.

> Hail to the Führer! (Signed) Göring, Reichsmarshal

From Hamburger Zeitung, August 2, 1943

CONSTANT CIVIL DEFENSE PREPAREDNESS

The Police President decrees the following:

In plants of the industrial civil defense and expanded self-protection services, constant preparedness to the extent necessary must be maintained in the future. This not only applies to undamaged installations, but also to buildings that were more or less destroyed by high explosive or fire bombs. Fire nests that were not completely extinguished must be put out or--if this is not possible--must be kept under constant surveillance. If a spread of the fire to undamaged buildings, materials, etc., is threatened, the appropriate civil defense sector must be notified immediately. From Hamburger Zeitung, August 8, 1943

FLAK FIRE MEANS AIR ALARM

Aside from the stationary sirens, the mobile sirens on the special vehicles of the civil defense police will also sound the air alarm. The siren vehicles will be used to a greater extent in the future. But aside from them, flak fire, too, means air alarm!

From Hamburger Zeitung, August 7, 1943

GORING IN HAMBURG

Reichsmarshal Göring paid a brief visit to our city yesterday. The Provincial Party Leader, Karl Kaufmann, reported to him about the terror raids and their effects. He also told the Reichsmarshal at the same time which emergency measures have been taken and what preparations have been made to secure Hamburg's continued participation in the war effort. The Reichsmarshal gave his thanks to the Provincial Party Leader and his assistants, to the administration, to the representatives of the party, and to the military for all they have done. He emphasized his close rapport with the Hanseatic City of Hamburg and its people. It has always been his belief that the people of Hamburg will prove their worth even in the toughest struggle, but his expectations of the conduct of the population were surpassed.

The Reichsmarshal later inspected several damage sites with the Provincial Party Leader. The population greeted him with enthusiastic shouts. They showed that the hours of battle and distress have welded the leaders and followers even closer together. The marshal was impressed by the will to rebuild shown by the people of Hamburg, which the Provincial Party Leader not only told him about, but which was also visible at all sites of destruction.

After a detailed discussion about the emergency measures instituted for the benefit of the population of Hamburg and away from Hamburg, the Reichsmarshal said goodbye to the Provincial Party Leader with the assurance that everything would be done to pay back the enemy for all the human suffering and material destruction that the Hanseatic City of Hamburg had to experience.

From Hamburger Fremdenblatt No. 207, August 27, 1943

"AND IF YOU DON'T RISK YOUR LIVES . . . "

Four weeks have passed since the nights of terror over Hamburg. Thousands and thousands of hands have been busy to bind the wounds of the city, temporarily at first. The fellowship of the war, strengthened by the nights of horror, makes everyone the same in the face of death and gives help and solace. The thousand-fold sorrow is borne quietly. The universality of the heavy fate has become a support for all.

Now that one has a moment's time to think and to grasp the course of the flood of events, details emerge from the wealth of impressions, and you see once again the faces, full of effort, sweat, and fatigue, of those people who stood side by side with you during those terrible hours. The whole population of this city has accomplished tremendous feats and has borne near impossible physical exertion without complaint.

At their side stood the comrades of the police, the police reserves, and the civil defense police, who, disregarding their own lives, did everything possible from the first moment on. There was no hesitation, no pause, no sleep, and no rest. Everyone did what had to be done and what was the most urgent task at the time. Never shall we forget the faces strained to the utmost, the uniforms singed and torn to shreds, and the wounded, for the most part older men of the civil defense police and security police, who again and again dived into the sea of flames without thought to themselves to help and rescue. Many of these men, like the rest of the population, knew nothing about their families at that time or had lost house and home and dear ones already during the first night of terror; they were just as homeless, as filled with sorrow, as all the others. But they stuck to their posts and did what had to be done and a thousand times more. They did not think of themselves for even a single moment.

Where the police stations were destroyed, as happened frequently, an emergency station was established somewhere in a half-destroyed building in the middle of the smoke and fire. No time was lost. In connection with the fire fighting, many kinds of tasks, some of them new, arose that had to be and were mastered. It is true that the forces could not be everywhere, because the damage sites were too extensive. But wherever they were, thousands of persons were rescued from death by fire or by asphyxiation out of the shelters of burning houses. The burning heat near the fire, the heavy labor at the hose, the biting smoke, the rain of sparks and ashes--all were borne bravely. In addition, there was the constant danger of being hit or buried by falling walls. Many of these brave men paid for their willingness to help and sacrificed with their lives. Vehicles with their crews were hit by high explosive or fire bombs and made unfit for battle. Aside from smoke poisoning, many cases of second and third degree burns occurred.

The main task of other units of police was to free people from blocked and partially overheated shelters and to bring them to safety. Fronts of houses that were gutted or had been destroyed by high explosive bombs were dynamited, and every Hamburger knows the rolling thunder of the blasting operations during those weeks. Streets have been and must be cleared of falling debris. Bomb craters had to be filled in, so that the main traffic arteries were passable again and motorized units could function. Another tremendous task is the recovery of the dead.

Forces of the Medical Corps and the brave girls of the rescue stations recovered the wounded and brought them to safety. The messengers of the civil defense police, the Hitler youth, and the emergency squadron of the motorcycle corps fulfilled their tasks during the failure of the telephone lines without regard to their own lives. The military forces rushed to offer assistance. The Federal Labor Corps and the out-of-town fire departments which came to the city from everywhere must not be forgotten. The same goes for the party, about whose participation a special report was published.

The police of Hamburg, with their assisting agencies, have done their duty. The true comradeship that bound them to the population in their care during the hail of bombs and the fire of destruction will bear its best fruits in a brighter future. From Hamburger Anzeiger No. 176 of August 23, 1943

THE NIGHTS OF GIGANTIC BATTLE FOR THE FIRE DEPARTMENT OF HAMBURG

A Song of Songs from Hamburg's Hardest Days

Every one of us during the past weeks has seen the fire engines of the Hamburg Fire Departments at work in the streets. Pipelines more than a kilometer long carried the water to districts where new fires were always erupting. Day and night, they fought with their weapons against the fire. Not for nothing were they thoroughly schooled in their tasks in war and peace. During those days of great struggle they had to give their utmost strength and knowledge.

All Fire Brigades in the Battle

The Hamburg Main Fire Station remained practically undamaged in the midst of a district hard hit by the raids. Therefore, the opinion may exist here and there that the fire department was primarily concerned with saving their own headquarters from the flames. The truth is far different, however. As a matter of fact, during the second night of terror, the main fire station was guarded by only a handful of firemen left behind, who first extinguished the falling stick fire bombs and then provided a shelter for the refugees streaming in from the burning streets, where they were safe from flying sparks and the unbearable heat. All of the fire brigades, in the meantime, were in the midst of the struggle against the fires at the most difficult spots.

Planned Mobilization

Without doubt, many tenants of a burning house might have wondered during those nights, "Where is the Fire Department?" Today, after everyone has seen with his own eyes that thousands of fires developed and flared up during the same time, even the layman can see that the fire brigades had to be put to use according to plan to save the "strategically most important" objects first and in this way prevent further spread of the catastrophe.

Crews Greatly Strengthened

The fire-fighting activity is only part of the task of the civil defense police during air raids. The core of the crews is made up of active, peacetime firemen who were strengthened considerably by large numbers of reserves and who also had a variety of equipment at their disposal. While in peacetime, the fire department of Hamburg is divided into 17 firehouses, numerous new quarters for crews and fire engines were created during the war. These men are under the leadership of experienced and proved officers and noncoms of the fire protection police. The mobilization of these forces in the civil defense sectors is effected by the technical leaders of the fire department and the reserves, and reinforcements from out-oftown fire departments by the Commandant of the fire protection police who is on the staff of the Police President.

Out-of-Town Assistance

Out-o?-town fire departments could be seen in Hamburg shortly after the first massive attack in the night of July 25. These fire departments, of course, had not been called in haphazardly; otherwise, endangered cities and counties might be left without fire-fighting equipment in case of danger. The territory surrounding every endangered city is divided like a chessboard, and according to need, fire brigades are pulled out. During major attacks such as those on Hamburg, motorized fire brigades rush to the rescue from as far as hundreds of kilometers away. These brigades are received at the arrival points by "pilots" who direct them to their mobilization site.

Thousands of People Saved!

The fire protection police could not have worked in such a wellplanned manner if it had not been kept informed by the tower lookouts and the civil defense patrols of the position of the fires. As an example, after the second terror raid, when main traffic arteries were blocked by falling buildings and flames and the danger of people being buried in their shelters became greater all the time, crews of several fire stations received orders to bring these endangered persons over a specially mapped route to safe open country. The fire crews were so busy with the task that in the meantime two fire houses burned to the ground without any firefighting crews being available to fight the fires. The men of another fire station kept an open square in a particularly endangered neighborhood under a heavy veil of water, so that many people could escape out of the terrific fire storm, which generated tremendous heat. Altogether, thousands of people were saved by these special efforts of the fire protection police.

Scouting Trips Through The Fire Storm

All members of the civil defense police have been on constant call since those dramatic attack nights, and as of now, only a few reports are available in which the events are described in brief, realistic form. But these few reports are enough to give a lasting, unforgettable impression of the extent of courage and will to sacrifice displayed by these men to save lives and possessions. One of them made scouting trips through the fire storm in his automobile until his floor mats ignited due to the tremendous heat. Others fought their way through to a public bunker where 4,000 people waited for a sign from the outside world. They made sure that the air in this bunker was satisfactory and calmed the crowd to such an extent that morale rose dramatically. Another one continued rescuing people endangered in their shelters, until he himself collapsed unconscious. As soon as he came to at a safe place, he immediately got up to help with the fire fighting. The considerable number of dead and wounded firemen and the large number of destroyed vehicles are proof that the men of the fire department attended to their tasks without regard to their own lives. All that these men have done for Hamburg will never be forgotten.

While we speak here particularly about fire fighting, we should not forget that our fire protection police have many other tasks in store for them. They offer assistance everywhere, as for instance in pumping cellars dry and clearing streets. The whole civil defense police force is operating now, as it was then, to remove dangers and damage and to protect us anew. From Hamburger Fremdenblatt No. 212

MARK YOUR CIVIL DEFENSE LUGGAGE!

The Police President points out again that every piece of luggage that is taken to the shelter should be marked with the name and exact address of the owner in his own interest. Also, it should have an Information Address (name and address of a relative or friend, if possible in another town). Lost and recovered belongings, when properly marked, can be returned to the owner faster and easier, and, if the owner cannot be found, to the information address.

* * *

From Hamburger Anzeiger No. 188, September 6, 1943

At Hagenbeck Zoo during the Bombing Nights

THE ANIMALS KNEW NO PANIC . . .

The British terror raids on Hamburg, which destroyed in addition to many private homes, numerous cultural establishments as well--schools, museums, libraries, churches--did not stop at the Hagenbeck Animal Park whose spectacularly new concept of animal-keeping was known the world over and served as a frequent example for other zoos, especially in America. We got in touch with Emil Koehrmann, a member of House Hagenbeck for many years, and had a talk with him about the experiences of the animal keepers in the zoo during the attacks.

The theme "Catastrophe in the Zoo" has been treated by sensational novels and films many times, even in peacetime, and to be realistic in such treatment, information was requested from Hagenbeck people in the past. They had the firsthand experience; they ought to know.

These animal experts never did go along with the idea of a breakout of ferocious wild animals spreading terror in the streets and attacking human victims. The truth will look differently, they used to say, and the beasts will be glad to crawl away somewhere. Did the events of the July night, when fire and high explosive bombs rained down on the zoo, confirm this opinion? Yes! A panic among the animals did not take place. And if you believe that voices from the jungle and the steppes filled the air, you are also very much mistaken. A severe shock reaction seemed to paralyze the inmates of the zoo and change them completely. A wild horse, usually very hard to keep in check, would not move from the side of a tame horse that had wandered into the zoo! And a buffalo, usually a dangerous fellow, suddenly became very meek.

The careful civil defense preparations made in the zoo a long time ago and constantly kept up to date by dry runs and practice exercises proved very effective. Everything that could be done to save buildings and animals was done. The men fought valiantly, but it was beyond their capacity to avoid all losses.

They fought fires and rescued animals. They advanced against the blaze in groups and at first did not realize the full extent of the catastrophe that befell their domain. The homes of some of the wardens burned down while they were working in the park.

Regular visitors to the Hagenbeck Zoo frequently have special favorites among the animals there, who recognize their voices and whom they always visit first. They will note with sorrow the loss that this July night has wrought among the animals, especially the predators. The fire raining down from the heavens knew no mercy for the dumb animals. (The emergency killing squads had comparatively little work to do).

There were examples of death-defying devotion of the wardens for the animals in their care. For instance, the man who used a pause in the firefighting activities at a more important spot to free the longhorns caught in the debris of a collapsed cage. The hippopotamus did not want to leave his damp bed at first, but later on was most happy in the waters of the Japanese pond (saved as a water reservoir for fire fighting).

The number of escapees was small and, not without pride, the Hagenbeck people point out that all of them were eventually caught. All of them, even the eagle, which could have escaped through a hole in the aviary; even two young wolves, which during their excursion into the neighborhood probably dealt death to a few chickens along the way, but which a while later returned to the zoo on their own and could be shot there.

Of course, these were animals no longer used to freedom, and they simply came back to their feeding places, but does this behavior not also speak a little bit for the fact that Hagenbeck has created a real paradise for the beasts? What made this place of research, education, and entertainment, well known all over the world and an example for numerous zoos in foreign countries, an attractive target for the enemy? This is a question for which the British-Americans will owe us an answer . . .

.

From Hamburger Anzeiger No. 185, September 2, 1943

TAKE IDENTIFICATION PAPERS WITH YOU!

The effects of the massive attacks on Hamburg showed us how important it is that every citizen have some identification documents with him at all times. Especially in the cases of the seriously wounded, who were unable to give information about themselves, great difficulties arose when identifying papers were not available. Their families lived through hours and days of great anxiety because they could not be notified.

Every citizen, therefore, should have some sort of identification on his person, if only a slip of paper in a bag around his neck, which should contain the following information: first and last name, profession, date of birth, and place of birth. In case of children, first and last name of father, and maiden name of mother, as well as street address of parents.

An alternate address is also very important (names and addresses of one or more relatives or friends). Such a slip, carried in a bag around the neck, might be destroyed if the citizen should lose his life during a subsequent air attack; on the other hand, it might come in handy a thousand times. If little children separated from their parents but rescued during the attack and taken to a safe place had carried such a slip of paper on their persons, it would have been so much easier to return them to their parents, and much trouble, sorrow, and anxiety might have been spared their families.

* * *

From Hamburger Fremdenblatt No. 222, of September 8, 1943

HAVE FIRE-FIGHTING EQUIPMENT READY

The civil defense portable fire extinguishers have proved most valuable. Their number, therefore, is to be increased from three to four in larger apartment buildings. The Federal Civil Defense Organization will assist in this effort. Also, tearing hooks have proved very valuable. Water and sand supplies for fire fighting in the houses must be increased. The civil defense tools themselves must be kept in the air-raid shelter or, in houses without basements, on the ground floor. Gas masks must be worn when fighting fires.

* * *

From Hamburger Anzeiger No. 191, August 9, 1943

WINDOW CURTAINS INCREASE FIRE DANGER

Hints for Fire Prevention During Air Attacks

Window curtains and drapes increase the fire danger. If it is not possible to remove the curtains in especially vulnerable apartments altogether, at least the curtains should be opened during an attack and tied back on the side of the window, so that they cannot be reached by flames immediately.

As soon as fire has broken out in the immediate vicinity, it is advisable to take down the drapes and curtains. Furthermore, during an alarm, if all the lights have been extinguished in the apartment, the blackout curtains should be pulled up and the window should be left closed, so that fire from the outside cannot get into the rooms. The apartment front door and the doors of the rooms should be opened wide in order to have a constant view over the whole apartment in case of fire. The sand bags belong always on the righthand side of the doors, so that they can be grabbed by everyone, even in darkness. During an attack, constant patroling trips through the whole house from the attic to the basement must be made. All persons in the air-raid shelter, if they are able bodied, must be available to begin fighting fires when requested to do so.
From Hamburger Tageblatt No. 223, September 10, 1943

WHY JUST THE CORNER HOUSES . . .?

The People of Hamburg Noticed Something--But it was Interpreted Incorrectly.

"This must have been a high explosive bomb. . . ." This sentence was dropped very casually in a questioning tone in the middle of street traffic in view of a heap of debris which was once a corner house.

At the next street corner, the same picture and the same voice, but this time already in the definite tones of expert opinion: "Here is another high explosive bomb hit."

During the next few hundred meters, one talked about trivialities. Then another street corner, and again the well-known voice with another opinion: "Again a high explosive bomb, here on the corner. And what a bomb! This is the third corner house along our way that was hit by a high explosive bomb. Funny that they always hit corner houses. Anna, did you notice this too?"

The above is a classic example of the way misinformation is created. Because, in reality, not one of these three damage site was hit by a high explosive bomb. These were fire ruins that were dynamited afterward because of their great danger of collapsing. But why were they all corner houses? Well, corner houses are especially prone to collapse under certain conditions, and when in addition, they threaten busy traffic intersections, they are put at the top of the list of our demolition squads. If you do not know the circumstances, however, you might easily be misled.

In this way, all sorts of strange thoughts and completely superfluous worries might arise. If you really want to know what the real dangers are in an enemy attack, you need only read the civil defense proclamation by the Police President carefully, which is based on all the experiences during the attacks in the days of catastrophe. This proclamation, distributed as an instruction sheet to all air-raid wardens, should be in the hands of every citizen of Hamburg. Every word in it is important. What is not mentioned in it is not important. The corner houses are not mentioned in it. No one therefore need worry about them and their rumored susceptibility to high explosive bombs. There are other worries to make up for

it, you will say. Where do we get the sand? Where do we obtain additional portable fire extinguishers and water containers? Now these are worries that are productive, and something can be done about them. As concerns the sand, it is being delivered to many streets already. The sand boxes are there to be emptied. Also the sand boxes of the playgrounds, which are deserted anyway, still contain considerable supplies of sand. As suggested in the Proclamation of the Police President to the Population of Hamburg, in case of all other questions, one should approach the air-raid warden, officials of the Federal Civil Defense Organization, or the appropriate civil defense precinct in which one resides. Where there is a will, there is a way! From Hamburger Tageblatt No. 227, September 14, 1943

MARKINGS ON HAMBURG'S HOUSES

On numerous damage sites in Hamburg, markings were and are being affixed whose meaning is not clear at first glance. On badly damaged or completely destroyed buildings one might see red or black crosses or circles. A cross indicates that the house is totally destroyed; a circle, that it is badly damaged. The color indicates if the building may be entered or not. The warning color red cautions against stepping into the debris or ruins. If, for instance, furniture or other possessions are to be removed from a house marked with a red cross or red circle, this must be done by experts from the civil defense police or, at the very least, under their supervision. These markings were originated by the experts of the department of public works. As at that time the salvaging of material possessions from damaged buildings was being carried out on a large scale, these markings made the task very much easier. Even today they still have meaning in many cases. If an owner or tenant of a badly damaged house goes there to try and salvage some of his possessions, he must be aware that the red marking in that case means danger.

Circles painted in green mean that the damage site has been searched for dead bodies. The hastily recruited workmen were directed by colored stickers with firm names printed on them to the places where work was to be done. For roofers, the signs were red; for glaziers, green; for cabinetmakers, yellow; and for carpenters, blue.

There are no signs with the designation, "This house will be dynamited!" Perhaps a sign saying "This house has been dynamited!" would be in order, because again and again, the debris from the dynamiting by our demolition squad is taken for the effects of high explosive bombs, which leads to false impressions both about the number and the effects of high explosive bombs.

From Hamburger Anzeiger No. 195, September 14, 1943

FIVE MINUTES MAKE THE DIFFERENCE

Every House in Hamburg Must be Ready

As always during a war, it is of the utmost importance to close ranks and fill the gaps. That means to make our homes and apartments prepared for civil defense once more, even more completely than was the case before the attacks. What we can do for the future will depend primarily on the work done until now. But everything must be done even more comprehensively, more intensively, and more resolutely. Even if we cannot save everything from the terror, we can at least save some things successfully.

An Official Instruction Sheet

An instruction sheet by the Police President to be distributed shortly, which will give detailed instructions, is briefly summarized here.

The best defense against large fires always has been and still remains speed and resolute attack. "After five minutes, five fire engines often are not able to extinguish a fire that could have been doused with one bucket of water or one bag of sand in the beginning." Therefore in case of alarm, do not stay in your beds, but go down to the air-raid shelter immediately and put yourself at the disposal of your air-raid warden. An alerted emergency fire squad equipped with a fire extinguisher and tools can go to work at once when something happens. A bunch of sleepy people can only lead to a great mix-up. In every house, all tenants, and especially the men, must serve as fire watches. Those assigned to this duty must not leave the house at night--except for professional reasons--and most of all, must not go to a public bunker.

Water, Even in the Air-Raid Shelter!

Listening carefully for direct hits, fire patrols must continue their trips through the house during the attack. This is absolutely necessary! You must immediately proceed with water and sand against fire bombs dropping into the house. Phosphorus bombs must be covered with very wet sand

and lots of water. Phosphorus debris must be removed to the outside at once. It is most important therefore to replenish and enlarge the sand supplies within the house continually. These supplies must be easily accessible to all floors, so that no time is wasted searching for them. The same thing is true to an even greater degree of water. Every air-raid warden must face the possibility of the water line from the outside breaking down, leaving him with only the water supplies stocked within the house to fall back on. Bath tubs, if they are kept filled, are a good reservoir for water. Water must be available on all floors, and also in the shelter. The latter should also be stocked with drinking water.

The number of portable civil defense fire extinguishers should be increased wherever possible. Fuel must not be stored in the attic in the future. If necessary, coal may be stacked on the balcony. Partitions and wooden dividing walls in attics are "to be removed ruthlessly and permanently." The removed wood, if stacked horizontally on the floor, increases the resistance of the attic floor abainst penetration by bombs. A thick layer of sand is also very practical for this purpose.

The staircase to the attic should be in proper repair and usable. Civil defense equipment does not belong in the attic, but in the basement where the fire-fighting squad can reach it easily and where it will not be destroyed or damaged before it is needed.

Escape Routes to be Determined in Advance

If a house has caught on fire and the development of a conflagration forces you to abandon your house and leave the air-raid shelter, this should be done in an orderly fashion and under the resolute direction of the air-raid warden or another person before it is too late. For this purpose, the air-raid warden must keep himself constantly informed about the general situation in his neighborhood. He and his community must agree beforehand about a possible escape route and place of safety, as for instance a park. During the escape, which if necessary must be undertaken between burning houses, water-soaked blankets and cloths wrapped around the body and held in front of mouth and nose and, in the case of women, also around the hair afford sufficient protection. Heavy shoes help prevent burns on the feet.

When the Fire Storm Begins to Abate

In situations that overwhelm the self-protection forces, the first and most important thing is the rescue of the population. However, when the fire storm is over, the extinguishing of fires burning from floor to floor may again be successfully taken up by the self-protection forces. The water should then be brought in by long bucket chains. With resolute action much can still be saved that might otherwise be destroyed.

All of the above suggestions are of course not panaceas and are not always 100 percent effective. In certain cases, people may be powerless against the force of the elements, but resolute self-protection forces are frequently, if not always, able to keep the rage of the fire under control by attacking it in time and with all available strength. The houses, apartments, furniture, and parts of the city saved from certain destruction this way are worth a few hours of exposure to danger and selfsacrifice. The weeks now behind us have proved this in a thousand cases.

PHOSPHORUS FRAGMENTS IN THE DEBRIS

Protect your Children from Burns!

The Police President announces:

Time and again, I have urged parents and baby sitters to warn the children in their care of the dangers inherent in the touching of enemy munitions or fragments thereof, in playing near or even in destroyed buildings, and in rummaging through debris and ruins.

In the past few days, there have been some unfortunate accidents, which make it necessary to issue my warning again. Some children who, against the warnings of their parents, dug and played in the debris developed blisters on hands and legs that were very painful. A physician who was consulted determined that the children had been playing with phosphorus scraps and suffered severe burns.

Ashes, phosphorus remnants, and mud all mix with the soil due to weather conditions. At any time, there may be remnants of phosphorus mixed with the earth, as well as with pieces of debris.

Adults who see children playing in debris and ruins are obligated to remove them from there. It is obvious that not every destroyed building can be blocked off, but it is generally known that no one has any business in the debris, least of all children.

POLICE WILL PROCEED VIGOROUSLY!

When the Alarm Sounds, Clear the Streets Immediately

The Police President wishes to point out specifically that the population must act in conformity with proper civil defense procedures during every air alarm, regardless of whether it takes place day or night. Part of civil defense discipline is that every citizen seek the nearest airraid shelter as soon as the warning signal Air Alarm is heard or, if an air-raid shelter is not available nearby, take cover wherever possible. Automobiles, horse carriages, etc., must stop immediately in accordance with regulations. In case of air alarm, the streets must be cleared completely within the shortest possible time, so that unnecessary losses are avoided, because bombs may drop before flak fire starts.

Based on observations during the past daytime air alarms, all police units have been ordered anew to proceed ruthlessly against persons who do not comply with civil defense regulations and report them to the authorities. Excuses, no matter what kind, are not valid.

From Hamburger Tageblatt No. 252, October 9, 1943

DAYTIME AIR RAID ALARMS

call for the same civil defense discipline as nighttime raids. The enemy will not tell us ahead of time which city he will hit. If the sirens sound with an undulating tone, this means that the bombs might fall on our city at any time. Those that still hesitate are helping the enemy. Help to avoid human losses that are unnecessary! People of Hamburg, think of it:

CLEAR THE STREETS IN CASE OF DAYTIME ALARM!

- * *

From Hamburger Tageblatt No. 252, October 9, 1943

BOMBS DROPPED BEFORE THE FLAK FIRE BEGINS

Behavior During Air Raids

The Police President deems it necessary to point out again that the population must act in accordance with civil defense regulations during every air raid, regardless of whether it occurs during the night or in the daytime. It is part of civil defense discipline that every citizen on hearing the Air Alarm go to the nearest air-raid shelter immediately or, if none is in the immediate vicinity, take cover wherever possible. Automobiles, horse carriages, etc., must come to a stop at once. The streets must be cleared immediately when the alarm sounds, so that unnecessary losses are kept at a minimum, or bombs may be dropped before the flak fire begins.

Based on observations during recent daytime air raids, all police have been ordered again to proceed ruthlessly against all persons who do not comply with civil defense regulations and to report them to the authorities. Excuses, regardless what kind, are not valid. People must be prepared to accept the consequences if they act senselessly.

From Hamburger Anzeiger No. 221, October 14, 1943

WHEN THE SIRENS WAIL. . .

it is too late to make preparations. All houses, therefore, must be prepared for civil defense at all times! And in case of alarm, we must go without hesitation to the nearest air-raid shelter. Bombs may fall even before the flak fire is heard!

TO BE DISPLAYED TO THE CIVIL DEFENSE COMMUNITY

In case fire bombs fall into houses during an air raid, the selfprotection emergency squads and the Civil Defense Communities have the duty to start fire-fighting activities immediately. Only when one's own house, despite all efforts, is beyond saving and conflagrations have developed in the vicinity that cannot be brought under control by human efforts, must the air-raid shelter be evacuated without delay. The airraid warden, therefore, must keep himself informed of the situation in the vicinity of his house at all times by personally reconnoitering outside.

In the event of a fire storm, collection points have been designated in the various districts of the city, which must be used by the population in the endangered areas.

The air-raid warden and the members of the Civil Defense Communities must be certain in advance which route to take to reach the designated collection point as quickly as possible in case a fire storm develops.

FOR THIS HOUSE, IN CASE OF FIRE STORM, THE FOLLOWING COLLECTION POINT(S) HAS (HAVE) BEEN DESIGNATED:

(The designated collection point address(es) are to be filled in the above space).

TO THE PLANT SUPERINTENDENT

Notice No. 4 (for industrial plants only)

Dear Sirs:

On the basis of our own experiences gathered from the recent catastrophe in Hamburg, several lessons have been drawn for the civil defense of our industrial installations. I therefore recommend that you study the following instructions carefully.

It was noted that at first high explosive bombs were dropped to destroy parts of buildings and to break out windows and doors through means of the blast wave overpressure from the detonation. Then followed the dropping of stick fire bombs, phosphorus bombs, and canisters. In this way, the incendiary ammunition falls not only onto the roof, but also into the rooms from the sides, aided by the previous damage, so that fires may develop in several floors at the same time.

The civil defense forces therefore must be grouped so that small fire extinguishing squads can reach the various apartments from protected places from the staircases. Special attention should be given to making sure that the necessary hoses and fire extinguishing materials are stored within easy reach.

All flammable material should be stored as far away from the windows as possible. To the extent that curtains are not needed during the summer months, these are to be removed at once. The spread of fires is aided considerably by curtains.

Large openings in ceilings and walls leading to other rooms have proved to be very dangerous. On the other hand, true firewalls have been very useful.

In massive air raids, such as the ones we have just experienced, outside water and electricity sources quickly fail. Therefore, an independent store of water for motorized fire engines from a well or from containers is very important.

As far as possible, all civil defense forces should be equipped with protective goggles (formerly used as automobile goggles and closed on the

sides). These goggles prevent eye injuries. Fire-fighting forces are more mobile with these goggles than when wearing gas masks.

In densely populated districts with quickly spreading fires, a hurricane-like fire storm with strong showers of sparks is a distinct possibility. Therefore, several paths should be designated in advance for forces mobilized or quartered in the plant to escape the fire storm. Special emphasis should be put on reaching open country as quickly as possible. Unfortunately, it was found that in narrow streets the air quickly becomes oxygen-depleted because of the developing heat, and people are in danger of suffocating.

In air-raid shelters, too, large quantities of water should be stored in addition to the sand. The water is needed to soak blankets, which must also be stored in quantity. If the shelter must be evacuated because of threatening danger, people must wrap themselves in wet blankets to get through the fire unharmed.

Emergency lighting arrangements should be sufficient to keep going for several days if necessary.

The first air station in an industrial plant must be stocked with a sufficient supply of eye ointments, boric acid solution, camomile tea for bathing the eyes, and dressings for burns.

It is advisable that points of general interest to all employees be gathered from this letter and put into an instruction sheet to be given to every employee. It should be easy for you to pick up the points that apply to your plant and summarize them in simple language. Furthermore, preparations should be made for a messenger service should the telephone fail, so that communication with the outside may be maintained.

The experiences gathered from the raids on Hamburg force us to keep a daily inventory. Please make out a certificate, as per the sample below, every day after the workday ends, listing the stock of tobacco and taxed and nontaxed cigarettes on hand. This certificate must be signed by the plant superintendent and by the department head concerned with the distribution of tobacco and tobacco products. The certificate must be made out daily in triplicate and kept as follows:

- 1. One copy should be kept personally by the industrial civil defense chief on duty; this person will keep it at the industrial civil defense station or in a safe.
- One copy will be kept by the plant superintendent on his person (billfold).

3. One copy will be kept by a responsible colleague (assistant or department head).

The inventory certificates must be returned to the superintendent every day. They will then be kept in a special file.

An inventory certificate similar to the one above should also be kept (in duplicate) on:

Cash on hand Stock on hand (estimated) packaged, and separated by type of packaging

Unpackaged stock on hand

Previous regulations concerning the storing of important business documents in the basement after working hours remain in effect.

I am making it the personal responsibility of all plant superintendents to comply strictly with the above regulations.

In friendship,

(Signed)

Appendix 13

POLICE SECURITY MEASURES Posters and Newspaper Clippings

POSTER

LOOTERS AND THIEVES WILL BE SHOT!

(Same in French)

(Same in Dutch)

The Defense Commissioner

ANY LOOTER WILL RECEIVE

THE DEATH PENALTY!

The POLICE PRESIDENT Kehrl

Sheet 2

Federal Criminal Police Criminal Police Headquarters Hamburg

Hamburg, November 8, 1943

Description of Isolated Looting Cases

On July 28, 1943, at about 6 a.m., an SA man at An der Alster across from House No. 44 was shot to death by a local troup leader and finance officer, because he looted the houses along the Alster despite having been warned previously.

The SA man was in uniform. He was called to his unit on July 5, 1943, but did not heed this call. He loitered around Hamburg during the terror attacks.

* * *

The apartment of a veterinarian was destroyed during the night of July 25, 1943, by enemy air attack. Only a part of the kitchen remained standing. The wife of the veterinarian first asked a workman to recover the still remaining things from her kitchen, and then she asked him to get dishes, glasses, etc., out of the apartment of a neighbor. The workman was never told that this was on orders of the tenant. The woman did not turn over the salvaged things from the neighbor's apartment to the tenant but kept them for herself. Furthermore, from the cellar of a neighboring house she stole a box with china belonging to a former co-tenant of her house and brought this box to a friend's house. The veterinarian and his wife were quartered somewhere else in the meantime. The absence of the tenants was used by the wife to loot the apartment. She stole dishes, crystal, silverware, linen, clothes, etc. These things she packed into 40 packages and removed them to her friend's house.

This woman was in a comfortable financial position, and the medical expert judged her of sound mind. She was sentenced to death and to permanent loss of all citizenship rights by the Special Court on October 18, 1943, for the crimes of looting as per Paragraph 4 of the People's Damages Act.

Mrs. D. of Wandsbek was totally bombed out during the night of July 27, 1943, by an enemy air raid. She had been the owner of a uniformtailoring shop and also worked for the Federal Ordnance Department. After she had been quartered with an old woman, she started to loot. She stole men's and women's clothing, bedding, and other items from bomb-damaged houses in large quantities. The value of the stolen goods amounted to several thousand marks. Most of the things she stole she succeeded in hiding. Part of the loot she brought to her niece living in the country. Mrs. D. was sentenced to death, and the death sentence was carried out on September 25, 1943. Her niece received a sentence of three years in prison.

* * *

During an air attack in the night of July 28, 1943, a couple living in Beyerstrasse was bombed out. The couple found quarters with relatives in Billwärder. The new quarters were also bombed during the night of August 3, 1943. During this attack, the relatives and other persons quartered there were killed, and one woman was brought to the hospital severely injured. The couple remained unhurt, and they used this opportunity for looting. During the ensuing days, they dug all buried item out of the debris and kept them all to themselves without differentiating between their relatives' belongings and those of outsiders. Despite the fact that the couple had saved their own food ration cards during both air raids, they appropriated the ration card of the severely injured woman. Both took advantage of the catastrophic situation from motives of greed. The Special Court has not pronounced sentence as yet.

From <u>Hemburger Zeitung</u> of July 20, 1943

DO NOT BELIEVE RUNORS!

Newspapers are not published in their usual manner at present, and the radio is no longer accessible for most of us. It is unavoidable that rumors start circulating at such a time. It is not always with bad intentions that they are passed on, but in some cases there is obviously a hostile or even traitorous intention behind the originating of certain rumors, regardless if these rumors concern the present situation of Hamburg or if they are political rumors, some of them of ridiculous content.

The political leadership of Hamburg and the <u>Hamburger Zeitung</u> will try, despite all difficulties, to keep the population of Hamburg informed of all developments. The first step must be taken by the population to the effect that they not spread rumors that come to their ears.

Let us maintain discipline in every respect, and the difficult tasks of these days will be much easier for all of us in Hamburg!

. . .

From Hamburger Zeitung of August 5, 1943

CAUTION IN STREET TRAFFIC!

Walking in the streets of city districts severely damaged by the air raids is very dangerous. House fronts still standing, wall fragments, etc., might collapse at any moment, and loose bricks and shingles might fall down.

This danger cannot be indicated by signs everywhere. Citizens are therefore urged to watch for these dangers themselves. Wherever possible, use the middle of the street and watch slanting house fronts and jagged roof corners, so that accidents may be prevented.

From <u>Hamburger Zeltung</u> of August 5, 1943

SEVEN DEATH SENTENCES FOR LOOTERS!

JUST FUNISHENT!

Several looters have been brought to justice before the Hanseatic Special Court now in permanent session in the Criminal Justice Building. The locksmith Walter Holzapfel was caught in Tarpenbeckstrasse with two bicycles not belonging to him. When he was arrested, he began acting like a mad person and started hitting the policeman with a flower vase and with the handcuffs put on him. He was sentenced to death as a people's enemy and a dangerous criminal because of looting.

The office worker Friedrich Bühler was observed on July 29 when he helped himself to things on the street in front of a destroyed restaurant. He had already appropriated a big Isundry basket with linens, a radio, and several cartons of cigarettes, which he had hidden in a sack. Furthermore, he had given two winter coats and two suits from bombed out apartments to a fireman. Bühler was sentenced to death for looting.

The French worker Naudin had stolen silver money, women's shoes, and clothing from Rosenstrasse in Altons and sold this stuff in St. Pauli. He tried to throw away the profit of RM 800 resulting from this sale when he was arrested. He, too, was sentenced to death.

On July 31, the Latvian worker Walter Miskins stole a man's suit, shirt, underwear, gloves, and shoe leather from a garden shop in Basselweg whose owner had been killed during an air raid. Miskins was caught while trying to get rid of the package. He, too, was sentenced to death as a looter.

On August 3, 1943, the 71-year-old pensioner Schmidt took two pair of shoes, five ties, and two silver lady's watches which belonged to bombedout people. He was sentenced to death as a locter.

The 39-year-old employee Maier, who stole a case of liquor from a liquor warehouse in the night of the attack, was caught by the police on his way out of the warehouse. He also was sentenced to death as a looter. From Hamburger Zeitung, August 12, 1943

PERMITS FOR AUTOMOBILES

Permits for vehicles of any kind are issued only by the admission centers of the Police President. Toget a permit, the applications for use must be recommended by the appropriate agencies (e.g., Main Office of Economic Affrirs, Group Leader of Motorized Corps, Medical Association, etc.). Permits will be issued on the same strict principles employed heretofore.

From Hamburger Zeitung, August 8, 1943

CELLAR SALVAGE OPERATIONS ONLY WITH PERMIT

In numerous gutted houses, the cellars and the belongings brought and left there are still in good condition. Understandably, many citizens wishing to salvage their belongings want to gain entrance to their cellars to secure immediate or later removal of their belongings. As a matter of course and for the good of the community and the people, the police patrols demand identification from people at the salvage sites to ascertain that it is really their house. Tenants who have identification of this sort are of course permitted to continue their salvage operations.

Since many citizens have lost their identification papers in the air raids, it is advisable for them to get a certificate at the nearest police station, which will show that they are entitled to salvage items from the undamaged cellar of their former home. Persons who do not have identification papers and fail to secure a permit from the police might be detained by police patrols to prove identification. This procedure, it should be pointed out again, is not directed against the tenants themselves, but as protection against looters and thieves.

In this connection, it should be pointed out again that entering of houses that bear a sign stating "This House has Been Searched" is strictly prohibited. In these houses, every remaining object has been salvaged by the government, so that a further search of the cellar is useless and only leads to danger to the person conducting the search, because debris might be loosened and the person buried. Information about the whereabouts of furniture and other salvaged goods may be procured at the Social Service Department at Bieberhouse, at the main railroad station, or in the social . service stations.

• • •

From Hamburger Zeitung, August 8, 1943

DANGER OF COLLAPSE STILL INMINENT

It is a mistake to believe that the house fronts and ruins that have not yet collapsed are safe. On the contrary, the danger of collapse still exists at many points and, as a matter of fact, may be increased. For instance, heavy rain might wash away the support between various wall parts, or shifting winds might suddenly hit ruins from a different direction, where the resistance is very weak. Therefore, continue to be alert to danger of collapse, citizens! It is better to go out of your way a little bit than to endanger your lives in unsafe streets! Watch slanting houses and protruding roofs. Use the middle of the street or choose the less dangerous side of the street!

. . .

From Hamburger Zeitung, August 12, 1943

DO NOT LISTEN TO RUMORMONGERS!

Days and weeks like the present ones in Hamburg are fertile ground for rumors of all kinds.

There is little opportunity to listen to the radio, and the newspapers, despite all efforts, are not published as regularly as in normal times. That is when rumors go around, grow out of all proportion, twist the facts while making the rounds, and in the end--as far as they were based on fact in the first place--hardly retain any grain of truth that gave rise to them in the first place.

The rumors are exaggerated to such an extent that their very extravagance alone should make them suspect. This, however, is not the case by any means. Even the wildest exaggerations find willing ears!

We, therefore, renew our warning: Lend no credence to the uncontrolled rumors, especially those pertaining to the number of victims of the air raids. The exaggerations of these "factual reports," supposedly from "reliable sources," know no bounds. But they do have a gcal, namely to spread confusion among the Hamburg population!

. . .

From Hamburger Anzeiger No. 173, August 19, 1943

DEATH SENTENCES FOR LOOTERS!

The Justice Department and the police, by resolute and continuous effort, are more and more successful in bringing to justice all those persons who take advantage of other citizens' distress by looting. Those who loot and in this way commit a serious crime against the community will be expurgated. Once again, let this serve as a warning to those elements who are willing to steal or otherwise obtain advantages at the cost of the rest of the community in our hard-hit city. They can be sure of being ruthlessly exterminated!

The following single cases of looting were punished by death sentences:

Anna Josefowiecz, a 21-year-old Pole, during the night of July 24-25, 1943, stole three dresses, two coats, and a suit from a burning house in Stellingen.

Herman Halbritter, 36, and Kurt Freese, 24, while salvaging goods from their own apartment, took numerous pieces of linen and woolen blankets from a linen store located in their bombed-out house. They transported this stolen merchandise to Glückstadt and divided it between them. Interrogation in Glückstadt proved their guilt beyond a doubt.

August Krzenciessa, 44, stole numerous pieces of clothing and bedding from a district evacuated because of the air attacks. From Hamburger Anzeiger, No. 178, August 25, 1943

MODIFIED TRAFFIC REGULATIONS

The Police President announces:

From August 26, 1943, at 6 a.m. and afterward, only those automobiles in Hamburg with license number HH, that carry a permit marked with a red cross on their windshields are permitted in street traffic. In the case of motorcycles, the driver must carry such a permit on his person. The application for such a permit may be obtained at the agencies announced in the newspapers.

From this date on, there will be strict control of all HH vehicles for the purpose of ascertaining that the vehicles carry this permit. Vehicles without such a permit will be taken into custody.

At the same time, increased police supervision of strict compliance with all traffic laws will be instituted. It should be particularly emphasized that the speed limit within the city must not be exceeded.

All traffic participants are advised to follow all traffic regulations to the letter to be spared unpleasantness.

...

From Hamburger Fremdenblatt, No. 216, September 2, 1943

MISUSE OF SPECIALLY MARKED VEHICLES

The Police President announces:

Apparently a lot of automobile drivers are still of the opinion that they may use their automobiles for private purposes far in excess of their permit. More than ever before, every automobile owner whose vehicle carries a special permit must stay absolutely and strictly within the framework of his permit and avoid all use of fuel allotted to him for warrelated use for his own private purposes. Every misuse of fuel will cause immediate suspension of the driver's license, as well as police prosecution. The above regulation will be strictly enforced.

Appendix 14

REBILLETING THE POPULATION

Collection Points and Closing of Streets

-Newspaper Clippings-



• Collection Points

Streets Closed to Unauthorized Traffic

From Hamburger Zeitung, July 26, 1943

DEPARTURE FOR THE RECEPTION ARZAS

Departure Times for Tuesday, July 27, 1943

Citizens who have become homeless through the sir attacks will have the opportunity on Tuesday to travel to the reception districts to which they have been assigned, provided that unforeseen events do not force changes in travel times. The transportation schedule is as follows:

For District I from Lokstedt (freight station) at 9:30 a.m., 12:30 p.m., and 6:30 p.m. to District Steinberg (Schleswig-Holstein).

For District II from Fidelstadt (freight station) at 11 a.m. and 3 p.m.; from Lokstedt (freight station) at 11:30 a.m. to District Süder-Dithmarschen (Schleswig-Holstein).

For District III from Hannoverschen Railroad Station at 10 a.m., 12 noon, and 3 p.m. to Lauenburg.

For District IV from Freight Station Billstrange at 10 a.m. and 1 p.m. to Lauenburg.

For District V from Wandsbeck (freight station) at 9 a.m., 12 noon, and 3 p.m. to District Segeberg.

For District VI from Barmbeck (freight station) at 9 s.m., 11 a.m., and 5 p.m. to District Süder-Dithmarschen (Schleswig-Holstein).

For District VII from Eidelstedt (freight station) at 9 a.m., 12 noon, and 6 p.m. to District Steinburg (Schleswig-Holstein). From Hamburger Zeitung, July 26, 1943

WHO MAY LEAVE HAMBURG?

Permission is Required

Who may leave Hamburg? This question is answered by an announcement of the Police President, which reads as follows:

- 1. Departure from Hamburg, until further notice, is allowed only with a special permit, with certain exceptions. A special permit is not required for (a) persons who, by passport, identification card, or census certification, can prove that they have no permanent residence in Hamburg; (b) members of the Army, Waffen-SS, police, Organization Todt, and Federal Labor Service having either furlough papers or marching orders; (c) members of federal agencies or officials of the party if they can prove that their trip is in the line of duty; (d) persons with travel certificate issued by the social service or transportation certificate issued by the party; and (e) foreigners with diplomatic passports.
- 2. As a rule, a permit to leave Hamburg will be issued to persons who do not belong to the self-protection or expanded self-protection forces or industrial civil defense and have a release from the Labor Department or the appropriate professional organization.
- 3. Persons drafted to the self-protection and expanded selfprotection forces will be issued a permit to leave Hamburg only if extenuating circumstances can be proved. Permits will be issued by the police precincts in the residential precincts. A release by the Labor Department or professional organization must be presented. The police precincts are located in the War Damage Agencies.

Those who leave Hamburg on their own only hurt themselves and bring confusion to the orderly transportation of Hamburg citizens.

From Hamburger Zeitung, August 1, 1943

HOUSEHOLD BELONGINGS ARE BEING SALVAGED

Household goods that were salvaged from burned out and destroyed houses and put out in the street will be carted away and collected at the earliest possible time. The individual whose house was damaged may rest assured that everything is being done to store his belongings so that he can find them later in a collection storage house.

From Hamburger Zeitung, August 1, 1943

AND ONCE AGAIN: WOMEN WITH CHILDREN!

Women with children must leave Hamburg, since there is no possibility to care adequately for the children at present or in the foreseeable future. In addition, it is better for persons not able to do essential war work to leave Hamburg so that they will not take up any of the badly needed existing facilities.

From Hamburger Zeitung, August 6, 1943

Nonworking Women and Children Should Leave the City!

It has been pointed out repeatedly that in the present situation only men and women without children should remain in Hamburg or return to Hamburg. There is no point for women who are not in essential war work, and especially women with children, to remain in Hamburg. They will be much better off elsewhere in the Reich and will only hinder reconstruction work here in Hamburg. Also, there are no facilities to care for them adequately at the present time.

From Hamburger Zeitung, August 7, 1943

WOMEN AND CHILDREN! STAY AWAY!

In the last few days, an increasing number of women and children have returned to Hamburg. This is neither advisable nor desirable. We now need men and unencumbered women of working age in Hamburg. Those not in this category moving back to Hamburg may find that neither food nor lodging is available to them. And they should not expect public agencies to give them preferential treatment. Their premature return only means an unnecessary burden on food and transportation facilities, which should be employed for the sole benefit of the work forces now active in Hamburg.

* * *

From Hamburger Zeitung, August 9, 1943

THOSE WHO RETURN TO HAMBURG UNAUTHORIZED . . .

Return to Hamburg Permitted Only for Working Persons

To ease the Hamburg traffic burden at the present time, travel into Hamburg is permitted only by those persons who have work to do in Hamburg. Persons not able to produce proof to this effect will not be carried on any form of public transportation and they will not be permitted to leave from the railroad stations at Altona, Eidelstedt, Elbgaustrasse, Altrahlstedt, and Harburg. The police are empowered to close off any and all of these railroad stations if they consider it necessary. Those who travel to Hamburg without authority are in danger of finding neither food nor quarters.

The above restrictions are necessary in the interest of the working population of Hamburg and to ensure the care and transportation of women and children emigrating from Hamburg.

Appendix 15

EXPERT OPINION ON THE DANGER OF EPIDEMICS CAUSED BY CORPSES AND REPORT ON CAUSES OF DEATH OF THE BOMBING VICTIMS IN THE AIR ATTACKS ON THE NIGHTS FROM JULY 25 TO AUGUST 3, 1943, IN HAMBURG EXPERT OPINION ON THE DANGERS OF EPIDEMICS CAUSED BY CORPSES

Concerning the situation that has developed in the destroyed parts of Hamburg due to the great number of corpses, the following should be stated from a public health standpoint.

An immediate danger to public health does not exist from the corpses, especially since the territory in which they are located is completely destroyed and uninhabitable for all practical purposes. The corpses are not carriers of disease organisms. Even for the body of a person who had been ill with an infectious disease, it can safely be assumed that with the degree of decay existing today, the disease organisms will have died.

The possibility exists that the corpses may become breeding grounds for flies; however, I do not consider this an important problem. From the way it looks today, the fly population apparently has been completely wiped out in the destroyed territory. Only in one case have flies been observed outside the shelter. In any case, breeding of flies would be a secondary danger only, because disease organisms must be present in the first place for the flies to spread them. However, if garbage disposal should be inadequate, this possibility should be considered. Transmission of what the layman calls "ptomaine poisoning" from the corpses by flies is out of the question.

It is not expected that human corpses will play an important role in the increase in the city's rat population. The state of putrefaction is so far advanced and the other available food sources for the rats are so plentiful because of the general destruction, that the rat question may be put into the background as far as the corpses are concerned.

In the opinion of the medical profession it is most desirable, for moral and ethical reasons, that the existing corpses be disposed of in an orderly fashion and that identification be established as far as possible.

Concerning the proposal that corpses in closed-off cellars be destroyed by quicklime, it should be stated that too little experience with this procedure exists to establish its efficacy. Aside from the moral and ethical questions, there are no health considerations about this procedure. However, no necessity exists from a public health standpoint to employ this method.

In shelters where corpses are charred or completely burned to ashes, special health measures after clearing are not necessary. In cellars where as a result of decomposition a layer of slime has formed on the floor, a thorough treatment with chloride of lime is necessary after clearing. A treatment with chloride of lime must be undertaken in every case where a discharge of liquid or any dampness is found. Where no discharge of liquid is found, no chloride of lime need be used. Chloride of lime in liquid form rather than in solid form should be used. When transporting corpses, they should be sprayed with chloride of lime in dry form for deodorizing reasons. A further treatment with chloride of lime at time of burial is not necessary.

The layer of earth above the dead bodies should be at least one meter deep. Because burial in coffins will not be employed, it is necessary that the grave be dug deep enough according to the number of layers of bodies.

There is no need to fear pollution of the water supply because of the existence of dead bodies.

Hamburg-Blankenese, August 6, 1943 (Signed) Professor Hagen, Staff Surgeon (Signed) Professor Rose, Chief Medical Officer Hellmuth Baniecki, M.D. Chief of Pathology Altona General Hospital

Hamburg, November 23, 1943

REPORT ON THE CAUSES OF DEATH OF THE BOMBING VICTIMS IN THE AIR ATTACK NIGHTS FROM JULY 25 TO AUGUST 3, 1943, IN HAMBURG

The autopsies on the bodies of bombing victims, begun in Hamburg in 1941, were performed to determine the cause of death and the time of death of the persons trapped in cellars and air-raid shelters. The answer to these questions is of primary importance to the Reconstruction Service. The previous autopsies resulted in worthwhile individual observations, but did not produce any new guidelines for the Reconstruction Service. It was noted that under similar apparent circumstances, there were several distinct causes of death.

Because of the changed tactics of the enemy (i.e., throwing massive amounts of phosphorous fire bombs) during the nights of July and August 1943, for the first time large numbers of persons dying of the same cause were observed.

In the middle of the city districts that had widespread conflagrations, numerous persons met their deaths in the cellars and air-raid shelters of their houses as well as on the streets.

In the subsequent discussion, deaths occurring in shelters and those occurring in the streets will be treated separately.

Autopsies were performed on numerous corpses buried in the debris in the first 36 hours after the attack; some of them were dissected completely. It was possible, therefore, to ascertain the exact causes of death. Autopsies performed on corpses salvaged much later, especially those in a mummified state, were not conclusive. Times of death were not established because of the overwhelming circumstances of the catastrophe. Changes in the bodies, especially in the internal organs, that may have pointed to an air blast effect were not observed.

Death in Closed Rooms

1. Thirty bodies taken from the public air-raid shelter in Düsternstrasse were examined, and three of these were dissected.

The shelter is a subbasement structure and can be reached by stairs that are closed off by a double steel door that opens outward. An emergency exit existed on the canal side; another emergency exit faced the front of the street.

During the night of the attack on July 24-25, the entrance to the shelter was blocked off by the strong fire from the houses across the street and because of the tremendous firestorm raging in the narrow Düsternstrasse. The heat in the street made entrance into the cellar impossible. Later on, entrance and emergency exits were buried under debris.

Because of the burning house and the fuel supplies that were stored next to the house, a tremendous heat was generated in the shelter. After several persons were successful in escaping the shelter on the canal side and the street side, the building above the shelter collapsed. The canal exit was destroyed, and the other exits could not be used because debris blocked the openings. According to the report of the air-raid warden, the shelter was partially accessible for rescue operations about 30 hours after the start of the enemy attacks. On entering the shelter, all 43 remaining persons were found dead. They sat on the benches, partially leaning, partially bent forward, as if they had fallen asleep on the benches. The pieces of clothing apparently torn off and strewn around seem to indicate that the people suffered a great deal from the heat before dying. In the entrance and in the sluice, the water reached a height of 30 cm. The unbearable humidity and heat and the strong stench from the corpses made the salvaging of the bodies extremely difficult. Even after eleven days, a continued stay in the shelter was impossible because of the heat, despite the fact that all air holes were kept open the whole time.

Thirty of the recovered bodies were examined approximately 35 hours after the attack. The similarity in external appearance of all bodies was startling. The heads and faces were puffed, distended, and dark red in color. Rigor mortis was not present. Postmortem lividity showed a bright red color. There were no signs of injuries caused by force. The dissection results on two adults and one child may be summarized as follows:

- a. In no case were any internal injuries noted.
- b. Muscles of trunk and thighs were noticeably bright red.
- c. Chemical blood examination (tannin test, formalin test), in all three bodies definitely showed carbon monoxide positive as compared with the body of a hospital patient.
- d. No food particles in stomach and small intestine. No sign of absorption of digested food particles in the lining of the intestines.

The conclusions reached were:

Dissection resulted in proof of carbon monoxide poisoning; this was the cause of death. From these dissections and on the basis of an outward examination, there is overwhelmingly strong evidence that all 43 occupants of the shelter died from carbon monoxide poisoning.

The time of death can only be estimated. Because of lack of external injuries, a microscopic examination of the course of vital functions was not possible. The carbon monoxide test affirms the conclusion that the victims lived for a while after the building collapsed. The comparatively well-preserved appearance of the corpses despite the humid heat in the bunker and the high summer temperatures outside make it probable that the people lived for several hours after the collapse of the building.

Twenty-four bodies in the public air-raid shelter in the Karstadt Department Store in Barmbeck were examined.

The temperature must have been very high, even during the attack, in the shelter rooms, from which about 1,200 persons were rescured alive the morning after the attack (July 30) at about 10 a.m. It is assumed that the heat was great because the air vents had to be closed early to prevent the smoke and fumes from the neighboring burning buildings from seeping in. Despite this measure, much smoke and fumes must have gotten into the shelter, because the industrial civil defense chief of the Karstadt Company decided to go with approximately 370 persons down into the deeper public shelter. Fumes and smoke must have seeped into this room also, unless, because of the great heat and shortage of oxygen, the air vents were opened at times or unless the doors became defective because of falling timber. The entrance doors were completely buried by debris from outside. The temperatures during the critical time must have been extremely high, because even at noon on July 30, the rooms were still so hot and full of smoke that a prolonged stay there was impossible. The dead looked as if they had quietly fallen asleep. Twenty-four bodies were examined 36 hours after the attack, and five bodies of this group were dissected.

There was a similarity of appearance noticed on all corpses, e.g., the marked distention of their faces and the red color. Signs of outward injuries by blunt force were not found. Postmortem lividity was bright red; rigor mortis was not present. Signs of advanced decay were strongly apparent.

In summary, the dissections showed:

- a. Positive proof of carbon monoxide content in the blood, established by tannin and formalin tests.
- b. Internal organs were not injured.
- c. No signs of asphyxiation.
- d. Stomachs were empty; only traces of mucous masses. In two bodies, we found a strong grayish-yellow outline of lymph nodes in the lining of the upper section of the small intestine, pointing to a strong digestive function of the intestine.

The conclusion reached was that, in five cases, proof was established by strong reaction to the carbon monoxide test that the persons enclosed in the shelter lived for a while after being buried. Based on the striking similarity in appearance of all bodies, it is safe to assume that all other occupants lived when the building collapsed and finally succumbed to the same cause of death. No definite pronouncement can be made about the time of death because of the advanced state of putrefaction.
To complete the findings, further autopsies were performed on bodies salvaged from the shelters of burned-out homes after a month. In a major part of these shelters, the occupants were found still sitting or lying in a position in which they apparently fell asleep. (see Picture 1, End of Report). Some persons were leaning forward on the benches; others had fallen sideways; and others were found sitting with their backs against the wall. In a shelter in Kreuzbrook, a woman and her child were found lying on the floor as if they had lain down to sleep. Common findings in all cases were that the persons were fully dressed and that the clothing showed very minor or no signs of being burned. After removal of the clothing and exposure of the body, the corpses appeared to be "baked." The skin was dark brown in color, with dried crusts, and very rough. (see Picture 2). The weight of the bodies seemed very light. Inside the bodies, the organs were found to have shrunk to miniature size. On some of the bodies, skin lesions and flesh lesions were found and the bones were completely bare. (see Pictures 2 and 3). The edges of these lesions were smooth; nowhere was there any connecting tissue left. There were no signs of rat or maggot activity. Neither was there evidence of any outward effects of force on the bodies. Detailed examination showed that there had been strong decay processes taking place in the bodies, but the extreme heat stopped these. When the dryingout process took place, cracks and fissures developed in the flesh, and apparently these large lesions developed by further drying out and shrinking.

The external and internal examination of these bodies enabled us to make findings that were most important, part of which had never been made before; however, examination did not permit conclusions as to the cause of death. The carbon monoxide tests performed on lungs and heart did not clarify matters. These tests were performed by Professor Halberkann, whose report is as follows:

Ratio: Normal blood saturated with carbon monoxide at a ratio of 1:1000. Five grams of an organ part were ground with 25 ccm water, and the mixture stirred. After letting it stand for half an hour, it was put through a centrifuge and the remaining liquid was filtered. These filtrates, after adding a reduction agent, usually natrium hydrosulfite, were checked for carbon monoxide by spectroscope.

217

The examinations showed the following:

The hearts and lungs of three Kreuzbrook corpses were brownish black in color and could easily be pulverized. The heart and lungs were examined separately. In none of the extracts could any carbon monoxide be found, nor could any changed or mutated hemoglobin.

The heart and lungs of one Hammerweg body were also examined separately. The inside of the heart was cherry red in color, the outer parts brownish black. In the lungs, the content of the veins was reddish, the other parts of the lung were brownish black in color. Both organs were of paste-like consistency.

The extract from the Hammerweg heart had a deep red color; when diluted, a cherry red color. It contained, besides hemoglobin and some methemoglobin, large amounts of carbon monoxide hemoglobin, whose absorption streaks could just barely be recognized in a dilution of 1:50 after adding natrium sulfate. According to this, 100 grams of heart contained as much carbon monoxide hemoglobin as 100 ccm of normal blood satiated with carbon monoxide; i.e., about 18 ccm or 22 mg of carbon monoxide.

In the brownish extract from the Hammerweg lungs, some methemoglobin but no carbon monoxide hemoglobin was found.

The finding of carbon monoxide in the organs of mummified bodies therefore was negative in three cases and strongly positive in only one case. The negative result on severely shrunk and driedout organs, however, does not rule out death by carbon monoxide poisoning. A sufficiently positive judgment about the cause of death of the mummified corpses was possible by comparison with the dead that were found under similar conditions and who were dissected 36 hours after the attack. Here no basis exists for suspecting death by burning. The position of the bodies gave no indication of death by panic or by asphyxiation. The dead rodies were found in positions of sitting or lying down to sleep. These findings also argue against death by overwhelming heat in closed rooms; the positive carbon monoxide findings in the blood particularly rule out this cause of death. Death apparently came before the development of the perilous heat. Based on the similarity of circumstances of the bodies found in a mummified condition and those found shortly after being buried alive, as well as on the positive carbon monoxide findings in the blood of the latter group, it can be stated with certainty that carbon monoxide poisoning in closed rooms in those houses and housing districts destroyed by the firestorm was the leading cause of death. Since the greatest number of victims by far were found in those districts that were swept by the holocaust, carbon monoxide poisoning without a doubt must head the list of causes of death for all the casualties in the City of Hamburg.

• \

Death in the Streets

In the firestorm sweeping the streets during the holocaust, a form of death was observed for the first time on record. This could not be confirmed by autopsy because the reports from the Civil Defense Command were not received until after the bodies had been buried.

During the conflagrations in Hamburg, which in their size and their appearance bore no comparison with former similar catastrophes, certain districts of the city developed hurricane-like streams of hot air, which enveloped hundreds of people who died within a very few minutes without their bodies being burned. Hamburg's staff physicians and rescue station physicians report that numerous bodies were found naked on the street. The skin had a brown color, the hair was well-preserved, and the mucous membranes of the face were dried out and encrusted. It was observed that persons fleeing from their shelters into the streets halted after a few steps, lay down on the street, and tried to keep from breathing the hot air by putting an arm in front of the face. Later on these persons were found dead. Children, according to the reports, were more resistant than adults. Precinct officials who were in the streets in the midst of the firestorm report that they had to turn around after a few steps, since a strong feeling of tightness in the chest, together with dizziness and faintness, kept them from going on. Afterwards, they had a feeling of weakness and general lassitude for a long time.

To clarify the above-mentioned happenings, four autopsies were performed in Hannover 36 hours after the great air attack on October 8-9. The bodies chosen were those found in the narrow streets of the inner city after the conflagrations were extinguished. The results of these autopsies are given in the following summarized reports:

Body of a young man, approximately 16 years old, fighter stance 1. of the right arm, totally naked lying on back on the street. Hair on the head was singed, the skin of the feet charred, and chin and tip of nose burned. Superficial charring of back of hands. Color of skin was reddish brown. Muscles of trunk appeared to be cooked. Neck organs dried out. Surface of tongue dry and brown. Esophagus empty. Soot-like deposits on the larynx. Large amounts of foaming liquid in the windpipe and in the bronchial tubes. Lungs distended and heavy. Front of both upper lobes dried out by fire and brown in color. Lower lobes heavy, full of blood. No foreign deposits in the bronchi. In the right ventricle of the heart thickened blood and coagulated blood. Left ventricle empty. The heart muscle startlingly pale, as if it had been boiled. Blood vessels and valves of the heart soft. Liver hard, stomach walls tough, stomach empty. Spleen melted. Lots of urine in the bladder. Kidneys dark red. Between meninges and skull large thick, pasty, reddish masses. No fissures noticeable in either skull or bones at base of skull. Lesions in the cerebrum and cerebellum without proof of free hemorrhages or pathological changes.

The spectroscopic examinations of the blood as well as the tannin tests show positive for carbon monoxide.

In the cells of the examined parts, strong reaction with emergency of white blood cells was noted.

The conclusion was that the youth was burned alive in the street.

2. Fully clothed female body with heavy layer of fat, approximately in her late forties. Gaping skin wound above the right knee, covered with dirt and dust. Skin of thigh shows strongly brown colored burns. Body clothed in undamaged shoes and stockings. Abdomen strongly distended. Lower abdomen shows numerous pale red death spots. Hair on the head singed down to the roots. Skin of chin, cheeks, and neck is dried out and brownish in color. Muscles of trunk and thighs pale red in color. Both upper lung lobes are attached to the chest wall. Pleura area is empty. Tip of tongue shrunk, dried out, tough and brownish in color. Esophagus empty. Windpipe and bronchi empty. No definite soot deposits in the mucous membranes of the respiratory organs. Lungs are flaccid, collapsed, of pulpy consistency. The heart muscle is rich in fat. Right and left heart chambers empty. Heart muscle distended, decay blisters pale and light yellow in color. Septum shows questionable streaks of blood.

Organs of the abdominal cavity full of decay blisters. Adrenal glands mushy. Large amounts of solid food pulp in the stomach. Bladder empty. Uterus small, ovaries barely the size of a walnut and tough.

No hemorrhages in the skin of the head. Skull solid and undamaged. Liquid blood in carotid artery. Meninges stretched, damp on the inside, shiny. Blood vessels at the base of brain are hardened. Soft skin clear and transparent. Cerebrum and cerebellum somewhat enlarged and filled with a lot of clear liquid. Sections of the brain tissues at various points, especially in the neighborhood of the thalamus and the substantia nigra, show a collection of blood clots that cannot be stripped off.

The spectroscopic blood examination as well as the tannin tests shows negative for carbon monoxide.

Results of Microscopic Examinations Were:

- a. In the burns of the right hip, increase and bunching of leukocytes in the veins of the corium.
- b. Numerous small circumscribed welts in the heart muscle.
- c. Lungs: strong accumulation of serum (edema) in the air sacs.
- d. Brain: high-grade edema, isolated hemorrhages.

The conclusion was that, based on the proof of vital reactions to burns and the considerable formation of welts in the heart muscle of an obese female body, it is presumed that death was caused by burn collapse.

3. Slim body of a male approximately 40 years old, fully clothed without signs of burns.

Body and internal organs in good condition. Muscles of the trunk and the thighs salmon-colored. Lungs detached, full of juice and blood. Heart muscle contracted, valves light red in color. Diagnosis of death by carbon monoxide poisoning confirmed by spectroscopic examination as well as tannin test.

The conclusion was death by carbon monoxide poisoning.

4. Fully clothed male body of narrow body build, without signs of burns, hair on head slightly singed. Organs of the chest and abdominal cavity well preserved. No signs of outward or internal injuries. Great amounts of slimy masses mixed with soot-like particles in the larynx. Mucous membrane of windpipe light red in color. Tip of tongue dried up. Lungs rich in blood and juice, crepitation on touch. Muscles of trunk light red in color. Spectroscopic examination of the blood as well as tannin test strongly positive for carbon monoxide.

The conclusion was death by carbon monoxide poisoning.

Discussion of Autopsy Findings

In two of the four bodies found in the street, carbon monoxide as the cause of death is an overwhelming probability (Cases 3 and 4). Proof of carbon monoxide in the blood was secured by chemical analysis and later by spectroscopy. Signs of burns on the body and the clothes are completely absent. On dissection, carbon monoxide poisoning was not competing with any other cause of death.

In the case of the male youth (Case 1) with extensive burn changes, it remains unclear under what conditions he was burned alive on the street. In the case of the woman (Case 2), examinations resulted in a verdict of death by burn collapse.

The question of how the people poisoned by carbon monoxide got to the street cannot be answered, since eyewitness reports are not available and would be nearly impossible to obtain. It is possible that these persons were already poisoned in the shelters and fled to the open to seek air and then collapsed in the street. Further investigations are needed to determine if carbon monoxide is capable of causing death in the streets.

The results of the autopsies performed in Hannover (with the findings of carbon monoxide poisoning in corpses found on the street) strengthens the observations made in Hamburg; that carbon monoxide gas poses a serious danger to the population in the present phase of the air war, especially since these gases seep into the shelter unnoticed and therefore can poison a great number of people at the same time. Questions concerning the cause of death of the persons who died in the firestorm could not be answered by the autopsies in Hannover. Animal experiments will be made to try and solve this question. Investigations along these lines have been started.

ų,

SUMMARY AND CONCLUSIONS

Experiences gathered in the days of Hamburg's major catastrophe taught us that the discovery of the causes of death after an enemy air attack is of the greatest importance in formulating new measures for civil defense. Furthermore, it is crucial that the autopsies be performed as quickly as possible after the attack to obtain clear-cut answers. In general, after major attacks, investigations into the causes of death will have to be limited to single cases since casualties will occur suddenly in large numbers and cannot all be examined within a short time span.

The cases singled out for autopsy should be chosen from as many different damage sites as possible, so that an accurate cross section is obtained and the results projected to provide information on death causes for the total number of casualties. The bodies found in the street are of primary importance. As many of these as possible should be chosen for autopsy; determination of carbon monoxide poisoning at the place of death may give a basis for selection. The bodies found are to be preserved in their original positions and locations until the medical examiner arrives.

The above information is limited to the examinations of effects of the fire bomb war and represent only a segment of the large number of causes of death, in an air war. With the war continuing for a longer period of time, new kinds of attacks, and with them, new kinds of injuries and causes of death must be expected in the air war.

(Signed) Dr. Baniecki







H. Baniecki, M.D. Chief of Pathology Altona General Hospital

Hamburg, September 11, 1944*

EXAMINATIONS OF DEATHS ON THE STREET IN A CONFLAGRATION

Report on Results of Three Dissections on Bodies Killed in the Terror Raids on Bremen, August 18-19, 1944

During the night of August 18-19, 1944, the enemy again attacked Bremen and thereby repeated his tactics of attack with phosphorus canisters and stick fire bombs, apparently with the aim of starting large conflagrations like the ones achieved during the attacks on Hamburg in July-August 1943. The on-the-spot impressions immediately after the attack strongly resembled those of the events in Hamburg in the summer of 1943, especially in view of the fact that in Bremen at this time, there was a dry summer heat just as there had been during the Hamburg attacks. All the conditions were present through which to pursue the solution to the puzzle of a still unknown kind of death, which had been observed for the first time in large numbers in Hamburg, when hundreds of persons in flight from air-raid shelters were caught in a stream of hot air in the streets, lay down on the ground after a few steps, and died shortly thereafter. (Compare with Experience Report of the Police President of Hamburg On The Major Air Attacks On Hamburg July/August 1943; Section III, and Appendix 15, Sheet 2.)*

To clarify the causes of these deaths, it was necessary to perform dissections as quickly as possible. In Bremen, I received active cooperation from the local civil defense headquarters in obtaining the bodies best suited for the postmortem examinations we had in mind. (At the body collection station, Police Major Tornow selected the bodies known to him from among the great number of fatalities.) The external appearance of these bodies confirmed the fact that they were found in the street, according to the symptoms described below, so that there was sufficient reason for initiating the investigation into the cause of death.

* This report was probably added after original document was prepared, perhaps by the U.K. Home Office.

Three bodies were chosen and marked for dissection. The dissections were performed about 18 hours after the attack. Putrefaction, which would make dissection results more difficult to obtain, was not yet present. Death by carbon monoxide poisoning was ruled out for all practical purposes by a chemical examination (formalin tes⁺), which was performed at once. With the help of an emergency dissection table erected in the yard of the body collection station, I was able to perform the dissection without great difficulty. The well-preserved organs taken for microscopic examination were put into a 10 percent formalin solution. Blood from the heart was taken for a quantitative carbon monoxide determination.

The three bodies chosen showed similar characteristics. They were naked and their skin was dry, dark brown in color, and made the body appear "baked." The epidermis was in the process of scaling off over large areas. In two of the bodies, large pale skin areas discolored by postmortem lividity spots were clearly defined. Apparently, these areas were not exposed directly to heat radiation because the bodies were lying face down.

Bremen Body No. 16

Well-nourished female body with dark yellowish brown skin color, naked, and without shoes. In the armpits, scraps of singed white underclothing. Right arm strongly bent at the elbow joint and stiff; left arm at an angle and alongside the body. Large parts of the epidermis, especially on the trunk, peeled off in layers. Above the left breast and above the left upper arm a well-defined area of skin appears pale compared with the brown coloring of the rest of the body and is discolored by postmortem lividity. Corresponding pale parts of the skin noticed in left inguinal region, in the pubic region, and on the inside of both thighs. The hair on the head and the eyebrows are singed. Face small, strongly altered by street dirt and dark discoloration of the skin, and hardly recognizable. On the left side of the face, a dark red pressure area, smeared with dust, with loosening of skin. Mucous membranes of lips colored dark red, swollen, and smeared with dirt. Eyes closed. Conjuctiva of both eyes filled with unusually heavy, dark red liquid with areas of dark red hemorrhages.



Bremen Body No. 16. Female corpse laid out for dissection. The pale sections of the skin can be ciwarly differentiated from the dark color of the rest of the skin.

230

Head Cavity

After removal of skin from head, the cells seemed unusually rich with blood. Also the soft parts of the neck and the shoulders were very rich with blood. During dissection, large amounts of liquid, dark red blood welled up. Clearly defined hematomae were not noted. The skull is intact. The blood vessels of the meninges are well filled with darkred to black-red blood. The dura mater on the inside is damp and smooth. Soft membranes are clear, transparent, and full of fluid. Brain tissue is rather solid, wet, and rich in blood. The brain is heavy. Blood vessels at base of brain are tender. Clear serous fluid in the brain chambers. Incisions into marrow, pons Varolii, and medulla oblongata reveal no deviation from normal markings.

Chest Cavity

Subcutaneous layer of fat well developed. Muscles pale, dry, and opaque. The brown skin of the trunk rough and hard (skin seams tearing).

Diaphragm at fourth rib on the right, at fifth rib on the left. Left lung distended, stuck to chest wall. Right lung free. Both lungs voluminous, bloated, and do not collapse at first after removal of breastbone. Only a few ccm of clear serous liquid in pericardium and pleura.

Tongue without defects, damp, of deep dark-red color; base of tongue, dark blue-red. Membranes of pharynx full of blood and of deep red color; a number of dot-shaped hemorrhages are noted. Esophagus empty; membranes noticeably pale and smooth and of whitish gray color. Tip of epiglottis bright red in color. Reddish mucous in the windpipe; membrane dull red. In the lower section, a number of tiny, sharply defined, pale indentations. A goiter, the size of a goose egg, on both sides of thyroid.

Numerous adhesions in the lung cavity. The free parts of the pleura smooth and shiny, and without evidence of dot-like hemorrhages. Lobes full of blood and increased amount of fluid. Foamy secretion in the smaller bronchi. Heart larger than a fist. Heart muscle limp and fatty. Left ventricle full of liquid, deep black-red blood. Liquid blood also in the right ventricle. Both ventricles enlarged, no proof of any thrombosis. Valves freely movable and without deposits. Aorta passable, almost without spots. Artery elastic. Heart muscle free of weals.

Abdominal Cavity

Intestines bloated. Peritoneum wet, smooth, and shiny. Normal position. Stomach empty, membrane pale. Spleen soft, noticeably pale. Liver pale cloudy at cross cut. Only small amount of secretion in gall bladder. Adrenals fatty. Surface spotted brownish yellow. Kidney surface smooth; parenchyma of bluish red color. A number of dot-like dark-red hemorrhages in the main cavity of both kidneys. Pancreas flabby. Bladder empty.

Uterus pear-sized. Small cysts in the left ovary. Right ovary lemonsized, enlarged by a cyst with a coagulated mass attached. A corpus luteum approximately six weeks old in the right ovary. Membrane of the bowel damp and smooth.

There was 11 percent carbon monoxide hemoglobin in the blood.

Bremen Body No. 38

Body of small, older woman, dressed only in boots. Scraps of charred clothing adhering to knees. Face remarkably small (bird face). Hair strongly singed. Right arm sharply bent, left arm at an angle. Skin dry, rough and of a strange brown color. Dot-shaped hemorrhages in the conjuctiva of the right eye.

Face dark in color and covered with dirt. Left ear partially charred. Hair and eyebrows singed and short.

Head Cavity

Skin of head coarse and dry, tears easily. Skull intact. Arteries strong and filled with black-red blood. Dura mater smooth on the inside and shiny. Meninges clear and transparent. Brain matter damp and with little blood. Clear serous fluid in the cerebral ventricle. Cuts in the marrow, cerebellum, and ganglia show no changes from normal pattern.

Chest Cavity

Muscles pale, opaque, and dry. Neck organs and neck vessels full of blood. Tongue deep dark red in color. Base of tongue and tip of epiglottis show fine, dot-shaped hemorrhages. Epiglottis bright red.



E

Membrane of trachea pale, covered with pale mucous mixed with a number of black particles.

Diaphragm at fourth rib on the right, fifth rib on the left. Lungs free and collapsed after detachment from the sternum, feel like a pillow to the touch. On cutting into the lower lobes, large amounts of blackred blood seep out of the vessels. Increased liquid content of lower lobes. Heart slack, fatty, and larger than fist. Both ventricles dilated. Large amounts of black-red blood in the right ventricle. No indication of thrombosis, valves movable, and aorta enlarged and hardened. Branches of the coronary artery hardened. Stenosis in ramus descendens. No sign of weal formations in the heart.

Abdominal Cavity

Intestines bloated. Peritoneum smooth and shiny. Sparse remnants of a grayish-green food pulp in the stomach; membranes pale. Liver pale, opaque. Spleen remarkably pale and soft. Kidneys pale and atrophied. No indications of hemorrhages in the kidney cavity. Bladder empty.

Ovaries very small and atrophied. Uterus small. Adrenal glands covered with thin yellow skin; no indications of hemorrhage. Pancreas long, narrow, lobed. Mucous membranes of all parts of the bowel damp, pale, and smooth.

There were 6 percent carbon monoxide hemoglobin in the blood.

Bremen Body No. 17

Slender, skinny male body, unclothed except for boots. Right arm bent. Remnants of singed clothing at right upper arm. An extended area of pale red colored skin above the left breast and above the left upper abdomen contrasting with the brown-colored skin of the rest of the body. Charring of skin and flesh on inside of both thighs. Eyebrows and hair on head extensively singed. Color of face dark red and covered with street dust.

Head Cavity

Skin on head leathery. Skull intact. Cerebral arteries well filled. Dura mater smooth and shiny on the inside. Blood vessels of the meninges well filled. Surrounding skin bloody. Brain mass soft, pulpy in parts, and decomposing. No evidence of free hemorrhages. Vessels at base of brain rather hardened.

234



Bremen Body No. 17 Body of man found in street in fixed position. Similar to Nos. 16 and 38.



Body of preceding picture turned over on its back to show pale sections of skin.

Chest Cavity

Skin at tip and center of tongue comes off at slightest touch. Tongue deep red in color, mucous membrane of the pharynx of dark-red color, with tiny dot-like hemorrhages. Esophagus empty. Mucous membrane of the windpipe bluish-red in color and covered with grey mucous, mixed with black particles. Dot-like hemorrhages in the mucous membrane of the trachea. Egg-sized goiter on both sides of thyroid.

Lungs distended, voluminous, and do not collapse on removal from the sternum. Scattered strand-like adhesions over both tips. Right lung, especially in upper lob, full of liquid and blood.

Heart muscle larger than fist of body, slack, and fatty. Ventricles enlarged. Lots of liquid black-red blood in right ventricle. No evidence of clots or weals. Valves freely movable. Coronary artery somewhat enlarged.

Abdominal Cavity

Spleen has icing-like covering; mass remarkably pale. Stomach empty; mucous membrane pale. Liver pale, opaque, and without recognizable lobe markings. Bile ducts passable. Gall bladder sparsely filled. Adrenals without evidence of hemorrhage. Kidneys noticeably pale; surface smooth. Mucous membrane of kidney cavity pale, without evidence of hemorrhage. Pancreas lobed. Mucous membrane of bowel pale and smooth. Scrotum and penis dried up.

There was 14 percent carbon monoxide hemoglobin in the blood.

Discussion of Results

There were marked and extensive similarities in the outward changes of the bodies as well as in the results of the dissections, so that the results may be discussed together. The only difference that existed was of degree. All three cases under discussion were bodies found in the street, sparsely clothed, after the fire had died down and the high temperatures had dropped. The bodies were still unusually warm during dissection. The soot particles found in the windpipe as well as the vital reactions in the cells indicate that these persons reached the street still alive. The position of the bodies on the street can be ascertained from the position of the arms and legs as well as from the pale areas where the skin was protected from the heat. The carbon monoxide content of the blood was so low that carbon monoxide poisoning must be ruled out as a cause of death.

The remarkable aspects that all three had in common were the large blood supply in the face, the mucous membranes of the mouth cavity, the pharynx, and the tongue, as well as the congestion of blood in the flesh of the neck and the fullness of the lungs (especially in Case 2). It was also remarkable that the right ventricle was much enlarged and contained large amounts of liquid, black-red blood, which welled up on puncture. The abundance of blood in the upper half of the body is strongly suggestive of asphyxiation, as is seen in compression of the chest or the neck. The bloodlessness of the abdominal cavity was in strong contrast to the fullness of blood of the upper body, especially as concerns the spleen, which in all three cases showed a remarkably anemic color.

To determine the cause of death, the upper respiratory passages, lungs, heart, brain, liver, spleen, and kidneys were examined under the microscope. In this case, the results on the organs of the respiratory system are especially important. The details of these results will be reserved for later scientific publication. In the framework of this investigation, the findings can be discussed only in general terms with specific emphasis on their evaluation as to cause of death.

The common characteristics of the three autopsies are the stases of the mucous membranes of the mouth and pharynx, where the vascular system is greatly distended and almost varicose in appearance. On the tongue and in the throat wall, the stases are combined with hemolysis and hemorrhagic edema of the cell structure. The same changes are observed in the lungs. These organs appear flooded with blood. The connecting tissue also is covered with hemorrhages or infiltrated with red blood corpuscles. The fullness of blood also extends to the hair follicles. The capillaries are only sparsely covered with epithelium. In numerous blood vessels, small emboli were found, and in some, collections of white blood cells. The air bubbles contain large amounts of albuminrich, watery or bloody-watery fluid, containing only a few blood cells. Distended alveoli and large cavities, corresponding in size to several alveoli, caused by tearing of the dividing walls were noted frequently.

The signs of breathing in hot air found during the autopsy were the shredding of the mucous membrane of the lungs (Case 3), with numerous membrane hemorrhages and the strong red coloring of the epiglottis as verified by microscopic examination; the microscopic examination also revealed necroses of the mucous membrane of the windpipe. These were also occasionally seen at the bronchial cartilage and bronchial artery in whose walls ribbon-like chromatin formations could be seen.

In summary, we have a condition of vascular damage to the upper respiratory passages and the lungs caused by breathing in hot air. Stasescaused breathing difficulties were intensified by pulmonary edema, hemolysis, and interruption of the respiratory epithelial functions of the lungs. A syndrome similar to asphyxiation soon developed, killing the people on the street before the effects of the heat were felt fully.

Appendix 16

IDENTIFICATION OF MISSING PERSONS

Police Ordinances

Public Bulletins

Newspaper Clippings

The Police President, Division II

Hamburg, August 1, 1943

To: The Federal Propaganda Ministry Hamburg

It is requested herewith that you disseminate the following regulation by press and radio throughout the whole German Reich, after clearance by the War Damage Commission and the Chief of Security Police.

- 1. All persons who were registered in Hamburg on July 25, 1943, or thereafter, or those who have spent time in Hamburg during that period, must report at once to the police of the community in which they are now residing.
- 2. The persons falling in the above category, must fill out a form that may be obtained at the local police precincts.
- 3. The form must contain the following:
 - a. First and last name (and maiden name if married woman)
 - b. Date and place of birth
 - c. Occupation
 - d. Former address in Hamburg (street and house number)
 - e. Present address
 - f. Signature
- 4. The police precincts should have the necessary forms available, reduced to postcard size and as simplified as possible.
- 5. The police precincts must forward the reports received by registered mail to the Police President, Dammtorstrasse 1, Hamburg, as quickly as possible.

For publication in the <u>Hamburger Zeitung</u>, please word the announcement as follows:

All persons, who were registered in Hamburg on July 25, 1943 or later, or who have spent time in Hamburg during this period, must report immediately to the police precinct in which they reside at present. The report must be submitted on a standard form designed for this purpose, which may be obtained at the police precincts.

In addition it is requested that you have 500,000 forms printed in postcard size, according to the sample below, as soon as possible:

a. Last and first names (and maiden name if married woman)

b. Date and place of birth_____

c. Occupation

d. Former address in Hamburg (street and house number)

e. Present address

Date_____, 1943

Signature

(Signed) Kehrl, Police President

POLICE REGISTRATION

All persons who were registered as residing in Hamburg on July 25, 1943, or later, or who have spent time there during this period, must report immediately to the police precinct in the district where they reside at present. This report must be submitted on a form designed for this purpose, which may be obtained at the police precincts. This means, therefore, that all persons who are still in Hamburg at this time must register according to the above procedure.

All citizens who have departed from Hamburg must report to the nearest police station in the place where they now reside. It is of the utmost importance that every citizen make sure his friends and acquaintances carry out this registration.

Inquiries regarding missing persons can be pursued only if everyone registers in full according to regulations.

Hamburg, August 7, 1943

The Police President

POLICE REGISTRATION

All those persons who were registered as residing in Hamburg on July 25, 1943, or thereafter, or who have spent time there during this period, must report immediately to the nearest police precinct in the district in which they reside at present. The report is to be submitted on a form which is available at the police precincts. This means that all persons named above must register as prescribed.

It is of the utmost importance that every citizen make sure his acquaintances also follow these instructions.

Inquiries into the whereabouts of missing persons can be carried out only if all registrations take place in full and according to instructions.

The police stations will send the collected registrations immediately to the Police President of Hamburg, Drehbahn 36, 2nd Floor, Room 251.

Hamburg, August 9, 1943

0

The Police President

From Hamburger Zeitung, August 2, 1943

INFORMATION ON FOUNDLINGS

Children who have lost their parents in Hamburg must not be taken away by anyone under any circumstances. They must be brought to the nearest Party Office, where they will be cared for until their parents are found or accounted for. Parents who are searching for their children may obtain information or be reunited with their children at the party office, also. At present, collection points are established at the following locations: Party Emergency Nursery Hohe Tannen, Golfstrasse 3, Wentorf; Party Nursery, Tinsdaler Kirchenweg, Rissen; and Party Day Nursery, Bissingerstrasse 31, Harburg. The children are being cared for at assembly stations and then sent to out-of-town nurseries.

From Hamburger Zeitung, August 2, 1943

PERSONS RESIDING IN HAMBURG MUST REGISTER

All those persons who were registered in Hamburg on July 25, 1943, or thereafter, or who have spent time there during this period, must report immediately to the police precinct in the district in which they reside at present. The report must be submitted on a form designed for this purpose and available at all police stations. From Hamburger Zeitung, August 2, 1943

HAMBURG CENSUS OFFICE

To facilitate the search for missing persons, a special census office has been established in Hamburg. All persons who have missing relatives may direct inquiries, marked "Hamburg Census Office" to the Resident Registration Office, Police Department, Drehbahn. All reports and inquiries will be centrally processed.

All inquiries directed to the Search Card Index in Lüneburg will be sent to the above-named office in Hamburg for processing. All local police stations in the Reich will accept reports and inquiries regarding missing persons and will send them on to Hamburg.

Inquiries can be answered fully and finally only when all police reports of the local population in Hamburg and those individuals who have left Hamburg and have registered at police stations in the Reich are available as background data.

From Hamburger Zeitung of August 5, 1943

All persons who are departing or have left Hamburg are urgently requested to report their present addresses immediately to the nearest police station, so that inquiries may be handled promptly.

Inquiries regarding the whereabouts of missing persons must be directed to Hamburg Census Office. All inquiries must contain the following, in plain writing or printed: Name, current address, Hamburg address of the inquirer, as well as name and personal data on the missing person.

As announced several times previously, even those persons still in Hamburg who were registered as residing in Hamburg on July 25, 1943, and thereafter must report at once to the police precinct in the district in which they now reside. The report must be submitted on a form designed for this purpose, which is available at the police stations.

From Hamburger Zeitung of August 11, 1943

THE SEARCH FOR MISSING PERSONS

Everybody Can Help

Far more painful than any material bomb damage for those affected is not knowing where their nearest relatives are, at present. To alleviate this unhappy situation as quickly as possible, a special Hamburg Census Office was created at the Resident Registration Office of the Police Department, Drehbahn 34, Room 251, a few days ago. As soon as this was announced, people who had no information about the whereabouts of their family members began to stream in. Patient and solicitous civil servants took down all data on the person or persons searched for, the last address of the missing persons (in case of boarders or subtenants, also the name of the landlord), and the present address of the inquiring person. In most cases, inquiries could be answered only provisionally. The people in search of their loved ones understand the problem. However, no one who has seen the silent, despairing faces of those who came and went in the small office will soon forget them.

But pity is not enough. The police stations want nothing so much as to clear up all cases of missing persons quickly. However, the most able clerks are unable to accomplish their task without the active help of every citizen. For instance, up to this time, only a small part of the present population of Hamburg has reported to, or left their registration card with, a police precinct. Also, a great number of Hamburgers who have left the City have not discharged this obligation in their new place of residence. This omission is every bit as serious a lack of consideration toward their fellowmen as a breach in civil defense conduct.

All registrations of Hamburgers from the Reich will immediately be sent on to the Hanseatic City and will be compiled into a giant card index that should greatly facilitate the locating of missing persons. All inquiries directed to the Search Card Index Lüneburg will be integrated into this index. To make detailed data available to the Hamburg Census Office, it is necessary that everyone who knows anything about the whereabouts of evacuees notify the Reporting Office. Consider the following case: Anneliese sent a postcard from the Allgäu to her girlfriend Gertrud who is still living in Hamburg. Because the Post Office is so overburdened, a similar postcard from the lost girl to her nearest relatives has not yet arrived. A short note from Gertrud to the Census Office: "Miss Anneliese B. (if possible, further personal statistics and former residence address) is living in the Allgäu as per a postcard of such and such a date," and perhaps a pair of parents will breathe easier now.

It is important that all reports and inquiries to the Census Office be written plainly. If the clerk has to guess at the name or hunt in the city directory, this will consume precious time and delay results. Reports and inquiries are compared daily by a large and experienced staff. No one remains without an answer, if only: 'Further information will be forthcoming in a few days." This does not mean that the inquiry will be put aside and forgotten. It will be checked on daily. Despite all the difficulties, many results have already been achieved. However, the number of persons who are in ignorance of the whereabouts or the fate of their loved ones is enormous. It is everyone's duty to do his share to help. The data compiled at the Census Office will be also made available to the Resident Registration Office. So it is the twofold duty of every resident of Hamburg at least to report his own address at once.

FOUNDLINGS TO BE REPORTED IMMEDIATELY

Persons who have taken in a parentless child should report immediately to the nearest party office, so that out-of-town parents may be reunited with their children. From Hamburger Zeitung, August 12, 1943

POLICE CENSUS

A census of the population living and registered in the city of Hamburg on July 25, 1943, is being carried out through a special procedure instituted by the Police President. The census is being taken by registering every person who falls into the above category, either here or out-of-town, on a specially designed report form of postcard size at the nearest police station, which is responsible for forwarding the report forms to the central Census Office at the Police Department Hamburg (Drehbahn 36).

Posters here and throughout the Reich give details of this procedure. The registrations obtained in this way are combined into a single alphabetical index, which will be used to answer oral or written inquiries about missing persons as quickly as possible. It is therefore to the interest of every Hamburg citizen to report his whereabouts as soon as possible. Every citizen must see to it that all Hamburg residents, including those now living in other parts of the Reich, register as quickly as possible.

* * *

From Hamburger Fremdenblatt, August 1, 1943

REDISCOVERED RELATIVES TO BE REPORTED!

With the postal service returning to normal, more and more cases are coming to light where citizens have received news from their evacuated relatives. Frequently, therefore, the earlier inquiry that had been directed to the Hamburg Census Office becomes superfluous.

Clearly, it is the duty of all citizens who are seeking missing relations and have received direct and private news of their whereabouts in the meantime, to inform the Census Office without delay of the rediscovered relatives, stating their present address. This will avoid unnecessary duplication of effort, and the personnel of the Census Office can direct all its efforts to clearing up the searches still in progress. From Hamburger Tageblatt, No. 262, October 19, 1943

DEFINITE INFORMATION ABOUT MISSING RELATIVES

Intensive Inquiries by The Criminal Investigation Department

The search for missing persons has always been the responsibility of the Criminal Investigation Department of the Police, regardless of whether a crime was involved. Therefore, after the major air raids in Hamburg, the Criminal Investigation Department was again called upon to search for the missing. All its resources and efforts are devoted to the task of searching for those Hamburg residents who have been missing since the days of disaster.

The success of this task is dependent on the data that keep mounting daily at the Census Office. This Census Office, on whose work we have reported frequently in past days, does not itself carry out any investigations. It only keeps the register, and, whenever possible, gives answers to inquiries. Unfortunately, it is not possible in every case to relieve the mind of anxious citizens who are seeking the whereabouts of their missing relatives. If it seems probable that these relatives may have been killed, the inquirer is referred to the Dead Persons file on the third floor of the house at Dammtorwall 41. Here, a card index of the dead bodies that have been identified is kept up to date, together with an index that gives proof; including the house, in or near which, the bodies have been found. These data are supplemented by an Object Index, filed by address, which consists of a list of personal belongings found on or about the bodies, such as wedding rings, watches, jewelry, and house keys.

Samples of clothing of unidentified persons who have died in the hospital at a later date are attached to a Clothing Card, a procedure that has always been followed in cases of unidentified bodies. Also, photographs of most of the unidentified bodies are taken, and these may be viewed at the Criminal Investigation Department. In addition, detailed questioning of eyewitnesses is used to identify the bodies. Anyone who has witnessed the death of a person still listed as missing will do a good deed by informing the CID, either personally or in writing, so that the many persons still searching for their loved ones will get definite word one way or another, instead of being kept in suspense. As soon as the death of a Hamburg resident is established, a death certificate will be issued immediately. If death is presumed without definite proof being available, a provisional death certificate is issued to the next of kin, which serves as proof for the eligibility of pensions for widows or orphans. It may also be used for civil claims arising from the death of a near relative.

The search for missing children has been turned over to the Women's Division of the CID, which works in close cooperation with the Social Welfare Department. At present, for every child that is being reported to the office from out of town, a search is undertaken to determine if the parents are still alive or if a guardian must be appointed. The State Juvenile Department has the duty to appoint a Hamburg guardian for each child from Hamburg who has lost his parents, even though he or she may live in Bavaria or elsewhere in the Reich. It is believed that this would be the wish of the parents, so that the children in question may retain their ties with their hometown.

Infants and small children whose names and origins cannot be ascertained must be reported--as prescribed by law--to the Federal Commander of the SS, who has a particular interest in the welfare of these children.

Experience has shown that it is a good idea to affix a piece of adhesive tape with name and address to babies and infants, so that they may be identified after disasters caused by air raids. Also, as early as possible, each small child should be taught the name of his parents, including the maiden name of the mother.

In addition to inquiries from parents about the whereabouts of their children, more and more inquiries are being received from children searching for their parents.

With the number of cases being processed mounting steadily, the experience of the police personnal increases in proportion. It is to be hoped that in the foreseeable future, every inquirer will receive a final and satisfactory answer to his quest.

(Signed) L.A.

254
Appendix 17

PUBLIC HEALTH MEASURES

Newspaper Clippings

From Hamburger Zeitung, July 26, 1943

SUPPLY OF NATURAL GAS AND WATER

The supply of natural gas for the population of Hamburg has been restored to normal in a number of city districts. Repair work was started at once; however, a little more patience is required in areas where gas is not at full pressure or is not yet available at all.

To supplement the drinking water supply, water tankcars have been put into service in large numbers. There will be an increase in the number of water supply cars by Wednesday.

* * *

From Hamburger Zeitung, July 29, 1943

MEDICAL CARE

Measures for the Prevention of Contagious Diseases

In the city districts destroyed by air attacks, where physicians can no longer hold regular office hours, around-the-clock medical service is available in all rescue stations. A physician will be on duty there at all times.

For the wounded and sick who have left the damage areas, a collecting station has been established in the Music Hall at Karl Muck Platz, where the wounded will be treated and, if necessary, transported to hospitals. Admission to hospitals is possible only in the most urgent cases.

Drinking Water

Under no circumstances should drinking water be taken from anywhere but the household tap, unless it is thoroughly boiled before drinking. Also, uncontaminated drinking water is being distributed to the population by municipal water tankcars.

Threat of Epidemics

Due to the special circumstances prevailing since the air attacks, primary attention should be given to proper health measures. It is of the utmost importance to observe scrupulous cleanliness, especially in places where germs might find a ready breeding ground.

Do not continue to use toilets until they are clogged; there is still a shortage of water for flushing. Build latrines instead. Any combat soldier will be able to assist you. The pit must be at least one meter deep and should not be located near any fresh water wells. Chloride of lime should be sprayed after every use; it can be obtained at the widely publicized self-protection depots.

Any suspicion of a contagious disease in large shelters should be reported to the nearest police station at once.

Supply of Drinking Water

Because of the air attacks of the last few days, the water supply from the public water network is not in operation in various city districts. There is no reason for panic, because there are 6,000 artesian wells in the city of Hamburg, which can provide several times the daily drinking water requirements. It is only a question of distributing the well water. For this purpose, the civil defense sectors have put water tankcars into service. Also, civil defense sector and civil defense precinct offices can give information about the location of the artesian wells. From <u>Hamburger Zeitung</u>, August 1, 1943

THE FIGHT AGAINST EPIDEMICS

YOU MUST NOT TAKE WATER FROM STORAGE BASINS!

Building Emergency Latrines

The First Order of the Day: Cleanliness!

The City Health Department of Hamburg wishes to communicate the following:

Due to enemy air attacks, the drinking water supply and the removal of sewage has been seriously disturbed in Hamburg. In addition, because of the many thousands of homeless persons, large numbers of people are crowded together in insufficient living quarters. Conditions of this kind represent a heightened danger of epidemics.

If sanitary drinking water from artesian wells in undamaged areas or from municipal water tankcars is not available, water for human consumption should be properly boiled (as, for instance, in the form of coffee).

Careless disposal of waste materials (excrement, urine, garbage, etc.) aids the spread of many contagious diseases.

Despite some damage to drains and sewer plants, the sewer system of the city remains in operation. In those areas where inhabitants are able to obtain water for flushing from the Alster and its tributaries or from canals and sewer installations, the toilets should continue to be used as far as possible. This will provide sufficient water to flush the sewers.

It is strictly prohibited to take water from water storage basins, because this will diminish the precious water supply needed for future fire fighting.

Throwing heavy paper, food remnants, and similar material into the toilet must be avoided at all costs, because stopped-up plumbing in residential houses cannot be fixed at the present time.

Where the toilets are no longer usable or where toilet facilities are insufficient, emergency latrines (at least one meter in depth) must be dug immediately. These latrines must be at least 50 meters, and if possible 100 meters, away from the nearest well or other drinking water source, and must not be dug at a spot where heavy rainstorms, etc., might cause wells and other drinking water sources to be inundated with sewage. After each latrine use, the excrement must be well covered with earth or sand, if chloride of lime is not available. Hands should be well scrubbed, especially before meals and after use of latrines or toilets.

Every citizen has the solemn duty to comply with these health measures for the good of all.

All employees of the Health Department who have not been assigned to duty stations should report between the hours of 8 a.m. and 6 p.m. to the Main Health Building at Besenbinderhof 41.

* * *

OUTPATIENT CLINICS GIVE MEDICAL ADVICE

In the hospitals that are still in operation and in the emergency hospitals, outpatient clinics have been established. Here medical advice and treatment, comparable to those given in a doctor's office, are dispensed.

At the main exit roads of the city, medical care stations have been established where medical help, particularly for the population leaving Hamburg may be obtained. These medical stations have a physician and some nursing personnel on duty and have medicines and bandages on hand. The medical stations are marked with a Red Cross flag and illuminated by a red lantern at night. From Hamburger Zeitung, August 1, 1943

DEPARTMENT OF PUBLIC WORKS BUILDS EMERGENCY LATRINES

In the heavily destroyed city districts in which water closets are no longer in operation, public emergency latrines are being constructed separately for men and women. Provisions have been made by the Department of Public Works for the distribution of chloride of lime and for the care and maintenance of the latrines. Used-up emergency latrines will be closed, so that they can be treated with chloride of lime. The spots that have been used as latrines will be marked as such and must not be used again.

Public Latrines

In many parts of the city, public latrines have been built to prevent the development of epidemics. Such epidemics can be prevented only if waste materials are disposed of conscientiously through these latrines. Those persons who do not use the latrines endanger the whole neighborhood and will be severely punished if caught. Only by scrupulous attention to the preventive health measures of the authorities can the danger of epidemics be averted.

* * *

From Hamburger Zeitung, August 5, 1943

KEEP YOUR HOME CLEAN!

Spoiled Food Remnants and Garbage Should Be Rendered Harmless

Strict discipline in all sanitary matters is the first duty of every citizen in our city. Keeping apartments and emergency quarters and their surroundings clean is the most important weapon we have in the silent battle against epidemics.

Excrement must be removed at once. Where the water closets are still usable, they should be flushed at once, if necessary with buckets. Soiled toilet bowls must be cleaned immediately. If toilet covers are available, they should be kept closed. Excrement must be covered with chloride of lime or with sufficient earth or sand. The goal is to keep flies from getting to the waste materials.

Another urgent health measure is the removal of all spoiled food remnants and the continued prompt disposal of all new garbage. Even in hurriedly abandoned and now empty apartments, checks for food remnants should be made. Even the most scrupulous cleanliness in one's own quarters is of no avail if exposed decaying material is present in the neighborhood. All food leftovers and spoiled foodstuffs must be buried immediately. Open only as many packages or cans of food as you absolutely need. All groceries should be kept in closed containers or well covered with clean cloths, towels, or other suitable material.

To guard against dysentery, do not drink too much water or water that is too cold. The abdomen should be kept warm. Do not eat any spoiled or fermented foods. Spoiled vegetables are particularly dangerous. To give the body the liquids it needs, boiled drinks like coffee and tea are best. Personal cleanliness is the best defense against skin infection and suppuration.

From Hamburger Zeitung, August 10, 1943

REGARDING WATER FROM THE MUNICIPAL LINE

It should be emphasized strongly that for the time being the water from those parts of the municipal water network that were restored after a temporary breakdown due to the air attacks should be used for human consumption only after thorough boiling; at least until thorough investigations by technical experts have shown the water to be noninjurious to health. As soon as the investigating authorities have found the water suitable for human consumption, the public will be so informed without delay. In the city districts that were hit by the air attacks, damage to pipelines and sewer lines may come to light that had not been recognized at first, and therefore it is of the utmost importance that the above health rule be strictly observed. The same rule applies to the areas adjacent to the damaged districts, if a change in the smell, transparency, or color of the tap water is noticed.

From Hamburger Zeitung, August 11, 1943

DRINK ONLY BOILED WATER!

The necessary drinking water in most of the city is still being supplied by municipal tankcars. However, it should be emphasized that even the water from these tanks should be used only after it has been thoroughly boiled to prevent possible epidemics. It goes without saying that the water that is being pumped from the Alster and the canals should be used only for cleaning and fire-fighting purposes. The water from these sources is unfit for human consumption, even when boiled!

From Hamburger Zeitung, August 13, 1943

RUMORS OF EPIDEMICS

The rumors widely circulating throughout the Reich that epidemics have broken out in Hamburg are denied by the health authorities as completely untrue. The state of health of the citizens of Hamburg is good, and this happy fact is no doubt due to the careful observance on the part of the population of all health measures recommended by the authorities.

It goes without saying that cleanliness remains the first order of the day. The sanitary guidelines, repeated daily in this publication, must be strictly adhered to in the future as well, because sanitary discipline is the primary duty of all citizens during the conditions prevailing in Hamburg at the present time.

Keeping your apartment or home clean, as far as the circumstances permit, remains the duty of everyone. Spoiled food leftovers and garbage must be disposed of. Scrupulous care at home must go hand in hand with surveillance of the vicinity. For example, apartments that were abandoned hurriedly and are now vacant should be checked for possible food leftovers that may have spoiled.

Removal of excrement, fight against flies, storage of foodstuffs in covered containers or wrappings and covering of waste materials with chloride of lime or with sand or earth are the primary health measures that must continue to be observed by everyone. From Hamburger Zeitung, August 15, 1943

WARNING BY THE HEALTH AUTHORITIES

It has been discovered that excrement from peat latrines and buckets has been dumped into canals and other bodies of water within the city. Such an act is completely irresponsible and most injurious to public health. The Police President strictly prohibits the pollution of open waters and decrees that waste materials of all kinds must be buried in gardens and yards at least one half meter deep or, if this is not possible, must be dumped into public emergency latrines.

From Hamburger Zeitung, August 16, 1943

VACCINATIONS AGAINST TYPHUS FREE OF CHARGE

A Preventive Measure for All Citizens

Until now, Hamburg has remained free of contagious diseases. All inhabitants of the city must help to keep it this way. To reiterate the most important points: Scrupulous cleanliness must be observed in one's home as well as in the neighborhood. Milk and any water from suspicious sources must be boiled, and everything must be avoided that might lead to intestinal upsets. All waste materials must be disposed of. Foodstuffs must be protected from flies and from other contamination.

Despite all our efforts, however, the danger of an epidemic is still with us. An epidemic could easily get a foothold during the conditions prevailing in Hamburg at the present time. This is especially true of typhus. Vaccination against this dread disease has proved to be most effective with our armed forces.

Vaccinations against typhus, therefore, are being carried out free of charge in Hamburg at present, and all citizens have a duty to themselves and to the population as a whole to avail themselves of this vaccination. If the danger of a typhus epidemic should increase in the future, all persons who did not get this vaccination will be forced by law to obtain it. Although these vaccinations do not give 100 percent protection, the number of cases will be drastically cut and the cases that do occur will be much less severe if everyone is vaccinated.

The vaccinations, given in three separate doses eight days apart, are being carried out in the civil defense rescue stations that have been established in every police station. (In Sector IV, the Vaccination Clinic in Brennerstrasse was designated for this purpose.) They will be carried out daily, including Sunday, during the hours of 3 p.m. to 8 p.m., beginning on Wednesday, August 18, in the following manner:

Citizens whose last names begin with A and B will be vaccinated on August 18, those with names beginning with C to G on August 19, H to L on August 20, M to R on August 21, S to Sz on August 22, and T to Z on August 23. On Sunday, August 24, those persons who have no free time during the week will have a chance to be vaccinated. The second shot will be given in the same sequence, starting on August 25, and the third dose will be administered starting on September 1.

Every person vaccinated will receive a vaccination certificate, which must be carefully preserved and on which the second and third vaccinations will also be entered.

Large plants who have a plant physician may have their employees vaccinated by this physician. The necessary vaccines and blank forms (vaccination certificates and lists of vaccinated personnel) may be obtained at the pharmacy of St. George's Hospital.

Special rules apply to the outlying districts. In the county areas, the following vaccination schedule will be followed:

Wellingsbüttel: Hans Schemm School on August 18, 26, and September 3. Sasel: Schulstrasse 46 (School) on August 19, 27, and September 5. Bergstedt: School, August 20, 28, and September 7. Davenstedt: Old School, August 22, 30, and September 7. Lehmsahl/Mellingstedt: School, August 23, 31, and September 8. Poppenbüttel: School, August 24, September 1, and 9. Hummelsbüttel: School, August 25, September 2, and 10.

Hours are: 1:30 p.m. for names starting with letters A to L and 6:00 p.m. for names starting with M to Z.

For the townships of Schnelsen, Lokstedt, Niendorf, Riesen, Sulldorf, Lurup, Osdorf, Eidelstedt, Stellingen, Kuhwärder, Altenwerder, Moorburg, Neugraben, Fischbek, Francop, Neuenfelde, Crans, Neuland, Volksdorf, Borne, Jenfeld, Tanndorf, and Meiendorf, arrangements will be announced in the near future.

* *

From Hamburger Anzeiger No. 77, August 24, 1943

VACCINATIONS AGAINST TYPHUS

Free vaccinations against typhus--announced in this paper yesterday-will be continued during the next week for all those citizens who have not had either the time or the opportunity to have themselves vaccinated. The sequence will be the same as for the week of August 18 or 24, namely:

On August 25, for all names starting with A and B, August 26 for C to G, August 27 for H to L, August 28 M to R, and August 29 S to Z and on August 30, for all those who had no free time during the week.

The vaccinations starting on August 25 will be given only during the hours of 6 p.m. to 8 p.m. to leave the physicians more time to attend their patients.

Anyone who wants to protect himself against typhus has another opportunity to do so. Vaccinations are being carried out at all civil defense rescue stations and in some large defense plants, but are not available in the regular office hours of private physicians.

From Hamburger Tageblatt No. 252, October 9, 1943

TAP WATER SAFE ONCE MORE FOR HUMAN CONSUMPTION

Thousands of Samples Have been Taken--Preventive Measures Pay Off

The Hamburg Water Department is pleased to announce that after systematic and repeated testing of the tap water in all parts of the city, the Hygienic Institute has no further restrictions against ingestion of unboiled tap water. This means that you may drink the tap water in Hamburg once more without boiling it first.' It is good to know that our tap water is safe to drink, even by the strict standards of the Hygienic Institute. The technical experts are gratified by this fact because no one really knew what consequences the breakdown of the municipal water network would have in the long run. There was a possibility that, during the time when water pressure was low, damaging contamination agents might have gotten into the water supply. The repeated earnest warnings by the authorities therefore, had a sound basis.

In the meantime, thousands of samples of the water in all districts of the city have been taken and examined. Many a housewife might have been puzzled when an automobile stopped at her house solely to take some water from her kitchen faucet. It took several days for each sample to be evaluated, since it depended on the speed with which each kind of bacteria that might have been contained in the water sample generally grows and multiplies. Not only the hygienists were careful; the Hamburg Water Department was also cautious, and it is due mainly to the sustained efforts and stringent preventive measures of the latter that the water in Hamburg 14 fit to drink once more.

Appendix 18

REPORT

OF THE TECHNICAL EMERGENCY SERVICE

REGARDING ITS EFFORTS

TO RESTORE PUBLIC UTILITIES TO THE CITY OF HAMBURG

Chief of County X Northwest Dr. Eng. P. Maack, Lt. Colonel of FPP and Chief of Technical Emergency Service

Hamburg, December 1, 1943

REPORT

Regarding the Assignments of The Technical Emergency Service at the Public Utilities Installations--Gas, Water and Electrical Power--from July 25, 1943

Electrical Power

The assignment of the TES (Technical Emergency Service) at the Hamburg Power Department began on July 28, 1943, and consisted of providing technical personnel (machinists, switchmen, etc.) to assist the Hamburg Power Department in filling the personnel rosters for the three shifts at the underground power station and to relieve switchmen in all substations.

After the relief shifts were ended, the main task was to make the damaged and idled underground power station operable again in cooperation with Hamburg Power Department personnel, in which the TES was given extensive independent tasks to accomplish.

Switching stations with voltages of six kilovolts and 25 kilovolts, boiler houses, and machine houses, some of which had the whole roof torn off and all windows knocked out, had to be quickly protected against weather influences by repair work. In many cases, bent steel gir'ers had to be removed. The roofing repairs were almost all carried out at heights of from 20 to 25 meters on swaying, damaged girders and beams. Every squad officer and workman had to exercise the utmost caution and seasoned judgment.

After removal of debris from boilers, machines, and switching installations and elimination of a collapsed crane installation, the damaged parts were removed, and the salvageable machines were cleaned and repaired. This work proceeded at such a pace that by Monday, August 2, 1943, we could undertake a one-and-a-half hour trial run with a medium pressure turbine.

The next day, August 3, 1943, the power station was back in operation, dispensing 25,000 kwh. This was increased to 200,000 kwh the next day. On August 6, the underground power station provided 231,000 kwh; on August 7, 300,000 kwh; on August 11, 409,000 kwh; on August 19, 618,000 kwh; on August 25, 677,000 kwh; and on September 9, 807,000 kwh.

At the Neuhof Power Station, which was also out of commission because of heavy damage, the TES undertook welding and fitting work on steam plants and condensers, as well as repair work on cranes and machinery. Among others, the following tasks were carried outs

- 1. At the main water cooling compressor installation, holes were mended by welding, and dampers were repaired.
- 2. Armatures and pipes were replaced in the steam plant, the auxiliary condenser was repaired, and damaged parts were either repaired or replaced.
- 3. The high pressure steam lines were checked, and damage was repaired. Condenser pressure lines with 300 mm pipes were mended and partly replaced.
- 4. Parts of stairs and steel parts in the boiler house were removed. Roofs of the machine house, switching station, and boiler house were mended.

After a short trial run on August 2, 1943, the installation was back in operation on August 3, dispersing power in the amount of 377,000 kwh, which was increased as follows: on August 17, to 621,000 kwh; on August 24, to 878,000 kwh; on August 28, to 953,000 kwh; and on August 27, to 1,000,000 kwh.

In the substations Burmbeck, Bille, Eilbek, Grossneumarkt, Roland Funkstrasse, Wandsbek, and Kuhwärder and in the heating plant in Karolinenstrasse, the TES constructed numerous emergency roofs to protect valuable machinery installations, removed collapsed cranes, and salvaged usable apparatus and transformers from destroyed buildings, which had to be braced in some cases.

Special squads were assigned to repair machines and apparatus, rerou's high tension switching stations, and restore interrupted overhead cables. The first estimate, namely that the capacity of the underground gas works and the Barmbek, Bahrenfeld, and Bergefeld Gas Works would be sufficient to supply Hamburg's demand for natural gas, has not been borne out, mainly because of the large scale return of the population to Hamburg. Therefore, service at the Grasbrook Gas Works had to be restored as quickly as possible. Here, TES Squads were assigned to rebuild ramps and stairs, tear down and remove walls, and perform cutting work on the steel construction of the collapsed gas tank.

Water

The primary task here was to alleviate the shortage of drinking water after the catastrophe. Therefore it was necessary, aside from restoring the central water pipeline network, to arrange for sufficient emergency wells, so that the people were able to obtain their own water supply, preferably at several places in each street.

At present, the TES is still working on the restoration of the full water supply by providing workers to dig wells. Since August 10, the workers have completed 97 wells. In addition, industrial wells that were built previously have been requisitioned to help supply the population, and service personnel has been trained and assigned by the TES to service these industrial wells. Approximately the same number of men was needed by the water department as was used for the gas works.

At the large water works in Rothenburgsort, the TES crews had the task of installing a corrugated iron roof on the switching station and an emergency roof on the boiler house. They also had to rebuild living quarters. To obtain the necessary raw materials for this task, other damaged buildings had to be dismantled and cleared. Approximately 70 emergency workers were assigned. They were assisted in clearing the masses of debris by approximately 200 armed forces personnel and, after these left, by about 40 prisoners. To restore the coal supply system, an operation which had been automated before the catastrophe, conveyor belts were obtained and installed.

Most of the work remains to be done at the water pipeline network. While the gas works cannot put the pipelines in operation until the damages are eliminated and damaged lines are closed off, the water works can feed the network and then assign people to fix the system when the breaks in the pipes become apparent. Pipe fitter squads of 7 men each with 20 assistants were assigned around the clock for ground work to eliminate damages in 300-mm and 900-mm lines. At the same time, special commando forces of 120 men each, under the direction of TES, had fitters assigned to repair the gas connections in damaged residential buildings.

The assistance given to the municipal gas works by the TES can be summed up as follows: removal of damages to main and distribution lines, separations and connections, and blowing out and sealing of residential connections. It is because of the TES' energetic efforts that the underground gas works and the gas works at Barmbeck, Bergedorf, and Bahrenfeld can supply the population with natural gas once more. Service was reestablished as follows:

August	22	Finkenwärder
	24	Wilhelmsburg
	25	Harburg
	26	Waltershof
September	2	Langenhorn, Fuhlsbüttel, and Ohlsdorf
	3	Winterhude and part of Barmbeck
	9	Alsterdorf and Gross Borstel
	15	Harbor and Moorfleth
	18	Altona, west of Hohenzollernring and Elbe suburbs
	19	Eppendorf, Hoheluft, and North Havestehude
	28	First part of Wandsbek
	29	Lokstedt
October	1	Harvestehude south to Sternschanze
	9	Altona to Main Railroad Station
	14	Second part of Wandsbek
	25	Steilskop and Bramfeld
	28	Uhlenhorst
November	4	Altona, from main railroad station to Holstenstrass
	7	Remaining part of Wandsbek
	9	Stellingen
	27	North Barmbek
	30	St. George to main railroad station.

Work on the remaining city districts is in progress. It is expected that Eimsbüttel and part of St. Pauli will have service restored in two to three weeks, the inner city in about three to four weeks, and South St. Pauli by about the middle of January.

Because of the departure of the out-of-town personnel, the repair rate of the first few weeks unfortunately cannot be maintained. In addition, in some districts, where destruction is particularly widespread, the work is much more extensive than had been anticipated.

The part of the tank that can be repaired has about 800 to 900 holes to be sealed. The holes have to be filed down to perfect circles, and specially prepared steel discs have to be fitted into the holes by electric welding. In addition, 30 riddled steel plates (6,000 mm × 800 mm) have to be exchanged for undamaged plates from the upper three tank stories, which will not be used for the time being. These have to be riveted in place and supported. The damaged pipe sections are being replaced, equipped with new flanges, and welded.

The work described above makes the highest demands on all foremen and workers and is being carried out under the direction of a senior fitter of M.A.N.

In the gas works in Barmbeck and Fuhlsbüttel, the main task of the TES consisted of repairing the regulators that had been destroyed by explosion. Work consisted chiefly of precision welding on pipelines and dismantling destroyed and mounting usable regulators, levers, and pipe sections. The work at the Barmbek Gas Works was carried out by a special squad of the TES completely on its own; in Fuhlsbüttel, TES crews worked in cooperation with the technicians of the gas works.

Also in Barmbek, extensive locksmith and electrical work had to be performed. Emergency roofs had to be put up, and, in some places, destroyed iron roof structures had to be dismantled before new ones could be erected. The same type of work had to be performed at the Bahrenfeld Gas Works.

In the Wandsbek workshops of the Hamburg Gas Works, the TES was given the task of removing the iron roof construction and one gantry in a hall of about 21×35 meters. This work was accomplished in a very short time.

At the same time, extensive damage to the low pressure network was eliminated. The greatest difficulties were encountered in obtaining the necessary tools, particularly pipecutters for 300 mm and 900 mm pipe, and measures must be taken at once to make the needed equipment available.

Squads of seven pipe fitters each were brought in by the TES from many German cities; e.g., Berlin, Breslau, Breitenburg, Dresden, Frankfurt, Hannover, Köslin, Leipzig, Magdeburg, Plauen, Stuttgart, and Weissenfels. For the ground work, squads of 20 to 25 assistants were assigned as needed. According to plan, the low pressure network was first subdivided into smaller network districts by using dampers to separate pipes. In some cases, to repair the network, the needed pipe material had to be cut out of shutdown lines.

A major task of the Hamburg Power Department was to restore the cable network, which had undergone numerous direct hits to the main cables and innumerable short circuits in destroyed residential buildings. A major part of the TES personnel were organized for this task. First, approximately 210 men were especially trained in repairing (or eliminating) residential connections to carry out this work without difficulties. Special motorized TES squads were also put into the field for the elimination of cable damage and other troubles so that service could be restored in defense plants as quickly as possible.

Other special squads salvaged meters, switch gear, and transformers from destroyed buildings so that they could be used to repair urgently needed idled installations.

Gas

The TES was first assigned to eliminate air attack damage in the underground gas works. Three wet containers and one dry container were to be repaired here. To restore service at the works, the most urgent repair was the wet container. After installing a raft as a work base, approximately 12,000 cubic meters of the water had to be pumped out by three fire pumps, an operation that consumed 30 hours. Then new metal plates had to be installed, and the split seams had to be rewelded.

The roofs and windows of all plant buildings, especially the roofs of the boiler house and machine house, had to be replaced in some cases and mended in others.

From August 10 on, the underground gas works were able once more to supply gas and, in cooperation with the Bergedorf Gas Works, which was undamaged, most of the defense plants were serviced with natural gas via the high pressure network after minor damage to the high pressure lines had been repaired.

The most difficult task that was required of the technical administration of the Hamburg Gas Works was the sealing of the large 108-meterhigh gas tank, which had to be restored in the quickest possible time to its approximately 125,000 cubic meter storage capacity; i.e., so it could be used up to the third story in buildings. Through an explosion in the immediate vicinity of the gas tank, the walls of the tank had sprung 2,000 leaks. Also, land mines had caused one of the sides to be dented and deformed the steel plating. The upper part of the gasometer was pushed to one side, and the girders of the roof were extensively bent. The elevators were badly damaged and not usable; the oil pump installation was out of commission, the pipelines were torn, and the heating plant was destroyed. In this way, it was possible to get the main feeder lines operating in a short time and to supply some of the city districts to the extent that the population could take water from numerous hydrants and from basement outlets. For fire-fighting purposes, many motor pumps were put in intermediate switching position to pump water from the lines.

After eliminating the largest pipe breaks, the pressure of the pipeline network could be raised to the point where almost all of Hamburg could be supplied with water, even on the upper floors. Unfortunately, however, the necessary water pressure has not been restored fully in several city districts. The reason for this is that about 47 percent of the water brought in is lost because of breaks in the pipelines.

To make the refilling of heating installations possible, the water pressure is being raised by ten meters in the hours between 6 p.m. and 8 p.m. It is not possible to keep the water pressure at this level all the time because no reserve would be left.

Numerous TES squads, in cooperation with crews from the municipal water department, are at work at present separating and closing off connections in damaged residential buildings. This work is expected to continue, especially in Eilbeck and Hamm, for some time.

One special task of the TES is to restore the interrupted circular pipeline at the destroyed Brown Bridge. By inserting pipe joints, a new pipeline is being erected above the remaining intact bridge girders. The pipes will not need to be covered since this is a main feeder line under continuous pressure and so there is no danger of freezing.

Experiences

The first call for help from the public utilities was to provide relief crews for the personnel engaged in operating power-producing and distribution stations, because the regular staff was too depleted to man all three shifts, either because of personal bomb damage or because of destruction of public transportation.

Where the plants themselves were hit by the enemy, the first priority was to put up emergency roofs and board up windows quickly, since boiler houses, machine houses, switching stations, and other plant buildings for the most part had their roofs completely torn off and all the windows blown out, so that the plants were exposed to the elements. To proceed according to plan in the distributor networks, all buildings still occupied or occupiable were entered on survey maps, (1:25,000) and this proved to be most valuable, since it was possible to gain an overall picture of where electricity, gas, and water were most urgently needed.

For the work on the cable network of the power department and the laying of gas and water pipes, as well as soldering, welding, and cutting, numerous squads had to be put together and trained thoroughly, as was the case with machinists and switch operators.

It is of the utmost importance for all squads to be fully equipped with the necessary tools. Effective assignment and immediate action depend on it. According to guidelines established previously, the out-oftown forces unfortunately were sent out without equipment, which led to great delays in putting these units into the field, since the necessary tools could not be found in all of Hamburg and the equipment owned by the municipal water department was almost completely destroyed.

Furthermore, it is necessary that the public utilities be informed about planned demolitions far enough in advance to have time to close off lines in the buildings to be demolished before the residential utility connections are blocked by debris. For those sites where debris has to be cleared so that the three public utilities--power, gas, and water-can be open to digging operations, a street map with exact location of each utility line to be cleared should be provided, plainly showing the sites that must be kept free from debris.

It should also be mentioned that the availability of portable auxiliary power plants was crucial not only for the direct supply of utilities, but also in many cases for starting the stationary large emergency power plants, because there was no air pressure available to start the diesel motors. In these latter instances, the TES fed the compressed air installations at the emergency stations with portable auxiliary power plants, and with the help of the compressed air, got the power stations going. Care should be taken at all times to have enough compressed air available to get the auxiliary motors started.

Outlook

The TES forces were withdrawn from the generating plants on October 16, except for the underground gas works where work on the large gas tank is still in progress and is expected to continue for several weeks. Considerable work for the TES remains at the distribution networks of the

utilities. In the cable network, where more than 10,000 shutoffs of residential outlets have been completed, the TES forces will be occupied with additional shutoffs for an additional four to six weeks. Major repairs remain to be done in the gas and water works, which will not be completed in the foreseeable future because the out-of-town assistance forces have been withdrawn. The authorities should seriously consider recalling the out-of-town TES forces or supply additional assistance in other ways.

It is pleasant to report that because of the great care taken and good judgment exercised during the work on the gas pipelines, no major explosions or gas poisonings have occurred. Unfortunately, just today 13 different minor explosions took place in the pipelines of the inner city, the cause of which has not yet been officially determined. However, it can be stated fairly definitely that the accumulation of explosive oxyhydrogen gas, a mixture which consists of 6 to 18 percent gas and 82 to 92 percent air, ignited when persons in these districts tried to light their burners after St. George Station was reconnected to the gas lines. The flames went inward and gradually traveled toward the explosive mixture. It cannot be ascertained to date how the gas got into the pipeline, but occurrences of this kind are unavoidable under the circumstances despite the fact that the utmost caution is exercised. It should be re-emphasized: feeding the lines with gas prematurely must be avoided at all costs.

It cannot be predicted at this time how long it will be till the inner city will have its gas supply restored.

At the water works, conditions are still such at present that about 47 percent of the water supplied by the large pumping station at Rothenburgsort is lost. At present, the following amounts of water are being supplied in Rothenburgsort from a 50-meter water head:

During the day, 8,600 cubic meters per hour

During the night, 5,400 cubic meters per hour.

In view of the fact that, before the catastrophe, approximately 2,500 cubic meters per hour were sufficient to supply the city at night, it would appear that 2,000 cubic meters should be ample now. Since 5,400 cubic meters are needed today, this works out to a loss of 3,400 cubic meters per hour. With a daytime consumption of 7,300 cubic meters per hour, the average daily loss is 47 percent.

When the points of leakage, some of which are still undiscovered, are eliminated, the pressure situation should improve greatly.

Because of the fact that more and more industrial and commercial firms are receiving permission to rebuild in the area, the public utilities are faced daily with new tasks to supply these firms with electricity, gas, and water. The necessary work is especially extensive, difficult, and time-consuming, because of the task of cleaning out the network, particularly shutting off the innumerable residential connections in destroyed buildings.

The figures on the next page give an illustration of the daily work carried out.

Number of Personnel							
	Out-of-	Sector	Army Assistance	100	Employed by ^a		
TES	Town	111	Squads	Total	Power	Gas	Water
719	312		-	1,031	192	40	32
1,303	457	-	_	1,760	39?	93	196
1,048	377	317	120	1,862	208 75	100 25	85 20
904	567	267	300	1,938	196 106	122 92	130 20
900	362	507	800	2,569	200 216	108 1.51	138 61
836	306	361	415	1,918	338 192	:147 92	246 78
740	343	260	320	1,563	340	145	223
682	266	332	160	1,440	289 40	144 60	230 60
790	159	348	694	1,991	230 40	120 60	187 80
732	47	405	629	1,813	188 40	111 60	159 60
	1,303 1,048 904 900 836 740 682 790	TES Out-of- Town 719 312 1,303 457 1,048 377 904 567 900 362 836 306 740 343 682 266 790 159	TESOut-of- TownSector 1117193121,3034571,3034571,048377317904567267900362507836306361740343260682266332790159348	TESOut-of- TownSector 111Army Assistance Squade7193121,3034571,3034571,048377317120904567267300900362507800836306361415740343260320682266332160790159348694	Army Army TES Town III Assistance 719 312 1,031 1,303 457 1,760 1,048 377 317 120 1,862 904 567 267 300 1,938 900 362 507 800 2,569 836 306 361 415 1,918 740 343 260 320 1,563 682 266 332 160 1,440 790 159 348 694 1,991	Army Out-of- Sector AssistanceEmp TotalTESTown111Squade SquadeTotalPower7193121,0311921,3034571,7603921,0483773171201,862208 759045672673001,938196 1069003625078002,569200 2169003625078002,569200 2169003625078001,938196 1069003625078002,569200 2169003625078002,569200 2169003625078002,569200 2169003625078002,569200 2169003623614151,918192 3388363063614151,918192 407403432603201,5633406822663321601,440289 407901593486941,99140 40732474056291,813188	Aray AssistanceEmployedTESTownIIIAssistance SquadeEmployed7193121,031192401,303 457 1,760392931,0483773171201,862208100 759045672673001,938196122 1069003625078002,569200108 2169003625078002,569200108 2169003625078002,569200108 2169003625078002,569201108 2169003625078002,569202108 2169003623614151,918192929003623614151,918192929003623614151,918192929003623614151,918192929003633614151,918192929003432603201,5633402456822663321601,440289144 406822663321601,440289144 407901593486941,9914060732474056291,813188111

a. First line - TES Men, Second line - Out-of-town assistance.

•

(Signed) Dr. P. Maack

Appendix 19

INFORMATION ON THE PERFORMANCE AND USE OF AIR-RAID SHELTERS Charts and Pictorial Material

CONTENTS

Private Air-Raid Shelters

Plan 1, Damage Site BILLSTEDT, Wilhelmstrasse 9 Plan 2, Damage Site STELLINGEN, Koppelstrasse 16 Plan 3, Damage Site EIDELSTEDT, Kieler Strasse Plan 4, Damage Site EIDELSTEDT, Kieler Strasse 680

Public Air-Raid Shelters

Plan 5, Damage Site BILLSTEDT, Hamburger Strasse 74 Plan 6, Damage Site ALTONA, Bahrenfelder Strasse 79 Plan 7, Damage Site LANGENFELDE, Kieler Strasse 288 Plan 8, Damage Site ALTONA, Friedensallee 76 Plan 9, Damage Site ST. PAULI, Schulterblatt 132 Plan 10, Damage Site ST. PAULI, Schulterblatt 156 Plan 11, Damage Site EIMSBÜTTEL, Margarethenstrasse 8 Plan 12, Damage Site HAMM, Volksschule, Marienthaler Strasse

Tunnels

Plan 13, Damage Site ALSTERDORF, Bilserstrasse Plan 14 Damage Site ALSTERDORF, Bilserstrasse 4-16 Plan 15, Damage Site ALTONA, Treskowallee Plan 16, Damage Site GR. FLOTTBECK, Luruper Chaussee

Special Underground Splinterproof Buildings (Bunkers)

Plan 17, Damage Site EIMSBÜTTEL, Amandastrasse Plan 18, Damage Site BARMBECK, Rübenkamp 16 Plan 19, Damage Site BARMBECK, Meisenstrasse Plan 20, Damage Site BARMBECK, Bachstrasse Plan 21, Damage Site BARMBECK, Probsteierstrasse Plan 22, Damage Site ROTHERBAUM, Mittelweg

Special Partially Underground Splinterproof Euildings (Bunkers)

Plan 23, Damage Site EIMSBUTTEL, Sillemstrasse/Heussweg Plan 24, Damage Site BILLW.-AUSSCHLAG, Bergedorfer Heerweg Special Above Ground Splinterproof Buildings (Bunkers)

Plan 25, Damage Site WILHELMSBURG, Fichenallee Plan 26, Damage Site ROTHENBURGSORT, Hardenstrasse

Bombproof Surface Shelters

Plan 27, Damage Site ST. PAULI, Paulstrasse Plan 28, Damage Site EILBECK, Wielandstrasse

Reinforced Concrete Shelters

Plan 29, Damage Site EIDELSTEDT, Hörgensweg Plan 30, Damage Site EIDELSTEDT, Hörgensweg Plan 31, Damage Site LANGENFELDE, Kieler-Emahusstrasse Plan 32, Damage Site SCHNELSEN, Weidenstrasse 33 Plan 33, Damage Site BRAMFELD, Hermann-Göring-Strasse Plan 34, Architectural Drawing of the Civil Defense Reinforced Concrete Dug Outs

PLAN 1

EXAMINATION OF AIR WAR EXPERIENCES

Damage Site BILLSTEDI', Wilhelmstrasse

Cause of Damages: Fire Bombs

Object of Investigation: Private Air-Raid Shelter in a Three-Story House

The air-raid shelter was located in the basement and was designed to give shelter to 25 people. The ceiling of the cellar was about 1.3 meters above the surrounding terrain. The air-raid shelter was secured by banked-up earth from the outside. The massive cellar ceiling had a wooden reinforcement. The building was completely destroyed by fire bombs. Three high explosive bombs fell about 100 meters away. The airraid shelter survived intact. All persons sheltered were able to leave the shelter by the emergency exit.



EXAMINATION OF AIR WAR EXPERIENCES

Damage Site STELLINGEN, Koppelstrasse 16

Cause of Damages: Air Mine

Object of Investigation: Private Air-Raid Shelter in a Residential Building

The whole house was blown away by an air mine. The shelter remained intact, seven people were protected and were able to exit after the all-clear by the stair hole under the gas meter marked (X).

289

PLAN 2



EXAMINATION OF AIR WAR EXPERIENCES

5

PLAN 3

Damage Site EIDELSTEDT, Kielerstrasse

Cause of Damages: High Explosive and Fire Bombs Object of Investigation: Private Air-Raid Shelter

The whole house was demolished and burned. The basement ceiling, except for the reinforced ceiling over the shelter, collapsed. Exit from the shelter was made possible by loosening splinter posts above the casement marked (\times) .



PLAN 4

EXAMINATION OF AIR WAF, EXPERIENCES

.*

Damage Site EIDELSTEDT, Kielerstrasse 680

Cause of Damages: High Explosive Bomb

Object of Investigation: Private Air-Raid Shelter

The house completely collapsed but the air-raid shelter remained intact. The 28 persons in the shelter were able to escape by clearing the emergency exit marked (\times) .



EXAMINATION OF AIR WAR EXPERIENCES

Damage Site BILLSTEDT, Hamburgerstrasse 74

Cause of Damages: Fire Bombs

Object of Investigation: Public Air-Raid Shelter in a Residential Building

This public air-raid shelter for about 125 persons was located in the basement floor of a three-story residential building that was extensively damaged by fire bombs. Massive cellar ceiling reinforcing held the burden of debris. The air-raid shelter itself was undamaged.

All persons sheltered were able to leave the shelter through the main exit (\times) and through the back emergency exit $(\times \times)$.

295

PLAN 5


EXAMINATION OF AIR WAR EXPERIENCES

Damage Site ALTONA, Bahrenfelderstrasse 79

Cause of Damages: Fire Bombs

Object of Investigation: Public Air-Raid Shelter

The interiors of the buildings burned out and collapsed. An emergency exit between two houses had been recently covered with a 60 cm concrete ceiling. This ceiling marked (\times) caught the mass of the debris, so that the 40 people in the shelter could exit without difficulty. The back emergency exit led through a paper factory, but the factory was on fire and that exit could not be used.



EXAMINATION OF AIR WAR EXPERIENCES

Damage Site LANGENFELDE, Kielerstrasse 288

Cause of Damages: Fire and High Explosive Bombs

Object of Investigation: Public Air-Raid Shelter

The house over the shelter burned out and collapsed. The public air-raid shelter gave protection until all 140 persons in it had been rescued. Heat and water had weakened the restraining concrete ceiling to such an extent that it could be kicked in with the foot after the debris was cleared away.



EXAMINATION OF AIR WAR EXPERIENCES

Damage Site ALTONA, Friedensallee 76

Cause of Damages: High Explosive and Fire Bombs

Object of Investigation: Public Air-Raid Shelter Located in a Factory Building

Fifteen persons were rescued from this shelter. The emergency exit (\times) was cleared from the inside after the splinter protection was removed.



EXAMINATION OF AIR WAR EXPERIENCES

Public Air-Raid Shelter ST. PAULI, Schulterblatt 132

Cause of Damages:

Object of Investigation: Public Shelter in Back of House

This air-raid shelter was located just under the ground level. The normal exit was through a gateway into a narrow yard. An emergency exit was available through the front basement rooms. The house and all neighboring buildings were burned out. When the attack started, 50 to 60 persons were in the shelter. When the houses began to burn, 40 to 50 persons left the shelter immediately by way of the gateway exit. The remaining 15 persons did not want to risk their lives to flee through the burning houses and were killed in the shelter (asphyxiated?). The room located next to the emergency exit had a wooden beam ceiling that burned out. The shelter itself was not destroyed. (No safe evacuation route was available at the height of the fire).







ÖLSR	=	Public Air Raid Shelter
NA	=	Emergency Exit
Torweg	=	Gateway
Zugang	=	Entrance
Nicht Unterkellert	=	No sub-basement

Plan 9

EXAMINATION OF AIR WAR EXPERIENCES

Public Air-Raid Shelter ST. PAULI, Schulterblatt 156

Cause of Damages: High Explosive and Fire Bombs Object of Investigation: Public Shelter in Back of House

This air-raid shelter was located almost entirely below ground surface. The exit could only be reached through a gateway from a terrace. When the fire started, about 30 persons fled through the gateway. The remaining 67 persons apparently were afraid to make their way through the strongly smoking terrace and the burning gateway, and were all killed. The wall breakthroughs were all established but were not used since the neighboring houses were on fire down to the ground floor. Death was apparently caused by asphyxiation or smoke inhalation. The shelter remained intact. (No safe evacuation route existed.)





SCHULTERBLATT 156

Terrasse	-	Terrace
Zugang	**	Entrance
ÖLSR	=	Public Air-Raid Shelter
NA	Ξ	Emergency Exit
M D	Ξ	Wall Breakthrough
Torweg	=	Gateway
Torweg		Gateway

Plan 10

EXAMINATION OF AIR WAR EXPERIENCES

Public Air-Raid Shelter EIMSBÜTTEL, Margarethenstrasse 8

Cause of Damages: High Explosive and Fire Bombs

Object of Investigation: Public Shelter in Back of House

This shelter could only be reached from a gateway and was located in the back of the building. It was located below ground level and had an emergency exit and a wall breakthrough. About 30 persons left the shelter immediately upon the outbreak of fire in the house. The remaining 23 persons apparently were not brave enough to follow. The gateway that had to be passed through remained in good condition. It is incomprehensible that the people remained in the shelter. Death was apparently caused by asphysiation. The room located behind the emergency exit had wooden beam ceilings, and these were burned out. (No safe evacuation route existed.)





MARGARETHENSTR.

Key:

OLSR	=	Public Air-Raid Shelter
Torweg	=	Gateway
Zugang	×	Entrance
NA	=	Emergency Exit
MD	=	Wall Breakthrough
Holzplanke	±	Wooden Plank

Plan 11

EXAMINATION OF AIR WAR EXPERIENCES

Damage Site HAMM, Grammar School Marienthaler Strasse

Cause of Damages: High Explosive Bomb

Object of Investigation: Rescue Station in a Grammar School

The basement floor contained a rescue station and air-raid shelters for about a total of 650 persons.

The ceiling of the cellar was located about 1.9 meters above the ground. The outer walls of the shelter rooms were 64 cm thick and were reinforced from the outside by additional strong masonry 75 cm thick. Three explosive bombs landed 35 to 40 meters from the school.

The outer wall reinforcements showed extensive splinter damage. The shelters remained undamaged. All sick persons and persons that took shelter were able to leave through the two shelter exits.



EXAMINATION OF AIR WAR EXPERIENCES

ALSTERDORF, Bilserstrasse

Evaluation of information from the massive air attacks on the construction of evacuation tunnels.

The emergency exit at the house at Bilserstrasse 16 is shown in the picture. It served five row houses under a common roof. The air-raid shelters were connected by wall breakthroughs. An emergency exit was prepared at each end of the row houses. The stepping stone from the emergency exit extended away from the house to the extent of about twothirds of the height of the building so as to be clear of debris from wreckage of the structure. At this distance, the burying of the exit should be not possible. (This is the basis used for the building of emergency exits after the catastrophe).



EXAMINATION OF AIR WAR EXPERIENCES

ALSTERDORF, Bilserstrasse 4-16

Evaluation of Experiences from the massive air attacks regarding the construction of evacuation tunnels.

An emergency exit from a block of houses in horseshoe shape is shown in the picture. All the houses are connected by wall breakthroughs. Evacuation route (\times) at the front end out of the field of debris connects with the exit (\times) leading to the street. The second picture shows the exit from the garden side with a view of the street. The building of emergency exits such as this was done employing the lessons from the last catastrophe.



EXAMINATION OF AIR WAR EXPERIENCES

Rescue Station ALTONA, Treskowallee

Utilization of experiences growing out of the massive air attacks regarding the construction of evacuation tunnels.

For this building, which has a horseshoe shape, an evacuation tunnel leading out of the inner court was constructed; it was covered with splinter protection beams and has a stairway leading to the schoolyard.



EXAMINATION OF AIR WAR EXPERIENCES

PLAN 16

GR. FLOTTBECK, Luruper Chaussee

Utilization of experiences drawn from the massive air attacks regarding the construction of evacuation tunnels.

In every residential block, where two houses are connected by wall breakthroughs, connecting evacuation tunnels are being installed leading to the street. (Here the exit is behind the wall.) Traces of fire bomb hits can be seen on the street.

Concurrently, water containers with about 50 cubic meters' capacity will be constructed along the path in the background by community labor on Saturdays and Sundays. The earth dug up for these constructions will be used to strengthen the walls of the air-raid shelter.



EXAMINATION OF AIR WAR EXPERIENCES WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION Damage Site EIMSBÜTTEL, Amandastrasse

Circle 1, Local Group Bellealliance

Time: Air Attack During the Night of July 25, 1943

Cause of Damages: High Explosive Bomb, Weight Unknown

Object of Investigation: Underground Splinterproof Special Shelter (Bunker)

The detonation of a high explosive bomb, which apparently hit the outer wall of the sluice of the special shelter or right next to it, caused a cone-shaped piece, 70 cm high and about six meters square to come loose from the sluice (entry-way) ceiling and fall into the sluice. Furthermore, several cracks developed in the outer wall of the sluice and lintels above the gas-proof sluice door leading to the interior of the building and the exit door were loosened. The l.l-meter-thick concrete shelter ceiling was reinforced above and on the underside with light steel rods. The concrete structure is still in perfect condition.

One person was killed by falling concrete pieces in the sluice. Other than that, none of the 52 people that took shelter in the building was injured.

The special shelter was otherwise intact.

Hamburg, October 5, 1943 Department of Shelter Construction





Key:

.

Schleusendecke = Sluice (entry way) ceiling Bewehrung durch leichtes Baustahlgewebe = Strengthened by lightweight reinforced steel





EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION

Damage Site BARMBECK, Rübenkamp 16

Circle 4, Local Group Zoll

Time: Air Attack During the Night of July 30, 1943

Cause of Damages: Air Mine

Object of Investigation: Underground Splinterproof Special Shelter (Bunker), Police No. VI/61/32

During the night of July 30, 1943, an air mine exploded about 80 meters from the special shelter. One of the two entrance structures had its wooden roof torn off and thrown aside. (See Picture 2). The original condition is shown in Picture 1. The gas-proof sluice doors, in this case double doors, were severely bent inwards.

The light emergency covering of the entrance proved very effective, since there was no blocking or burying of the entrance. No persons were injured.

> Hamburg, October 4, 1943 Department for Wartime Shelter Construction









Schleuse = Sluice Vorraum = Anteroom Pumpenshaft = Pump Shaft




Einschlag der Luftmine = Hit of Air Mine



EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CON

Damage Site BARMBECK, Meisenstrasse

Circle 4, Local Group Adler

Time: Air Attack During the Night of July 30, 1943

Cause of Damages: Probable Air Mine

Object of Investigation: Underground Splinterproof Special Shelter (Bunker), Police No. VI/61/24

The detonation of an air mine approximately 10 meters away from the special shelter caused the entrance with masonry sidewalls and a concrete ceiling that were constructed after the shelter was built, to collapse, and part of the building above the emergency exit was torn off; see Picture IV. The outer gas sluice door was very severely bent inward; see Picture II.

The main exit remained usable. No persons were injured.

Hamburg, October 5, 1943 Department of Wartime Shelter Construction







.





EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION

Damage Sity BARMBECK, Bachstrasse

Circle 4, Local Group Humboldt

Time: Air Attack During the Night of July 30, 1943

Cause of Damages: High Explosive Bomb, Weight Unknown

Object of Investigation: Underground Splinterproof Special Shelter (Bunker), Police No. VI/60/25 (Time of Construction: 6/11/40 to 5/5/41) (Construction Firm: E. Prignitz)

The building received a direct hit during the night of July 30, 1943. Of the three tunnels of the building, two were damaged. The opening created in the arched ceilings is about 4×4 meters in size. The shelter ceiling was reinforced by light steel girders above and wire mesh web on the underside. The wall between the two tunnels, 40 cm thick, was considerably damaged. This being an older building, the dividing walls between the shelter rooms were put in after the ceiling was constructed. The front walls contained steel rods for reinforcement.

The detonation of the bomb apparently took place in the ceiling, so that much of the force of detonation escaped to the outside. The effect of the air pressure in the inside of the structure is only shown on the gas-proof door (marked A), which is bent outward. Twelve of the 150 persons that took shelter in the bunker were fatally injured by concrete spall.

The overpressure resistance of the concrete ceiling has been determined to be 268 kg/cm². This value refers to the expected resistance of the concrete 28 days after construction whereas, if the aging of the concrete is taken into consideration, the value would be much lower, which the shock from the explosion apparently exceeded. The minimum overpressure resistance prescribed for bunkers of this kind, namely 160 kg/cm² after 28 days, was therefore also exceeded. The dividing walls served their purpose as they apparently helped to limit damage to two sections of the two tunnels although one dividing wall was also damaged and collapsed (See Picture 1). The third tunnel shows cracks in the ceiling and walls only.

Although we are dealing here with a bunker of older construction, the damage shows that the expectations for a structure of this sort have been fulfilled. The structure is not usable any longer since its repair would be as expensive as new construction.

> Hamburg, October 5, 1943 Department of Wartime Shelter Construction







Standpunkt des Lichtbildners = Position of Photographer Baustahlgewebe No. 6 an der Aussenseite = Light steel girders on the outside Starkes Waschendrahtgewebe an der Innenseite = Heavy wire mesh on the inside Querschnitt = Cross Section Längsschnitt = Longitudinal Section Grundriss = Groundplan Durchschlagsöffnung in der Decke = Opening in ceiling created by hit







EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION

Damage Site BARMBECK, Probsteierstrasse

Circle 4, Local Group Dulsberg West

Time: Air Attack During the Night of July 30, 1943

Cause of Damages: High Explosive Bomb, Weight Unknown

Object of Investigation: Underground Splinterproof Special Shelter (Bunker), Police No. VI/62/17

Through a bomb detonated in the neighborhood, the west entrance structure of the bunker, consisting of masonry walls and a concrete sheet ceiling, was blown over and fell into the entrance. The entrance therefore was unusable (as an exit). Condition of the shelter before destruction is shown in Picture II.

The entrance superstructures of masonry that were added afterwards have proved to be not strong enough to withstand the detonation pressure of nearby explosions. By their breaking into numerous fragments, they easily block exits. No persons were injured in this shelter.

The structure is otherwise undamaged.

Hamburg, October 5, 1943 Department for Wartime Shelter Construction











Key:

Standpunkt des Lichtbildners = Position of Photographers Bombeneinschlag = Bomb Hit



EXAMINATION OF AIR WAR EXPERIENCES WORK CINCLE AIR-RAID SHELTER CONSTRUCTION Damage Site ROTHERBAUN, Mittelweg

Circle 1, Local Group Dammtor

Time: Air Attack During the Night of July 30, 1943 Cause of Damages: High Explosive Bomb, Probably 100 lbs Object of Investigation: Underground Splinterproof Special Shelter (Bunker), Police No. II/26/50

During the night of July 30, 1943, the splinterproof bunker was damaged by a high explosive bomb that landed about seven meters from the bunker. The structure, consisting of two tunnels with a dividing wall one meter thick, received a crack across the dividing wall; see Pictures I, II, and III. Also, a slight shifting of the structural parts against each other can be noted from the seams; see Pictures IV and V.

The damage is of no consequence to the usefulness of the building. No persons were injured.

E/

Hamburg, October 4, 1943 Department of Wartime Shelter Construction















Key:

BENEINSCHLAG

Bombeneinschlag = Bomb Crater Querschnitt = Cross Section Standpunkt des Lichtbildners = Position of Photographer Grundriss = Ground Plan Längsschnitt = Longitudinal Section Erdüberdeckung = Earth Covering

& STANDPUNUT DES LICHTOLONERS



Key:

Johannis Kirche = St. John's Church Bombeneinschlag = Bomb Crater



EXAMINATION OF AIR WAR EXPERIENCES WORK CIRCLE AIR RAID SHELTER CONSTRUCTION Damage Site EIMSBÜTTEL, Sillemstrasse Heussweg Circle 1, Local Group Sillem

Time: Air Attack During the Night of July 25, 1943 Cause of Damage: High Explosive Bomb, Approximately 1,000 lbs Object of Investigation: Partially Underground, Splinterproof Special Shelter (Bunker), Police No. 11/23/23

During the night of July 25, the splinterproof bunker was damaged by a heavy bomb, which probably grazed the building and detonated close by. The northwest exit with the sluice was completely destroyed. Aside from big cracks in the outer walls of the rooms bordering the sluice, the structure remained intact. The ceiling had structural steel girder reinforcement on the underside and in two layers near the top. The concrete construction is flawless.

One person in the sluice was killed. The other approximately 300 persons using the bunker were not injured.

Hamburg, October 5, 1943 Department for Watertime Shelter Construction














PLAN 24

EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION

Damage Site BILLW. AUSSCHLAG, Bergedorfer Heerweg

Circle 4, Local Group Billw. Ausschlag

Time: Air Attack During the Night of July 28, 1943

Cause of Damages: High Explosive Bomb, Probably 1,000 lbs

Object of Investigation: Partially Underground, Splinterproof Special Shelter (Bunker), Police No. IV/46/29 Building Time: 6/14/40 to 7/28/50 Construction Firm: Arge Oberelbe, Soltau

During the night of July 28. 1943, the three tunnels of the bunker were severely damaged by a direct hit. The hit occurred approximately in the center of the structure. The detonation apparently took place within the concrete of the ceiling. The bomb crater was about four meters across and three meters in length in the structure. The center vault was totally destroyed, and the other two vaults were partially destroyed.

Numerous large cracks run through the ceiling starting at the location of the bomb crater. Also large cracks are found where the arch joins the walls. The reinforcement of the ceiling consisted of one layer of structural steel bar (or wire) on top, as well as a layer on the underside. The lower bars came out of the concrete in many places at right angles to the long cracks and are hanging down from the arch. The ceiling apparently moved a lot through the shock of the detonation and, because of failure, did not return to its proper place.

In the ceiling (Pictures IIc, IIIa) stratification in the concrete can be seen, apparently caused because the concrete was not poured in one uninterrupted operation. The horizontal seam is definitely a drawback for the further survival of the structure. Above the tarpaper roofing on the ceiling, there is a thin protective concrete layer containing wire mesh. The structure shows a strong shifting in one concrete seam (Picture VI), which apparently (Picture VII) was secured by masonry after the original construction was completed. Also, the dividing walls of concrete were set into the structure after original construction. They withstood the shock and the air pressure well. Shifting of the lengthwise walls or the dividing walls was not found. At Point IV in sketch 1:200, an air pipe was laid through the ceiling. The hollow space therefore was not conical, so that the concrete out of the square hollow space fell into the shelter along with the pipe (Picture IV B).

The construction of the concrete structure cannot be criticized. The maximum overpressure resistance of the concrete in the structure, which was probably reached 28 days after construction, was ascertained to be 370 kg/cm². The aging of the concrete was taken into consideration by a lowering of this value of the shock overpressure resistance. The overpressure resistance prescribed for a building of this kind, namely 160 kg/cm² after 28 days, was therefore present.

Three people who used the bunker during the attack were killed by falling concrete debris.

The structure is not usable any longer and cannot be repaired.

Hamburg, October 5, 1943 Department of Wartime Shelter Construction















Key:

Längsschnitt = Longitudinal Section Grundriss = Groundplan Standpunkt des Lichtbildners = Position of Photographer Durchschlagsöffnung in der Decke = Bomb Crater in Ceiling Querschnitt = Cross Section





PLAN 25

EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION

Damage Site WILHELMSBURG, Eichenallee

Circle 8, Local Group Wilhelmsburg

Time: Air Attack During the Night of July 28, 1943

Cause of Damage: Heavy High Explosive Bomb

Object of Investigation: Aboveground Splinterproof Special Shelter (Bunker) (Round Construction) Police No. B 113/132 Construction Time: June 140 to July 1940 **Contracting Firm: Vahlensieck**

During the night of July 28, 1943, the structure was severely damaged by a near hit of a heavy high explosive bomb. About a fourth of the outer wall was torn open. The projecting structure for the protection of the emergency exit was torn away. Parts of it were thrown a distance of 20 meters. The protective wall in front of the entrance is partially down. All the remaining walls are crisscrossed with cracks. The bomb was apparently dropped from a low flying plane. (An eyewitness report indicates that the plane was returning the flak fire). The bomb, apparently as a result of this, dropped at a shallow angle. The bomb splinters apparently hit the wall from below, and the air pressure forced fragments from the wall into the structure.

The reinforcement of the structure was made according to the drawings on which the structure is based. The overpressure resistance of the concrete was ascertained by studying two cubes out of the outer wall. This resistance, taking into consideration the pressure shock and the age of the concrete beyond 28 days after construction, had a comparative value of 201 kg/cm^2 . The concrete therefore had the overpressure resistance required for a structure of this type of 160 kg/cm². The composition of the concrete was not first rate, and the density of the concrete construction was not satisfactory because it apparently had too high a water content and too low a compression ratio when put in place. Actual errors in the structure itself were not discovered.

Twenty-three of the 35 persons in the shelter were killed by concrete debris flying into the structure.

The structure is no longer usable and caanot be repaired.

Hamburg, October 5, 1943 Department of Wartime Shelter Construction













PLAN 26

EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION

Damage Site ROTHENBURGSORT, Hardenstrasse

Circle 4, Local Group Rothenburgsort

Time: Air Attack During the Night of July 28, 1943 Cause of Damage: High Explosive Bomb, 1,000 lbs Object of Investigation: Aboveground Splinterproof Special Shelter

(Bunker), Police No. IV/40/53

Through a direct bomb hit during the night of July 28, 1943, the walls and ceiling of the anteroom of the bunker were damaged. The hit apparently occurred on the wall, so that the level ceiling was only slightly affected. The detonation took place in the concrete. The dimensions of the bomb crater are 1 meter by 0.6 meter. The reinforcement of the ceiling consisted of three layers of iron rod crisscrossed in 15-cm intervals. On the underside, there were very strong iron rods 14 mm in diameter. Parts of the thick-walled bomb were found lying under the bomb crater.

The concrete structure is apparently very solid. The damage is almost exclusively confined to the bomb crater. There are hardly any cracks in the remainder of the structure.

None of the 475 persons in the shelter was injured.

Hamburg, October 5, 1943 Department of Wartime Shelter Construction











•

Key:

scanopunkt des	Lichtbildners = Position of Photographer
Nachbargiebel	= Neighboring Roof
Schnitt	= Cross Cut
Längsschnitt	= Longitudinal Section
Grundriss	= Groundplan
Durchschlagsöff	nung in der Decke = Bomb Crater in Ceiling



Key:

Lageplan = Scale Bombeneinschlag = Bomb Hit

398

.



EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION

Damage Site ST. PAULI, Paulstrasse

Circle 7, Local Group General Litzmann

Time: Air Attack During the Night of July 25, 1943

Cause of Damages: Explosive Bomb Weighing About 500 lbs

Object of Investigation: Bombproof Shelter (Aboveground Bunker) Police No. VII/71/35

During the night of July 25, 1943, the aboveground bunker was damaged by a near hit of a high explosive bomb. The bomb fell in a small space between the bunker and a neighboring building and detonated approximately two meters from the edge of the bunker. The bomb splinters made cavities in the concrete of the outer walls to depths of 15 to 20 cm. These external damages are unimportant for the stability of the bunker. The air pressure made the outer wall sway so strongly that cracks developed in two concrete ledges in the second story. This concrete is not reinforced.

The catch flew from a built-in air pipe in the outer wall and injured one person in the back. No other injuries were sustained.

> Hamburg, October 4, 1943 Department of Wartime Shelter Construction

> > 400

PLA 27










EXAMINATION OF AIR WAR EXPERIENCES

WORK CIRCLE AIR-RAID SHELTER CONSTRUCTION

Damage Site EILBECK, Wielandstrasse

Circle 4, Local Gioup Fichte

Time: Air Attack During the Night of July 30, 1943

Cause of Damages: Probably Heavy Air Mine

Object of Investigation: Bombproof Aboveground Bunker, 2.5 Meters Wall Thickness, Eight Stories, Police No. V/52/30

During the night of July 30, 1943, the bombproof shelter in Wielandstrasse was severely damaged in the sidewall of the seventh story, probably by a heavy air mine. The kind of explosive charge used cannot be ascertained since no fragments were found. It is believed that the air mine hit the side of the building and detonated right at the wall.

The overpressure must have been extremely strong because around the bomb crater, 16 mm anchor rods that protruded 15 cm from the wall were either bent or broken off. The projected roof ledge is partially torn off and partially bent upward.

The detonation tore a hole in the wall 2.5 meters wide and 1.8 meters high. The outer bomb crater has a diameter of five meters, the inner about four meters. The shock effect on the wall extended to a distance of over five stories. In this range of distance, more or less serious cracks appeared, as well as grooves in the wall on the sixth floor. In areas next to the bomb crater, the concrete was blasted off the steel reinforcing rods in many places. Near the crater, the adjacent ceilings were destroyed. These bombproof ceilings suffered several cracks running vertically to the damaged wall and across its face. Specifically, the seam between two concrete sections was torn apart.

The middle wall running lengthwise through the bunker which was 70 cm thick and not reinforced, was destroyed to a length of 60 cm from where

PLAN 28

it joined the damaged outer wall at the seventh story. The intermediate ceiling above the seventh floor and the bombproof ceiling of the bunker have become detached from the dataged wall. Cracks in this wall reach to a distance of about eight meters from the site of destruction.

The Brunswig reinforcement of the damaged wall is made of iron rods. Many of these rods were stripped of concrete, bent sideways and the endguards, made from 16 mm steel, were torn free near the site of the crater. The anchorage of the guards in concrete proved adequate, however, except where complete destruction of the concrete itself took place.

The construction of the concrete in the damaged floor was good. From two cubes of concrete thrown out by the explosion, the overpressure resistance of the concrete 28 days after construction was mathematically calculated at 339 kg/cm². Herein the age of the concrete, which was constructed in February 1943 and is therefore about seven months old, was taken into consideration by multiplication with a factor of 0.8 and the shock of the explosion by multiplication with a factor of 1.1 The prescribed concrete pressure resistance of 300 kg/cm² was therefore achieved. The structure was completed on March 27, 1943.

The strength of the inner ceilings, 36 cm in thickness beginning with the ceiling of the seventh floor and 30 cm in thickness for the ceiling of the sixth floor and below, apparently contributed significantly to the limitation of the wall breaks. It is without a doubt correct not to extrapolate the strength of these inner ceilings to their static pressure limits, but to take the extended effect of the stronger outer ceilings into consideration.

Two persons who were in the room next to the bomb crater were killed by spalled off concrete debris. The room that received the hit was unoccupied.

> Hamburg, October 6, 1943 Department of Wartime Shelter Construction

















.

Key:

•

Deckenuntersicht = View of Ceiling from Below Bombensichere Decke über dem 8 Geschoss = Bombproof Ceiling Above 8th Floor

Ansicht = View



Key: Querschnitt = Cross Section
Grundriss = Groundplan
Durchschlagsöffnung der Decke über dem 6. Geschoss = Bomb Crater
in Ceiling Above Sixth Floor
Risse in der Decke über dem 7. Geschoss = Cracks in Ceiling above

416

Seventh Floor





EXAMINATION OF AIR WAR EXPERIENCES

Damage Site EIDELSTEDT, Horgensweg

Cause of Damages: High Explosive Bomb

Object of Investigation: Formed Concrete Block Bunker U 12

The bunker and the bomb crater are shown in both pictures. Only the outer walls of the concrete blocks were hit; debris lodged in the sand filling. Holes were found only in the outer walls; the inner space was undamaged except for the shifting of some of the blocks. The roofing and the upper layer of blocks were moved about four centimeters. The shelter inhabitants, mostly children, were uninjured.





EXAMINATION OF AIR WAR EXPERIENCES

Damage Site EIDELSTEDT, Horgensweg

Cause of Damage: Several High Explosive Bombs

Object of Investigation: Formed Concrete Block Shelters U 11 and U 12

These two shelters, which border a flak station, received bomb hits five, eight, and 13 meters away. One small settlement house was set on fire and illuminated the shelters. One settlement house lies under a bomb crater. The tenants of the surrounding houses with their many children were in the shelters and were unhurt.

The shelters show bomb fragments that only penetrated the outer walls of the hollow concrete blocks and stuck in the sand fill.





EXAMINATION OF AIR WAR EXPERIENCES

Damage Site LANCENFELDE, Kieler-Emahusstrasse

Cause of Damage: High Explosive Bomb

Object of Investigation: Experimental Building (October 1942) of a Shelter with Formed Chemical Building Blocks

A high explosive bomb hit to the right of the shelter about 20 meters away. The entry was somewhat squashed, but the shelter itself was undamaged, so that the inhabitants escaped unhurt.

The shop behind the shelter collapsed from the pressure.



EXAMINATION OF AIR WAR EXPERIENCES

Damage Site SCHNELSEN, Weidenstrasse 33

Cause of Damage: High Explosive Bomb

42

Object of Investigation: Formed Concrete Block Shelter U 5

A high explosive bomb landed about eight meters away from the shelter. The residential building behind the shelter was destroyed. The tenants were in the shelter and remained unhurt. The roof of the shelter shifted about one centimeter. The rabbits in the warren behind the shelter were all killed.



EXAMINATION OF AIR WAR EXPERIENCES

Damage Site BRAMFELD, Hermann Göringstrasse

Cause of Damage: Air Mine

Object of Investigation: Formed Concrete Block Shelter U 13

An air mine, which blew two settlement houses to the ground, landed about 30 meters from the shelter. The tenants (30 persons) who went to the shelter escaped injury. The upper layer of the roof of the shelter shifted somewhat. With the exception of repairing the ripped open mortar seams, no repairs of the shelter were necessary.

The second picture shows the crater of the mine. The picket fence was undamaged, because the air pressure was able to pass through the openings. The wall of the attic floor of the small house behind the shelter was broken and pushed in. The roof was torn away. At the time the picture was taken, some of the damage to the house had already been repaired by the self-protection squad.

PLAN 33





Splinterproof Wall in Front of Entrance Without Gas Sluice

Roof of Keinforced Cement Strips With Reinforcement Planks

Specs: Types I, II, and III for seven, 10, and 20 persons Thickness of Walls: 60 cm.

Types V and VI for 13 and 25 persons Thickness of Walls: 90 cm.

TELEVER MARKED HERE HERE HA

an an Andrew Angle a







Becurity Closed Aceties				
(Becurity eleccification of title, bady of abottest and		a des annuali secont la classificat		
ORIGINATING ACTIVITY (Capanto autor)		AT DECURITY CLASSIFICATION		
Stanford Research Institute	Uncl	lassified		
Menlo Park, California 94025		as enour		
Appendixes 8 through 19 to the Hambur Air Attacks on Hamburg, Germany, in W		port on the Large Scale		
DESCRIPTIVE NOTES (Type of report and inclusive dates)				
Carl F. Miller				
REPORT DATE	76. TOTAL NO. OF PAGES	76. NO. OF REFS		
December 1968	454	None		
. CONTRACT OF GRANT NO. NO0228 -67 -C-1519 . PROJECT NO.		NUMBER(9)		
. SRI Project No. MU-6464	Sb. OTHER REPORT HO(S) (Any other numbers that may be as elged bis report)			
	NRDL-TRC-68-48			
This document has been approved for is unlimited.				
This document has been approved for	12. SPONSORING MILITARY Office of Civil	Defense ecretary of the Army		
This document has been approved for is unlimited.	12. SPONSORING MILITARY Office of Civil Office of the S Washington, D. In attacks and on civil d after the large scale a orts of events during the rous illustrations show activities initiated to bulletins and newspaper restoration of the civil asures to prevent lootin restore public utilities dangers of epidemics cau revealed by autopsy find	Defense ecretary of the Army C. 20310 efense activities in the ttacks that started on air attacks from July 2 attack damage sustained counter the effects of articles from the period l defense forces and the g and disease epidemics, to the city. Expert sed by corpses and on the ings. A descriptive and		

_

Hoclassified

+

	REV WORDS		LINKA			LINK C	
		ROLE	-	ROLE		ROLE	
Air attacks .							
vil defense							
mburg, Germany							
orld War II							
lonb damage		•					
Fire damage							
Looting							
Disease epidemic							
Missing persons Public utilities			1.				
Shelter						1	
				1. N. 1. 1		1	
							1
							1.0
						8	
						6. m.s	6
						1 . 1	1
		A. 141 1 1 4					
					1.4	1	
						1	
		1.					
				14			
				-			
		1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A					
				-			
			10.00				
	3	1			1.5		
				1			
		1					
		-					
					1		
						1.0	
					-		
				~			
			-	-			
			Unclas	sified Classific	stien		_
	As a constant of						
					+		
and the second second	and and and						

~.)