

Eyewitness at the explosion in Björkborn (a major ammunition factory) where 11 workers were killed on December 17th, 1940.

Transcript of an interview with Håkan Rosvall (1908-2009) made in Arvika on 19.1 1999. Roswall was then 90 years old. He was police commissioner in Karlskoga between 1938 and 1949. In total, he was active in the city for almost 40 years and retired in 1973. Björn Albinson from Värmlands Fire Historical Club did the interview. The text has as far as possible been modified for reading.

I and a couple of other police officers had been to a civil defence training at the Air Defence Centre at Boåsberget, and we decided to drive home through Karls-Åby. There we saw a large black cloud of smoke rising from Björkborn. Very black! We immediately drove down to Björkborn but we were stopped at the gate. The guard at the gate, told us that it was too dangerous to go any further, but I had to. I asked for the fire chief but was told "He is at the fire place together with the chief engineer" – (the guard said).

I ran but it was so slippery, it was in December, that I had to calm down and walk as fast as I could. When I approached the fire, it was very smoky there and very poor visibility. But I have a clear memory of seeing a man in uniform and a civilian standing there. I understood that it was the fire chief and walked towards them. It was smoky, but I discerned them anyhow. Then there was an explosion, a huge explosion. Everything in front of me flew into the air. I was thrown backwards by the shock wave. I do not know how far. I fell into a squatted position and hit my back against a brick building. There I sat. Then came a large amount of splinters made of wood and earth. Fortunately, my body was protected by a protruding metal roof that was on the house. I was lucky that nothing hit my legs.

I was unconscious but probably only a few moments. I was going to get out of there and started crawling up and limping away. My back was badly injured and I blindly went up the other way. The hill was steep and overgrown with grass and I crawled on all fours. As I got to the top, another explosion came. It was a terrible blast, and I tumbled head first down the precipice, which was a protective wall, which I did not know. It was more or less panic. I fell upside down on the inside of the dike. Down there, I lay with my arms around my head fearing that shrapnel would come, but it did not. When it became quiet again, I looked up and found that I was lying next to a large sheet metal door that led to a smaller brick building and on the door it was written "4000 kg of trotyl (same as TNT)". I got away from there in a hurry. It was a warehouse for trotyl.

I limped on. The dike had three closed sides. The fourth side was the open side. I pushed on to the gate; I had to get out. When I was halfway through, there was such a horrible explosion again. There was an armoured shed that I hurried into. Through the openings I saw, and I have the clearest memory of it, a whole bike rack with a metal roof over and probably 40-50 bikes, rose high, high up in the air. When it stopped, the bikes started to fall and so everything went down.

I went out and ran on, with the intention of going out through the main gate. There was a tennis court and a veteran reserve company was lined up there, with an officer in front. I had to go there and went in through the fence towards the officer.

But I never reached it until another explosion came – the fourth. The whole company ran into a dining hall barrack that stood on the tennis court. They were trapped in there with the captain as the last man, and I after him. I do not know why I joined. But then the pressure wave came and pushed in the roof of the barrack, so everyone had to run out. The officer was almost thrown out. I was holding a doorpost and remained sitting on the hill next to the barrack. All men ran to the forest. Not only that, when the captain and I were sitting there, a 15 cm howitzer grenade came – we heard the whistle. It crashed 15 meters from me on the ice on the tennis court. There were some unpleasant moments before we found out that it was uncharged.

The captain and I remained, but I had nothing to do there. I ran down from the tennis court and came to a fire truck. The city fire brigade had arrived and a firefighter was standing guard at the car. In front of the fire truck stood two ambulances. They were the city's ambulances that had arrived, but they were stopped at the gate. The previous explosion had destroyed the windshields of both vehicles. The drivers joined the home guard company into the forest.

A policeman was still waiting for me. Then two men came, which I understood were ammuntionworkers, helping the chief engineer. He was seriously injured. During the first explosion, he had been thrown backwards into an acid bath. He was burnt on the posterior and the back and his clothes hung all around him. He screamed like crazy and beat himself around – he was completely mad – of pain of course. They could not get him into the ambulance, the policeman I had with me – his name was Enar Jansson, by the way – was a resolute man. He jumped forward and knocked him out. Then he got him into the ambulance, sat down at the wheel and drove to the hospital with him.

I had to try to get to the city and take care of the police. There was a lot to organize. I started lumbering out of Björkborn towards Karls-Åby. When I came to the public bathhouse, I saw about 20 lightly dressed ladies come rushing out. The tiled walls of the swimming pool had fallen off. I could not do anything about it, so I continued. At the same time a truck came. The driver stopped and got these ladies up on the truck, spread a canvas over them and drove away. I then heard that he drove them all home. It was a very resourceful deed.

I had a "Krimmel" type of fur cap, a winter hat we had at the time. It was still there and it was probably thanks to it that I did not hit my head so badly. I had a long police coat as well and it was hard to run in it. Thankfully, a car came and I stopped it and I got a lift to the police station.

Police Chief Wassberg was at the station. He decided that we should proceed to Björkborn's civil defence centre, which was located in a shelter under Björkborn. It was called Shelter 9, I think. There were a lot of people. There were exhausted ammuntionworkers and engineers, I cannot tell all there was. Lots of people and very chaotic. I understood then that the firefighters were deceased.

In the shelter, there was a calm man, who was the head of the civil air defence. He noted the time of each explosion and recorded outside temperature and weather. There were many who thought this was ridiculous. but we appreciated this, very much because he had a timetable for everything.

There were still explosions once in a while. An engineer or ammuntion worker came in and said "if the nitroglycerine (*i.e.*, the nitroglycerine factory) explodes into the air, then half of Karlskoga goes with it". He said that "it was so arranged in this nitroglycerine factory that if anyone just came in through the protective wall, there is a tunnel and within there is a

sealed handle. If you pull it, all the nitroglycerine goes out into the Timsälven". Then he said that "if I can only get someone with me, I will try to get there". Everyone thought it was brave, and policeman Jansson said "I will follow". These two crawled out into the darkness between the fires. It burned here and there because there were a lot of wooden houses; the roofs were often made of wood. But when they crawled in through the tunnel, there was only one big black hole. The factory had been destroyed a long time ago. It was one of the biggest explosions and perhaps the one that broke the windows in Karls-Åby. In the buildings that were closest to the factory, there were a lot of windows broken, so the apartments had to be evacuated.

The city itself was so far away that there was only be minor damage. But it took, *e.g.*, the large windows in The City Hotel dining room - it was in a courtyard. The shock wave came afterwards. There was a short time span between the explosion and the shock wave. This is the one which made the military flee.

It was very chaotic and with many suggestions on what should be done, mostly our waiting until there were no more explosions. It got calmer but explosions actually lasted until four o'clock in the morning – that is, for twelve hours.

There was concern in Karlskoga. Of course, people were worried. When I came back, we ordered a patrol car to drive around and calm down people. The veteran service went into operation to take care of the apartments that had to be evacuated in Karls-Åby. But no major panic, I can say. Many were very worried and feared that many workers had perished. I now think afterwards that the patrol car did a good job. So it was claimed at least. The police did not find out more than I had told them.

There were no more incidents until dawn. Governor Hasselroth together with military attendants turned up and began to demonstrate. He was of the old-fashioned sort, who shouted and dominated. When dawn came he wanted to go out and look around, and he discovered a shelter. He was about to open the door, but it was locked with a padlock. He became extremely upset, and screamed. An engineer came forward – who, by the way, was rather stressed out because in the panic some had probably drunk a lot – and explained in his somewhat half-drunken manner "that is not a shelter, Mr. Governor". It is a protection for a transformer station and it has to be a locked". So, no scandal came to be.

Nothing happened until they said that now the crisis must be over. There had not been any explosion for a long time. There was talk that the guard should go out. It was sabotage! No doubt about that. In Shelter 9, it was quite clear that it must be sabotage. By phone, I ordered all the policemen out there. There were five entrances to Björkborn's factory area that needed to be guarded. It did not take long before the veteran reserve company arrived. They had gathered again and occupied each gate. It went well because they knew each other. Between 8 and 9 o'clock in the morning came a company from I3 "the closest Infantry Company – I3" They also encircled Björkborn, but farther away, so we never saw them. It would have been dangerous if someone had approached them. They were young conscripts, so watch was strong as it was supposed to be sabotage.

It was prohibited for foreigners to be in Karlskoga, with the exception of trade delegations from Argentina, Persia and, possibly, Holland. They were allowed to stay in Bofors and live within Bofors' factory area at the hotel and in nearby homes. We had a lot of trouble with that throughout the war, except the last year. There were large deliveries to the navy and army in Argentina etc. Otherwise foreigners were forbidden to be in Karlskoga. If someone came, we arrested them right away. They were very adamant about that down in Bofors. I was there teaching officials what to do if they saw a stranger.

The investigation was assigned to me. As it was, everything went quickly. It was not a question of sabotage at all. It was due to the fact that one boiled trotyl. It was cast in

cardboard moulds coated with shellac. Then these trotyl pieces were turned into a suitable dimension for different types of cannons. For smaller dimensions, the shellac cardboard sleeves turned away were mixed with a lot of trotyl. Someone had discovered that a lot of TROTYL could be recovered by reboiling the trotyl in the waste. This was done in a large 200 litre open pot. Usually two or three ammuntionworkers took care of this cooking. Close by, in the same house, lay six torpedoes and seven mines – or *vice versa*. These and two hundred litres of trotyl caused the first explosion.

It so happened that due to the shellac – it is flammable – it happened from time to time that the pot with trotyl caught fire and that the flames hit the ceiling. But those old ammunition workers did not care about this, because they had a fire hose lying on the floor next to the pot. When it caught fire, they threw the hose into the pot and turned on the water. Then the flames died at once. Then this accident occurred. The two in charge had got an apprentice, a boy. I do not remember how long he had been there, but he was young and inexperienced. He was left alone with the boiling pot because they had gone on a break. When it caught fire, he got scared and ran away. Then the roof ignited. That was the beginning of the fire. It burned about 20 minutes before there was an explosion. In the meantime, Björkborn's fire brigade, *i.e.*, factory workers, got time to form a ring around the shed, got hoses and started waterspraying on the whole thing. They stood so close that they all died from the explosion. The fire chief also perished because a brick wall fell on him. It was this smoke we saw first. It still burned when I arrived.

A very difficult identification followed. They were all so burned, that it really was a medical issue. I only remember one who was identified by a key chain he had in a back pocket. He had fallen backwards by the explosion. The clothes on the back remained, but otherwise they were completely gone. He was burnt and as small as a dwarf – he had shrunk from the heat. All were identified.

No one thought of us who had been present. It was not standard procedure. I have thought about it many times, but it was never discussed openly. We talked to each other and I told openly about it. I say it was horrific.

I cannot remember what the newspapers wrote and do not remember that I was interviewed by anyone. They did not realize that I had been there. It was the sheriff they interviewed. I did not talk to anyone other than the police about my involvement.

I cannot remember that I experienced panic in "the ninth shelter", but I was tired and in pain. It took a while before the pain came. The local health agency administered strong painkillers to me. I was seriously injured and very stiff, but I think I tried to behave as if nothing had happened. I was badly hurt – there is no doubt about it.

I must have been deeply shocked. When I got home, I was scolded by the landlady, who lived downstairs. We lived upstairs in a two-family villa on Skolgatan. She came up to me and scolded me because there had been such a noise upstairs all night. And that was because our closest friends, who lived in Karls-Åby, had been evacuated to us. My wife had taken care of them. They were lying on mattresses. So she scolded me for making such a noise all night. But then it broke for me and I barked back forcefully. Of course, I was not in balance.

I cannot say that what I had experienced disturbed me long after. No, but I know that a year later I was in Örebro with the police. It was a question of us having a large-scale air defence exercise and I had imagined that I would gain some experience. The Örebro police had a major exercise before and I was sitting in the police station. Then they mentioned a new explosion(s) in Björkborn, I felt how it knotted in my stomach. I threw myself in the car. With the gas at the bottom, I drove there.

There was a house in which they made shaped charged warheads. They made the explosive dough in a flowerpot fashion, probably for use in antitank missiles. That house blew up, but no one died. In this case the exhaust wall worked. An engineer lost his upper

arm. But then I know I felt a shock of it. I also remember that if you heard a huge explosion, you wanted to react.

There was no talk of asking outsiders for help with debriefing. For that matter we were fully occupied by that investigation, which was not done in a jiffy. It had to be written. A man came from the Explosives Inspectorate and I reported to him for several days. So, I was very busy, which probably did its part to make it easier.

As to government involvement, the military at I3 and the police chief were the main actors. They took care of the surveillance – the veteran service was one of them too.

We were on site and did the investigation. There were a lot of men around who carried grenades. They were volunteer ammuntion workers who had undertaken to this help. The grenades were scattered throughout the area. This was a dangerous job for some were charged and others uncharged. But they could probably recognize what was what. I thought they were brave when they carried the grenades to certain places and put them in piles.

Rumours said that this was something disastrous for the armed forces, because it had removed most of the stored ammunition for the navy and the air defence. Rumours, also said, that 40,000 anti-aircraft grenades had exploded and they (were?) Sweden's whole stockpile of anti-aircraft ammunition. I do not believe this.

Karls-Åby - but no other place - must be evacuated, only there window panes were crushed and had to be replaced. I think it was only two nights that our guests stayed with me – they had a room facing Björkborn and there the windows were gone.

I saw no panic anywhere. I had to go back right away and think it was an overstatement. It dropped grenades, but I have not heard that they came further away than to the fences there. And they were big – the biggest were for 15 cm howitzers. These small 40 mm grenades flew a lot. They did not come as projectiles but flew away anyway. And they were everywhere – most were uncharged. They came from above, spinning like the one on the ice, and lay down. Horrified we were then. I still have some anti-aircraft grenades left after that.

Surely, the atmosphere was gloomy for a long time. Very much sadness.

But then an intensive construction work followed. There were 1100 builders – navvies, I would say – to rebuild. Included were card players, whores and pimps. It was a real circus and the police worked like slaves. There was something very strange at that time. The steam brewery on Näset had the right to sell beer in crates through a window in the wall in exchange for the buyer in question only stating a name that was (noted) written down in a book. We in the police protested against this, but it did not help. It was an old privilege that had remained.

Translation made November 2020 by Stig R. Johansson, Sektionen för detonik och förbränning (www.sdfsweden.se) The Swedish Section for Detonics and Combustion affiliated with The Combustion Institute Ver 1.1