



SP Emergency Communications Club (SPEC)

Member of Polish Radio Amateur Union (PZK)

What's happened since 2016
(activities between 2016-2018)

Friedrichschafen 1-st of June 2018.

1. Area of activity and structure – part 1.

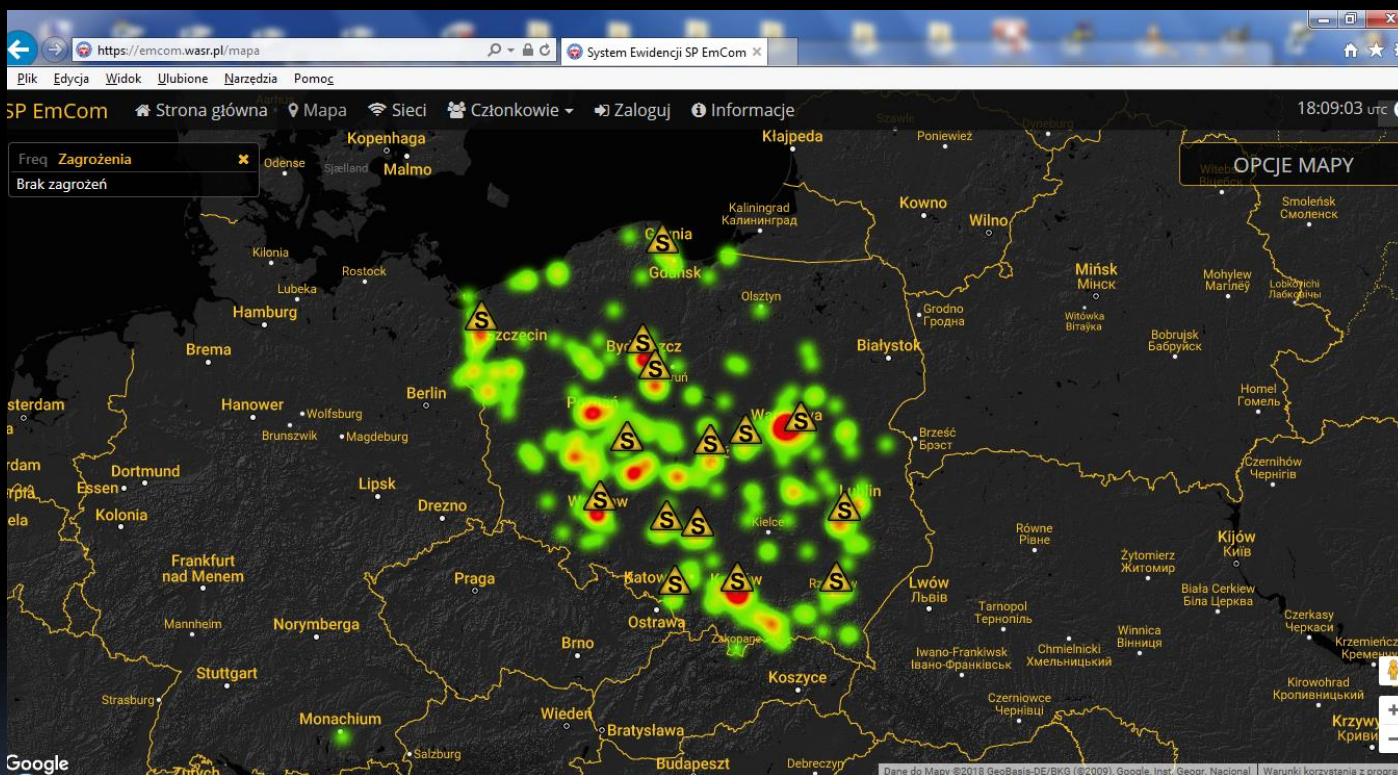


SPEC is nationwide organization, which is based on ham radio club rules, The club is associated in Polish Radio Amateur Union (PZK). Local networks are mostly connected with regional PZK departments.

Today on whole Poland area, are active local 15 network structures, covered by SPEC PZK (half of year 2016 were only 12). In addition, SPEC has at disposal fast response team, as 16-th network, for special tasks and activities on particular part of Poland and cooperation with foreign ham radio EmCom structures.



1. Area of activity and structure – part 2.



Picture from SPEC electronic evidence system with presentation map of density SP EmCom members, on particular parts of Poland. 519 people is working together in our structures

1. Area of activity and structure – part 3.



The screenshot displays the 'System Ewidencji SP EmCom' web application. The main heading is 'Sieci SP EmCom'. A table lists various regional networks with their operational status indicated by green arrows and text. A summary at the bottom left states '12 sieci w gotowości'. A Java update notification is visible in the bottom right corner.

Network Name	Status
SP EmCom Akademicka Sieć łączności Kryzysowej	← brak gotowości
SP EmCom Dolnośląskie	← brak gotowości
SP EmCom Kujawy	← pełna gotowość
SP EmCom Lubelskie	← pełna gotowość
SP EmCom Mazowsze	← pełna gotowość
SP EmCom Małopolska	← pełna gotowość
SP EmCom Opolskie	← pełna gotowość
SP EmCom Podkarpackie	← pełna gotowość
SP EmCom Pomorskie	← pełna gotowość
SP EmCom Wielkopolska	← pełna gotowość
SP EmCom Zachodniopomorskie	← pełna gotowość
SP EmCom Łódzkie	← pełna gotowość
→ Skierniewice - miasto i powiat	
SP EmCom Śląskie JS-1325 Jastrzębie	← pełna gotowość
SP EmCom Śląskie [Ochotniczy Sztab Ratownictwa]	← brak gotowości
Grupa Szybkiego Reagowania	← pełna gotowość

Complete list of active networks, visible in electronic evidence system for SPEC



1. Area of activity and structure – part 4.

During 2016 - 2018 have reorganized and / or started seventh new EmCom structures in Poland

- a) Skierniewce Crisis Communication Network – 2016,
- b) Academical Crisis Communication Network in Bydgoszcz - 2017, (club station SP2PUT) ,
- c) Kuyavian Crisis Communication Network – 2017,
- d) Lublin Emergency Ham Radio Network (OT-20 PZK) – 2017,
- e) Pomeranian Crisis Communication Network - 2017,
- f) SP EmCom Silesia – JS-1325 Jastrzębie Zdrój – 2017,
- g) Sieradz Crisis Communication Network – 2018.

in addition in Poland are active emergency networks which are working outside of PZK SPEC structures.

2. People.



Each local network has about 20 active person, which work together and concerned on regular SP EmCom tasks. The number of people has changed, but in long time terms systematically is increasing.

3. Trainings / exercises – part 1.



Between 2016 and 2018 SP EmCom organized six important national exercises for checking readiness to response against natural weather catastrophes.

SP EmCom PZK organized with DARC Colleagues in May 2017 first international exercises „Lightnings 2017”.

SP EmCom PZK organizes regularly weekly and / or monthly local communication tests and trainings (SP2PUT team, Mazovian Amateur Emergency Network, Cracovian Amateur Emergency Network etc.).

2. Trainings / exercises – part 2.



Colleagues from Masovian Amateur Emergency Network, during national SP EmCom PZK exercises „Smelting Ice 2018” – Warsaw, 10-th of March 2018.

2. Trainings / exercises – part 3.



Colleagues from Cracovian Amateur Emergency Network – Radioclub SP9RNS team, during national SP EmCom PZK exercises „Smelting Ice 2018” – Nowy Sącz, Lesser Poland 10-th of March 2018.

2. Trainings / exercises – part 4.



Colleagues from Cracovian Amateur Emergency Network – Radioclub SP9RNS team, during national SP EmCom PZK exercises „Smelting Ice 2018”, with Volunteer Fire Brigade – Nowy Sącz, Lesser Poland, 10-th of March 2018.

3. Cooperation - part 1.



SP EmCom PZK cooperates with:

- Ministry of National Defence Republic of Poland,
- Ministry of the Interior and Administration,
- Ministry of Digital Affairs,
- Local Administration Authorities,
- State Fire Department,
- Volunteer Fire Departments,
- Local Forest Departments.
- SkyWarn Poland Team.



3. Cooperation - part 2.

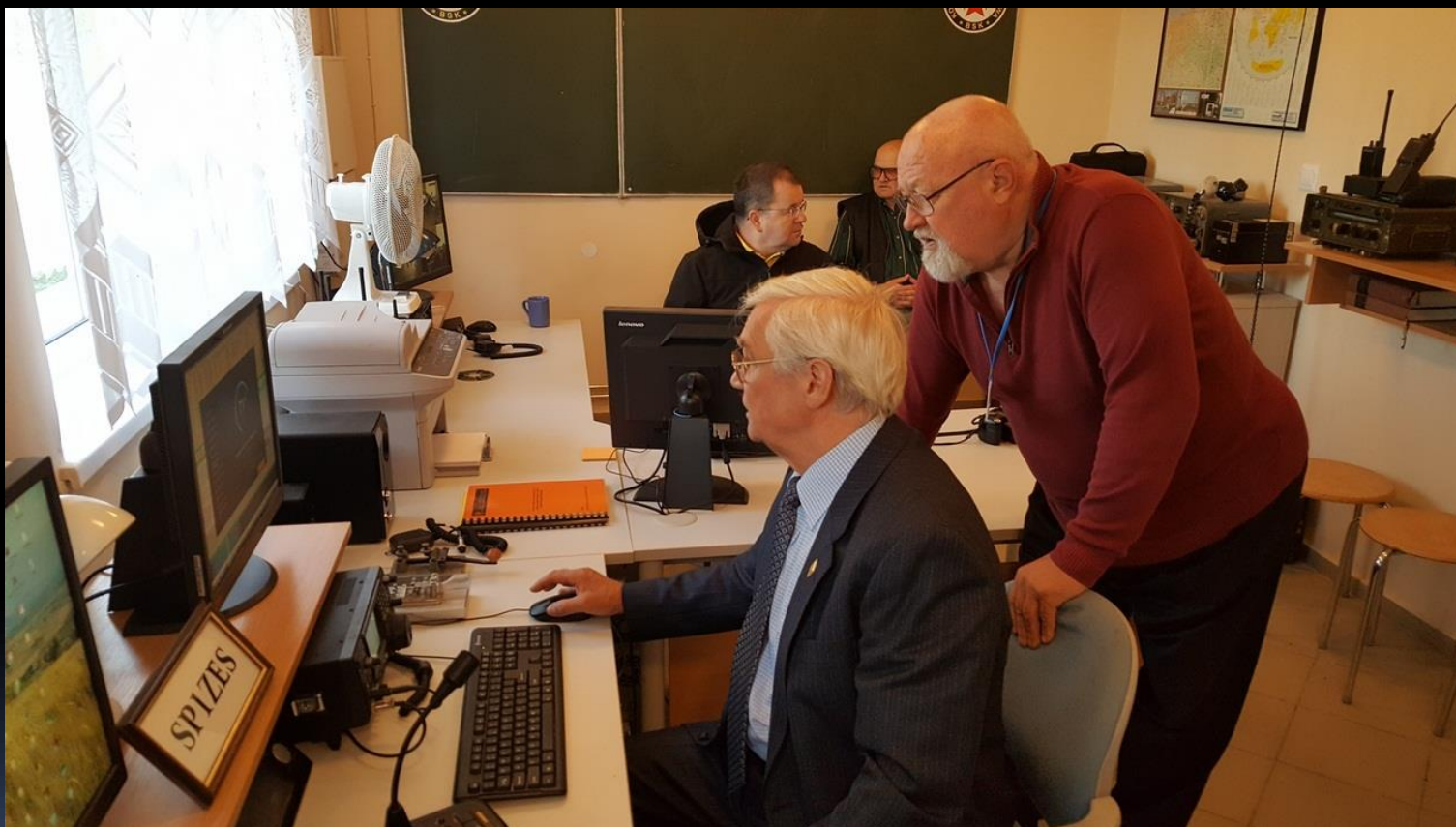


Rare facts:

Increasing level of signed agreements between PZK local departments and local administration authorities. New agreements between 2016-2018:

- agreement between Cracovian Amateur Emergency Network and Lesser Poland Voivodeship (Department of Security and Crisis Management) – October 2016,
- agreement between SPgRNS club team – the member of Cracovian Amateur Emergency Network and President of Nowy Sącz City in southern Lesser Poland – August 2017,
- agreement between Masovian Amateur Emergency Network and Warsaw Bureau of Security and Crisis Management – December 2017,
- extension of agreement between Łódź Amateur Emergency Network and Łódź Voivodeship – next network with access to government emergency frequencies in VHF band, by DMR system – April – May 2018.

4. Education – part 1.



Special school laboratory dedicated radio communication and emergency communication – Gościno High School – September 2017.

4. Education – part 2.



Chris SP7WME and Polish military officials in Gościno High School – September 2017

4. Education – part 3.



Mike SP9XWM during the lecture for students about crisis emergency communication in Andrzej Frycz Modrzewski High School – Cracow, June 2017.

5. Technical aspects – part 1.

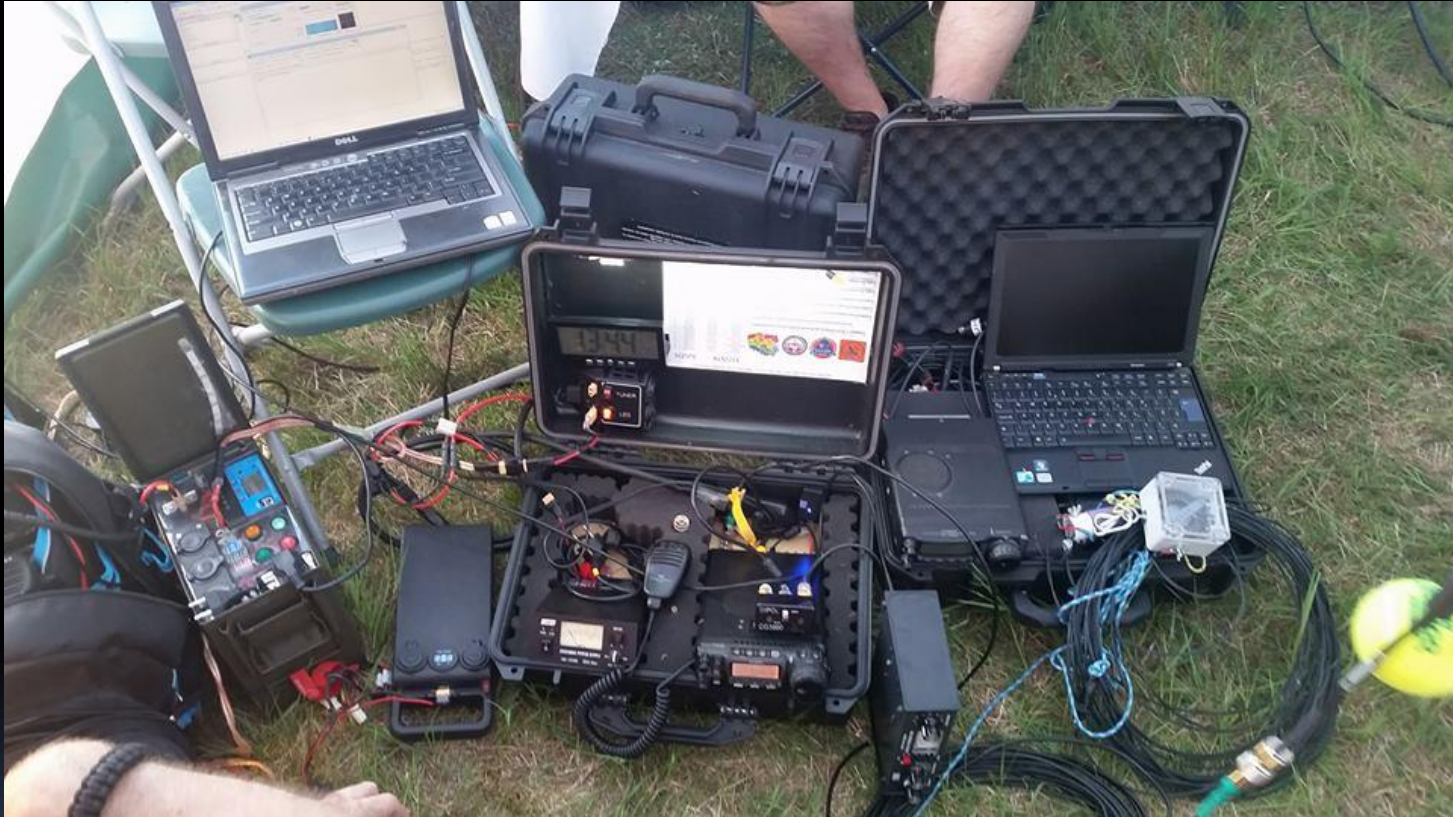


SP EmCom PZK concerned on backup professional radio communication, because during many kinds of crisis situations - professional digital communication systems (telecoms, government, rescue services), with real probability and risk, will be broken or partially malfunctioned.

In today regular activity (not in „E” situations) SP EmCom PZK provides experiments with new technologies: Ham Net system, EchoLink, APRS, D-Star and DMR networks.



5. Technical aspects – part 2.



Polish SP EmCom „go boxes” with complete equipment setup for HF/VHF/UHF bands activities for analogue and digital emissions. Upper are visible go boxes used by Masovian Amateur Emergency Network

5. Technical aspects – part 3.



Go box assembled by Tom SP9SCZ, used in Cracow Amateur Emergency Network, also complete setup for HF / VHF / UHF bands.

5. Technical aspects – part 4.



Local SSTV tests provided by SP9RNS team on 144,500 [MHz] with FM modulation, for preparing photo documentation from potential crisis operation place.

Real tests from 30-th of December 2017 on distance over 100 [km] between Cracow and place Miłkowa Hill nearby Nowy Sącz city. Receiver Yaesu FT8900R and Android phone with direct microphone decoding SSTV Scottie 1 mode.

5. Technical aspects – part 5.



SP EmCom PZK use with success - for reliable relaying radiograms - WinLink communication system with RMS Express software, Winmore mode and simple soundcards modems.

Also under tests we have own Nbems Android application (created by SP2PUT team).

SP EmCom PZK created at the end of 2017 and beginning of 2018 - first in Poland and this part of Europe - WinLink regular HF node located in Warsaw with callsign SP5MASR, now visible in channel table in RMS Express software. Node in working on 40 meters band, but finally, as destination frequency, will be located in 80 meters band.

National exercises „Thaw 2018” organized 10-th of March 2018, were provided with spreading WinLink radiograms, to local administration authorities and other networks participants.

6. Crisis situations.



1. Protection activity during World Youth Day 2016 (end of June 2016). Prepared alternative radio bridge connection between Cracow and Campus Misericordiae, where were collected pilgrims and Pope Francis. Two real security incidents served by SP EmCom PZK and other emergency networks.
2. Xavier Hurricane – security networks created on 3,745 [MHz] during night 4 – 5 of November 2017. Many security incidents, collected information about weather situation over the Poland area.
3. ARA San Juan submarine searching action – listening on emergency frequencies.
5. Citizens searching, help for local societies – 4-th person survived.



Thank you for your attention!

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