

THE INTERWAR DEVELOPMENT OF THE AIR FORCE AS AN IMPETUS FOR THE CREATION OF THE ALARM SERVICE OF THE FORMER CZECHOSLOVAKIA

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Abstract

The paper deals with the issue of the genesis of warning in the former Czechoslovakia. The genesis and further development of this area were stimulated not only by the emergence of military aviation during the First World War and its further development in the interwar period, but especially by the rise of fascism in Italy in the second half of the 1920s and National Socialism in Germany in the first half of the 1930s, which slowly grew into fighting rhetoric and culminated in the outbreak of World War II.

Based on a search of selected contemporary legal norms, professional magazines and professional publications (all mainly from the mid-1930s), this article acquaints readers with the initial solution to the issue of warning in our state through the newly established alarm service, ie the relation of this service to possible air attack, with the executive bodies providing this service, with the material means of the alarm service (means of warning) and with the tests and announcement of the air alarm.

Keywords:

Air Force, alarm service, Czechoslovakia, genesis, notifications, warning.

1 INTRODUCTION

The issue of warning, notification and information in the Czech Republic (former Czechoslovakia) has undergone a long development during its existence. Of course, the current modern form cannot be compared at all with the beginning of this effective tool of *civil anti-aircraft protection* [1], which can be traced back to the mid-1930s, especially in connection with the threat of the Second World War. The then government was forced to react quickly to the deteriorating situation in the military-political field, including by adopting appropriate legal norms (on the basis of which various elements and services of defense and protection were built). One of the most important acts in the legislative area was undoubtedly the adoption of Act No. 82/1935 Coll. z. a n., on protection and defense against air attacks [2]. The law entered into force on 26 April 1935, was repealed on 2 May 1961 by the newly adopted Act No. 40/1961 Coll., on the defense of the Czechoslovak Socialist Republic. This law was subsequently developed in the form of government regulations, decrees or directives, which were a lawful response not only to the achievements of the First World War, but of course also to the possibility of another World War. The mentioned achievements in the field of military included not only the first, more or less successful deployment of tanks in combat, but also the first use of combat gases on the front lines and, last but not least, the first deployment of military aircraft in combat. Especially the last of the mentioned gains - the possibility of attacking the state by the air force, it was necessary to respond adequately. Therefore, among other things, our government rightly placed emphasis on the establishment and further development of the so-called *public service* (with national competence, under the responsibility of the military administration) and *the alarm service* (with national competence, under the responsibility of civilian authorities), which we could liken today to a unified system. warnings

and notifications – see Act No. 239/2000 Coll., on the integrated rescue system and on the amendment of certain acts [3].

The paper therefore considers some aspects of the origin of the alarm service and briefly answers questions related to the relationship of this service to air attacks (alarms), the question related to the executive bodies of this service, factual means of warning and testing, as well as questions related to with the announcement of an air alarm.

2 AIR FORCE AND ALARM SERVICE

Already in the thirties of the last century, there was great potential in the Air Force, especially in the speed of the attack and thus the surprise not only of the opponent, but also the defender. The late response to such an attack also reduced the possibility of activating and implementing effective measures in relation to the protection of the population or staff (employees) of manufacturing companies, various authorities or employees and schoolchildren, especially by hiding it through shelters or trenches. All this, as already indicated in the introduction to the article, therefore led to the official establishment of an public and alarm service in the former pre-war Czechoslovakia. The public service was to be provided and also in practice provided exclusively by the military administration, the alarm service was to be provided and was also organized by civilian air defense authorities.

According to [4], “the task of the public service, which was the basis and condition for the implementation of all measures of defense and protection against air attacks, was to search in the airspace for enemy aircraft and monitor the flight path. Furthermore, evaluate the obtained observations and based on the results of this evaluation, activate active means of defense and alarm service.” The activity of the public service for civilian purposes then ended at the stations of the public service, from where the further announcement of reports on the activities of the enemy air force was already provided by the aforementioned alarm service. The connecting links between the alarm and alarm service were the so-called *alarm control panel* (manual), which were already occupied by civilian authorities (civilian personnel). According to the reports received by the public service, their task was to inform the relevant cities, municipalities, major companies, etc. of the impending air danger, so that all previously prepared protection and security measures could be activated before the attack began. The population, less important businesses, authorities, etc. were notified by the *local alarm service*, which was organized in each municipality.

3 EXECUTIVE BODIES AND MATERIAL MEANS OF THE ALARM SERVICE

The task of the local alarm service was to prepare and manage the *commander of the local civil anti-aircraft protection*. He was also responsible for maintaining, improving and supplementing the material resources of the local alarm service, which were to be used to announce alarm signs. This commander had his deputy as *personnel support*. In large cities, the mayor could decide to assign additional *professional advisers* to support the leadership of local civilian air defense. The necessary trained personnel, who were not subject to mobilization, were assigned to receive alarm messages (labels) from the *public service* for further announcement of these labels [5].

Several types of *means* were provided by the local alarm service for the announcement of individual signs. It always depended on whether only the executive branch, companies, authorities, etc. or the entire population should be informed. In the first case, the use of the telephone network was planned, or special signaling device. In relation to the population, it was

planned to use audio or optical devices, or and special mobile alarm units. In order to inform the population, it was possible to include, in particular, fixed sirens, mobile pipes, loud-speaker or bells. The use of shrapnel rockets was also planned. Optical devices have been considered, for example, to lower or raise the agreed flags or to switch on certain lights, especially where the sound signal could disappear in the noise. Consideration was also given to the possible extension of alarm signals by specially trained mobile units (on bicycles, motorcycles or only through "mere" runners, etc.). For the announcement of alarm signs in the above-mentioned companies or offices, consideration was given, for example, to a home phone, bells (see eg Figure 1), light signals and smaller sirens, etc. In residential buildings, the announcement of alarm signs was to be carried out according to local conditions. In all cases, however, these should always be the simplest, most effective and most reliable means and means of declaring alarm signals, preferably in combination with several possibilities of using these methods and means [5].

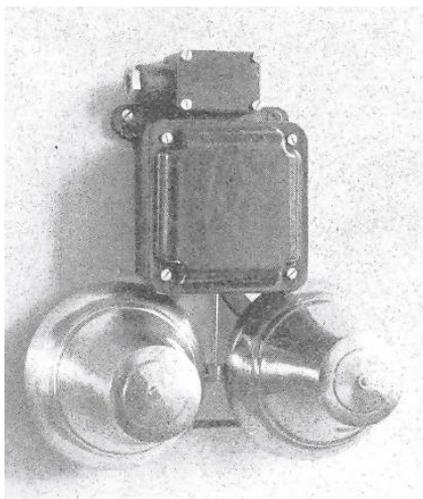


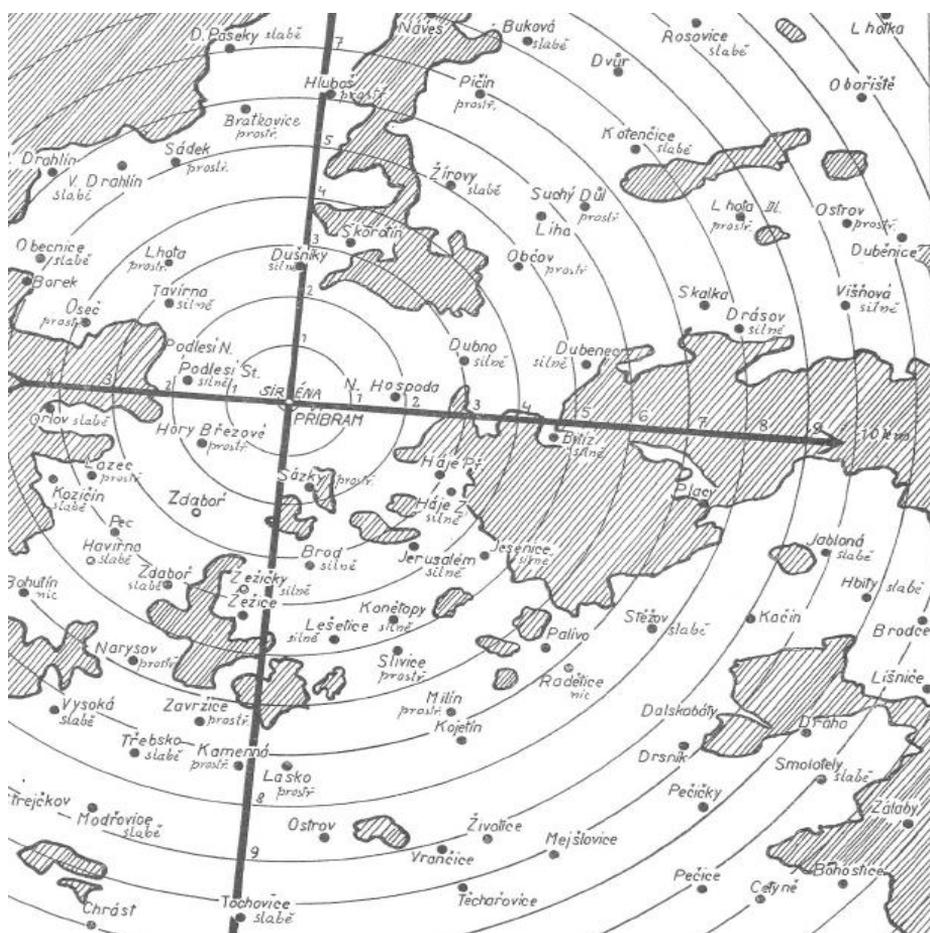
Figure 1
Waterproof alarm bell by Telegrafia [6]

4 AIR ALARM TESTS AND ANNOUNCEMENTS

Screening of alarm service personnel and *testing of the alarm*, as well as the means of the alarm service, played an important role in the readiness of this system for possible threats from air attacks. Therefore, they were ordered at least once a month. These tests were ordered with the cooperation of all components of civil air defense, incl. population. Tests of alarm devices were also ordered to be performed in companies, offices, etc., again with the participation of employees. [5]

The alarm tests also included an audibility check, especially for newly installed sirens. It was not uncommon for a siren to be lent for this test for a short period by the manufacturer before purchasing it to verify this audibility. A detailed recommendation was made for these tests. It was recommended to perform the tests in close cooperation not only with the population, but also with other suitable persons. The population on pre-selected vowels in the area had the task during the test to mark on the record sheet: the place where it was located, ie. a specific village, apartment, cellar, barn, office, etc. Furthermore, the audibility of this siren in

three levels, ie. strong, medium, weak. Police officers or scouts, such as crossroads, streets, and the perimeter of the village, were to find out the audibility in public places in the same way on predetermined voices. Information obtained from designated voices from schools, businesses or authorities should also have made a significant contribution to the audibility test. Here, emphasis was placed especially on audibility in the interiors of buildings. The most suitable and most frequent place to install the siren should then be the roof of the town hall or other public building, if possible high enough, preferably in the open. Where such a building was lacking, it was recommended to place the siren, for example, on a mast. Based on the evaluation of audibility (see eg Figure 2), it was recommended in the given area, for example, to change the location of the siren and then perform the test again or to add more sirens to the area.[7].



Audibility legend: • – name of the village, strongly – excellent audibility, medium – medium audibility, lightly – poor audibility. [7]

Figure 2
Graphic representation of the test result of the CHEMA-ALARM-37 siren in the given area

The task of *announcing the alarm* in the village was to order the commander of the local civil air protection or his deputy. He was notified of the imminent danger from the alarm control panel, usually by telephone in the form of agreed passwords and abbreviations.

The types of air alarm signals included:

1. "Preparation"
It meant the readiness of the executive components of civil air protection, including offices, companies, etc. and their assembly at a designated location, incl. start of the implementation of measures to ensure further operation. This sign was announced in *private by telephone or other connection*.
2. "Alarm"
It meant a warning to the entire population or staff of companies, authorities, etc., and therefore planned to implement by *public announcement by sound means* (fixed sirens, mobile pipes, loud-speaker, bells etc.), *in a long tone* (by hooting and ringing).
3. "End" (of alarm – autors' note)
It was to be announced again by *public announcement by sound means in a series of short tones*. This signal was not to be announced immediately after the end of the threat of the raid, but only after the elimination of the consequences of the air attack [5].

In 1937, Addendum No. 1 to the above-mentioned directives specifies the following indications.

The sign "Preparation" (in addition to notification by telephone or similar links - see above) could be secured by means of, for example, a bell or a trumpet. It was to be announced by alternating short and long tones for one minute. This sign could also be secured optically by alternating long and short yellow light again for one minute.

The sign with the original name "Alarm" is changed to the name of the sign "Aerial alarm". According to the mentioned add-on, the continuous tone has changed to fluctuating (for electric or manual sirens) or intermittent (for whistles, horns, etc., a two-second tone, interrupted for two seconds). Therefore, this sign could also be used for bells with a specific way of ringing, or optical (light) alarm devices with a red color of light (two seconds of light, one second of interruption) or shrapnel rockets fired from a pistol during the day. The length of this sign was set at three minutes.

The sign "End" was specified by the above addition to "End of the air alert". A number of short intermittent tones have been changed to a continuous long tone (for electric and manual sirens, whistles, horns, etc.). It was also possible to use bells with normal ringing or optical (lighting devices) with the color of light green (permanent uninterrupted light). The length of this sign was again set at three minutes.

However, in the case of lack of time, the above signaling scheme did not have to be observed, it could have been announced immediately "Alarm" without prior "Preparation".

There should be only one air alarm - an alarm should not be sounded separately, for example against a gas attack, as this would be extremely useless. At that time, the Air Force could use almost any means of attack in almost every attack, so the population always had to prepare for protection against the effects of all types of air bombs. [8].

5 CONCLUSION

The 1930s, especially the second half, brought with them an unprecedented boom in response to a possible military threat to the former Czechoslovakia, both in terms of legislation and genesis, and the accelerated development of elements, processes or systems to ensure the state's defense and protection. The speed of putting these elements, processes and systems into practice and the ingenuity sometimes associated with perfect improvisation is unbelievable in

some segments. This also applies to the area of genesis and further development of the warning system.

At present, it is evident that we rely too much on digitization in almost all areas of our lives, on the sophistication of elements, processes and systems. The current area of a unified warning and notification system in the Czech Republic is no exception. However, as the floods in Germany in mid-2021 showed (they claimed more than a hundred lives), the assumption of sophistication does not necessarily mean 100% operability in all situations. The disruption of electricity supplies in some of the affected areas, the malfunction of mobile networks and the absence of alternative means of warning or information have taken their toll. The current Concept of Population Protection until 2025 with a view to 2030 basically sets the same dangerous trend.

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