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2008

SP ZOZ
Polish Medical Air Rescue

Antoni Urbanowicz

SP ZOZ Polish Medical Air Rescue

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ORGANIZATION

MEDICAL AIR RESCUE

Helicopter Medical Air Rescue Teams HEMS

NATIONAL DESPATCH OFFICE

Airplane Transport Teams EMS

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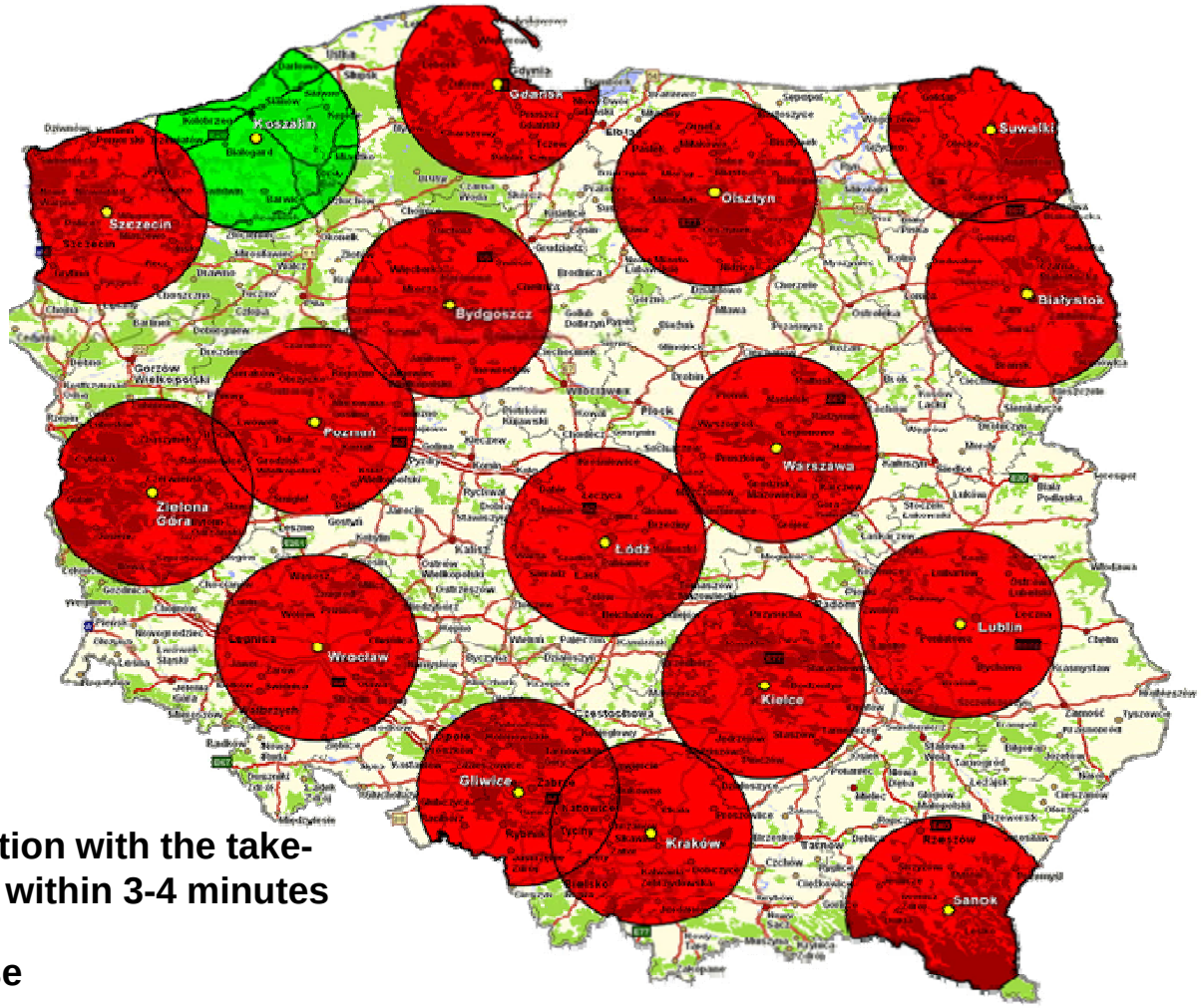
Distribution of Helicopter Medical Air Rescue Bases



area of operation with the take-off readiness within 3-4 minutes

Seasonal base

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Operation of Helicopter Medical Air Rescue Bases (HEMS)

HEMS TEAM PROFILE

- Medical equipment: ALS standard
- Team: a pilot, an HTM* medical rescuer and a physician
- Duty time – from sunrise or 7.00 a.m. to 45 minutes before sunset or 8.00 p.m.
- aircrafts:
  - Mi-2plus – 17 pcs.
  - EC-135 P2i - 23 pcs. (since 2009)
- - Agusta A109 Power - 1 pcs.

*HTM- HEMS Team Member (Air Law)

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Operation of Helicopter Medical Air Rescue Bases (HEMS)

ACT of 8th September 2006

on State Medical Rescue Services

Art. 48(1) The operation of medical air rescue teams is financed with the state budget, specifically from the funds available to the Minister competent for health care.

Art. 48(2) Tasks of a medical air rescue team include the performance of medical rescue operations.

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Operation of Helicopter Medical Air Rescue Bases (HEMS)

TASKS

Flights in order to provide assistance to patients in case of a sudden health hazard that requires intense supervision during a flight, when any delay in medical aid may pose a hazard to life or health, including:

- Medical rescue services, involving a direct flight to a site of an event/call (an accident, a sudden illness) and from the site of an event/call to the nearest Hospital Rescue Ward or another suitable location, rendered:
  - within the radius of 60 m – takeoff readiness within 3-4 minutes,
  - within the radius of 100 km – takeoff readiness within 15 minutes
  - in case of mountain flights – takeoff readiness within 15 minutes.

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Operation of Helicopter Medical Air Rescue Bases (HEMS)

- Sanitary transport between health care centres ordered from the National Traffic Controller of Medical Air Rescue ZOZ LPR:
  - takeoff readiness – 30 minutes

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HEMS: on roads, above water, far away from roads, in the mountains

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Operation of Helicopter Medical Air Rescue Bases (HEMS)

REGULATION BY THE MINISTER OF HEALTH

of 7th May 2007

Concerning the framework procedures of receiving orders by a medical traffic controller and despatching medical rescue teams

Article 2(1). Framework procedures for despatching medical rescue teams

2) Despatching a suitable medical rescue team, considering its type and the shortest distance to an accident site, if it is concluded that the time required for reaching a site by a medical rescue team other than an air team exceeds the time limit set in Article 24(1)(1) of the Act of 8th September 2006 on State Medical Rescue Services or if an emergency condition of a patient requires the despatch of a medical rescue team.

(8 minutes in a town/city with the population above 10 thou. and 15 min. outside a town/city with the population above 10 thou.)

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CRITERIA FOR DESPATCHING HEMS TEAM

- The time of air transport from an event/call site with a patient in a sudden condition to a Hospital Rescue Ward or another suitable ward is shorter than the time of transport by other means of transport and may be beneficial for the further therapy.
- There are circumstances that may prevent or significantly delay the time required for other rescue teams to reach a patient who is in an urgent condition (e.g. topography of the area).
- Mass events
- An unconscious patient
- Sudden circulatory arrest
- Acute cardiac conditions
- Hypertensions crisis
- Cerebral stroke
- Road accidents
- Fall from a height

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CRITERIA FOR DESPATCHING A HEMS TEAM

- Burying, avalanche
- Multi-organ injury
- Head injury that requires an urgent neurosurgical intervention
- Spine injury with paraplegia, tetraplegia or symptoms of lateralization
- Penetrating injury of the chest, neck or abdomen
- Fracture of two or more long bones
- Severe pelvis injury
- Limb amputation due to injury
- Second and third degree burns that exceed 20% of body surface, suspicion of respiratory duct burns, electrical burn, explosion and fire
- Hypothermia
- Drowning
- Other sudden conditions that require an urgent intervention of a medical rescue team

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UNITS ENTITLED TO CALL A HEMS TEAM WITHIN MEDICAL RESCUE SERVICES

- National Controller of SP ZOZ Medical Air Rescue
- Medical coordinators and controllers of rescue services and emergency assistance wards – *until the establishment of the Rescue Notification Centres*
- Controllers of the Rescue Notification Centre
- Controllers of other rescue entities (State Fire Department, Mountain Rescue Service, High Mountain Rescue Service and Water Rescue Service)
- Via the Rescue Service Controller – *until the establishment of the Rescue Notification Centres or directly under a signed agreement*

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Special Procedures

- Transport of a patient directly from a site of an event/call to specialist centres

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Special procedures

1. Burnt patients
2. Patients with amputations due to injuries
3. Patients with a recommended hyperbaric oxygen therapy

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MASS EVENTS

- Mass events – sudden events resulting in the demand for rescue services that exceed the capacities of the forces and resources present at the site and if it is necessary to carry out segregation understood as establishing therapy-transport priorities

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MASS EVENTS

- In case of mass events it is possible to use more than one HEMS team.

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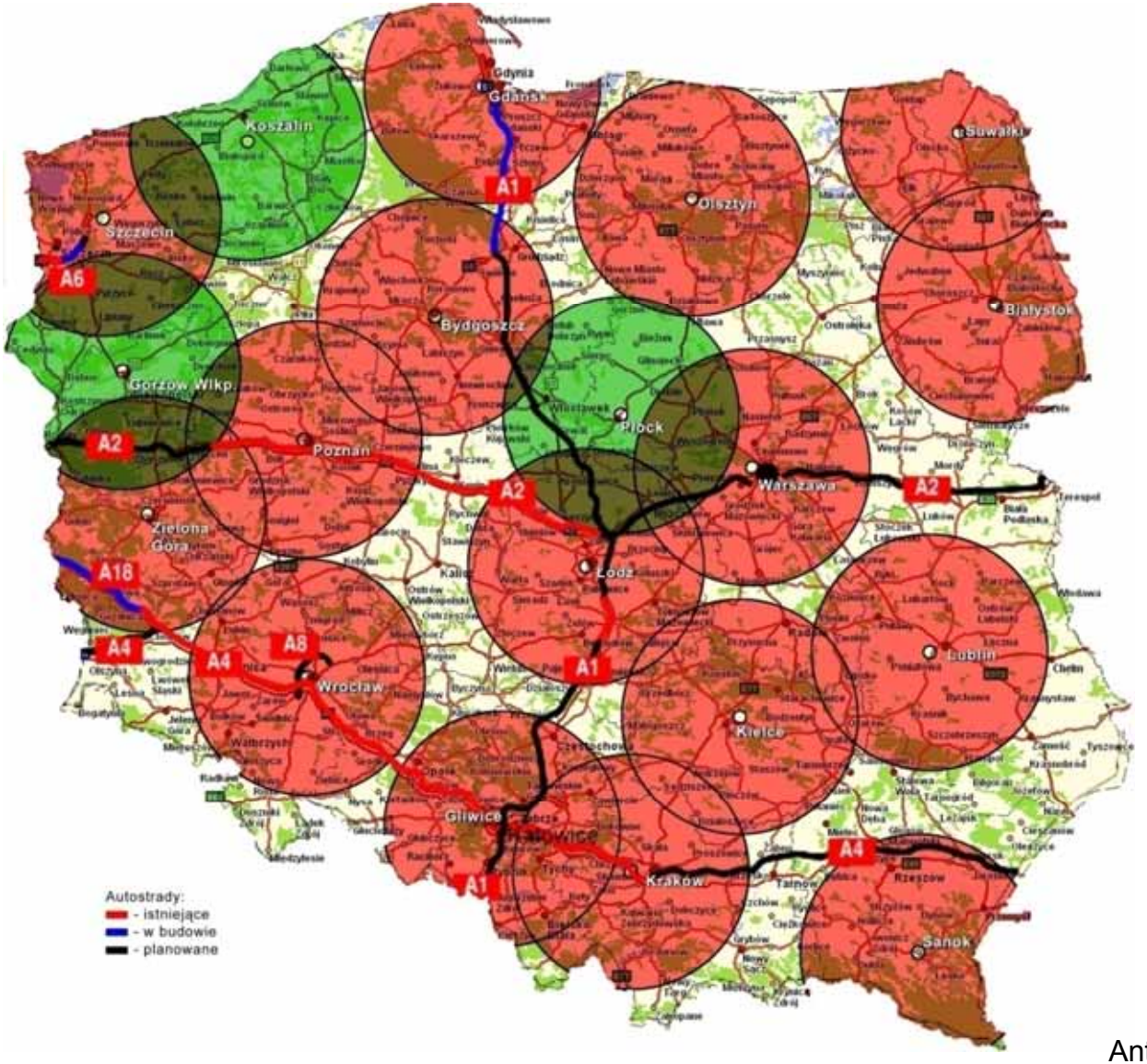
HEMS and motorways



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COOPERATION BETWEEN A HEMS TEAM AND GROUND RESCUE SERVICES

- 1. Two-way communication procedures with a helicopter
- 2. Criteria of a landing pad selection for HEMS flights
- 3. Safety and physical hazard zones around a helicopter
- 4. Control of spectators

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COMMUNICATION

- 1. Helicopters of the Medical Air Rescue operate on the national rescue channel at 169.00 MHz.
- 2. Every helicopter has its unique codeword assigned according to its base.

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List of codewords for Medical Air Rescue helicopters

HEMS team	Codeword
Białystok	Rescuer 1
Bydgoszcz	Rescuer 2
Gdańsk	Rescuer 3
Gliwice	Rescuer 4
Kielce	Rescuer 5
Kraków	Rescuer 6
Lublin	Rescuer 7
Olsztyn	Rescuer 8
Poznań	Rescuer 9

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List of codewords for Medical Air Rescue helicopters

HEMS Team	Codeword
Sanok	Rescuer 10
Szczecin	Rescuer 11
Warszawa	Rescuer 12
Wrocław	Rescuer 13
Zielona Góra	Rescuer 15
Łódź	Rescuer 16
Suwałki	Rescuer 21
Koszalin	Rescuer 22 (seasonal base)

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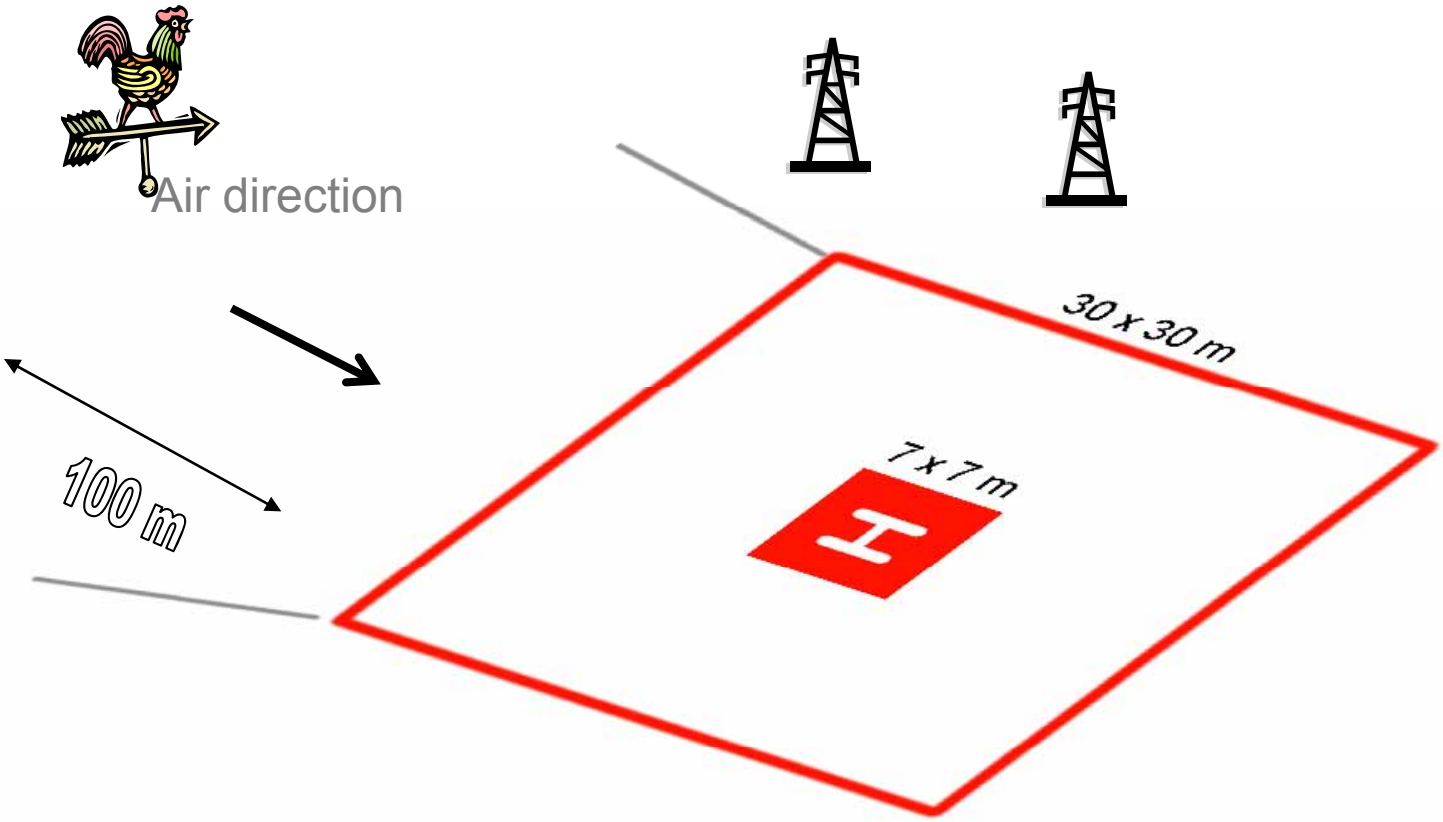
HEMS Field Landing Pad



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Hazard – invisible wires

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Hazard – invisible wires

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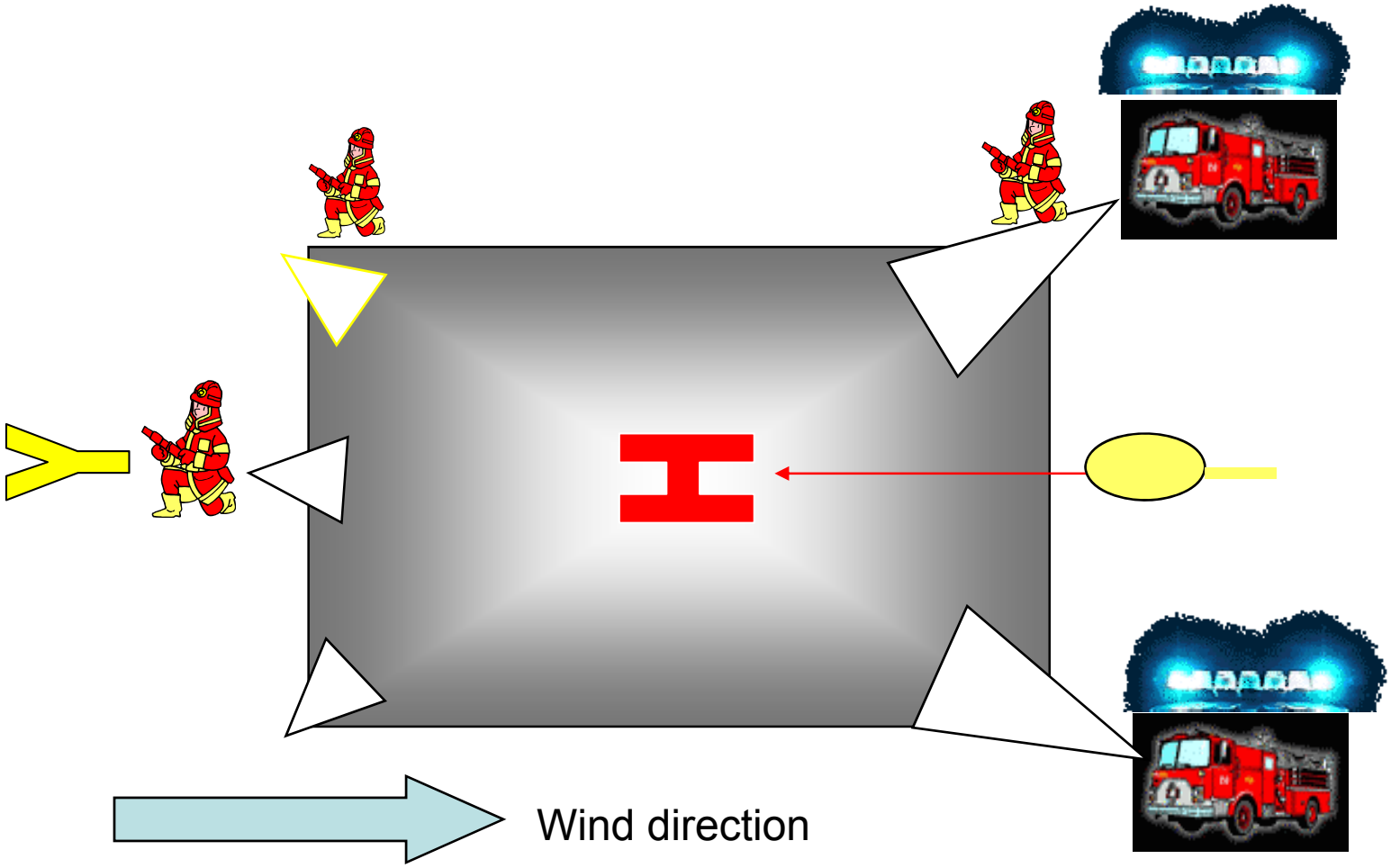
Preparing a landing pad at night



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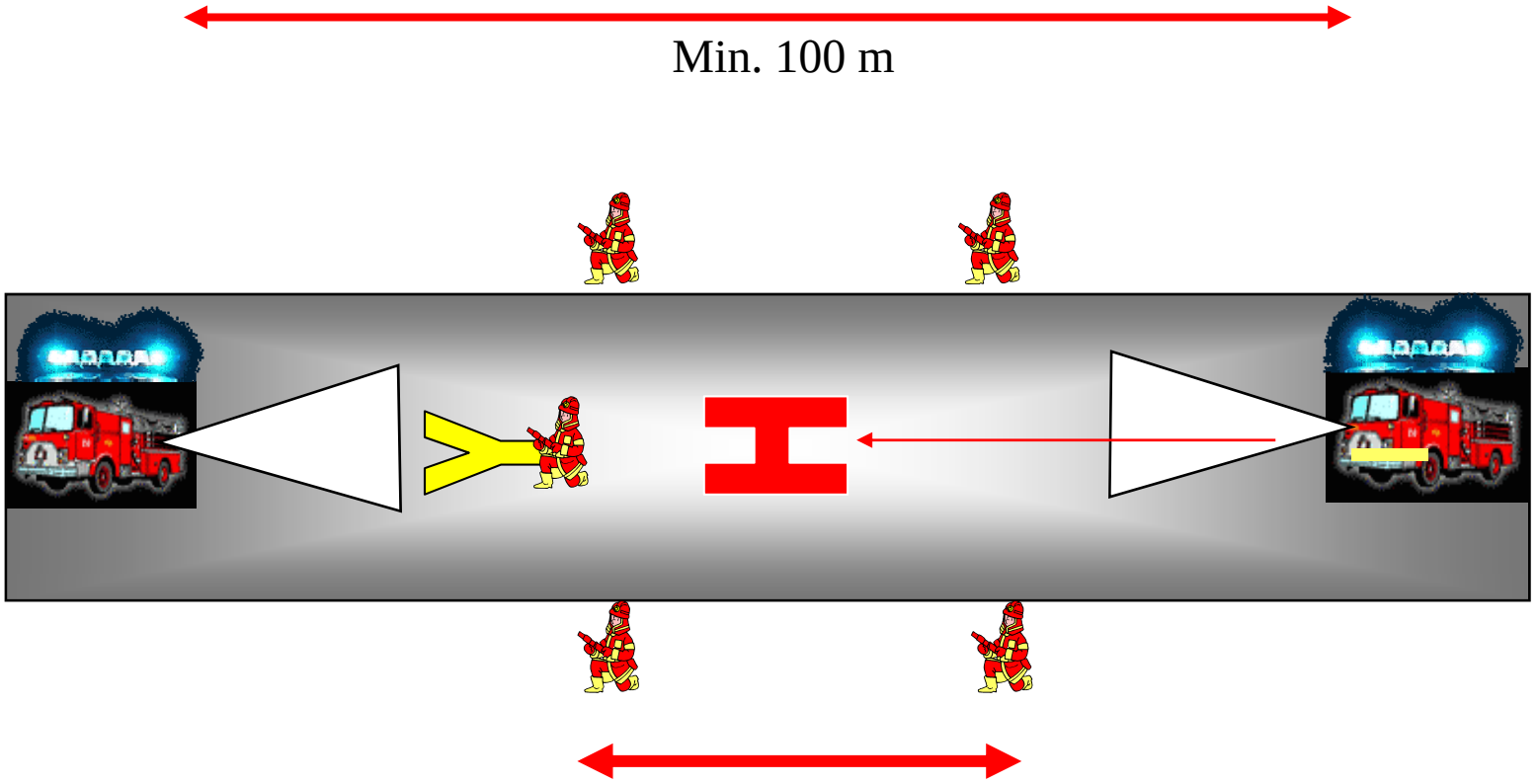
Field landing pad at night – a motorway



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Problems

- Exchange of medical equipment (orthopaedic boards, collars)
- Communication (national rescue channel 169.000 MHz)
- Hospital landing pads

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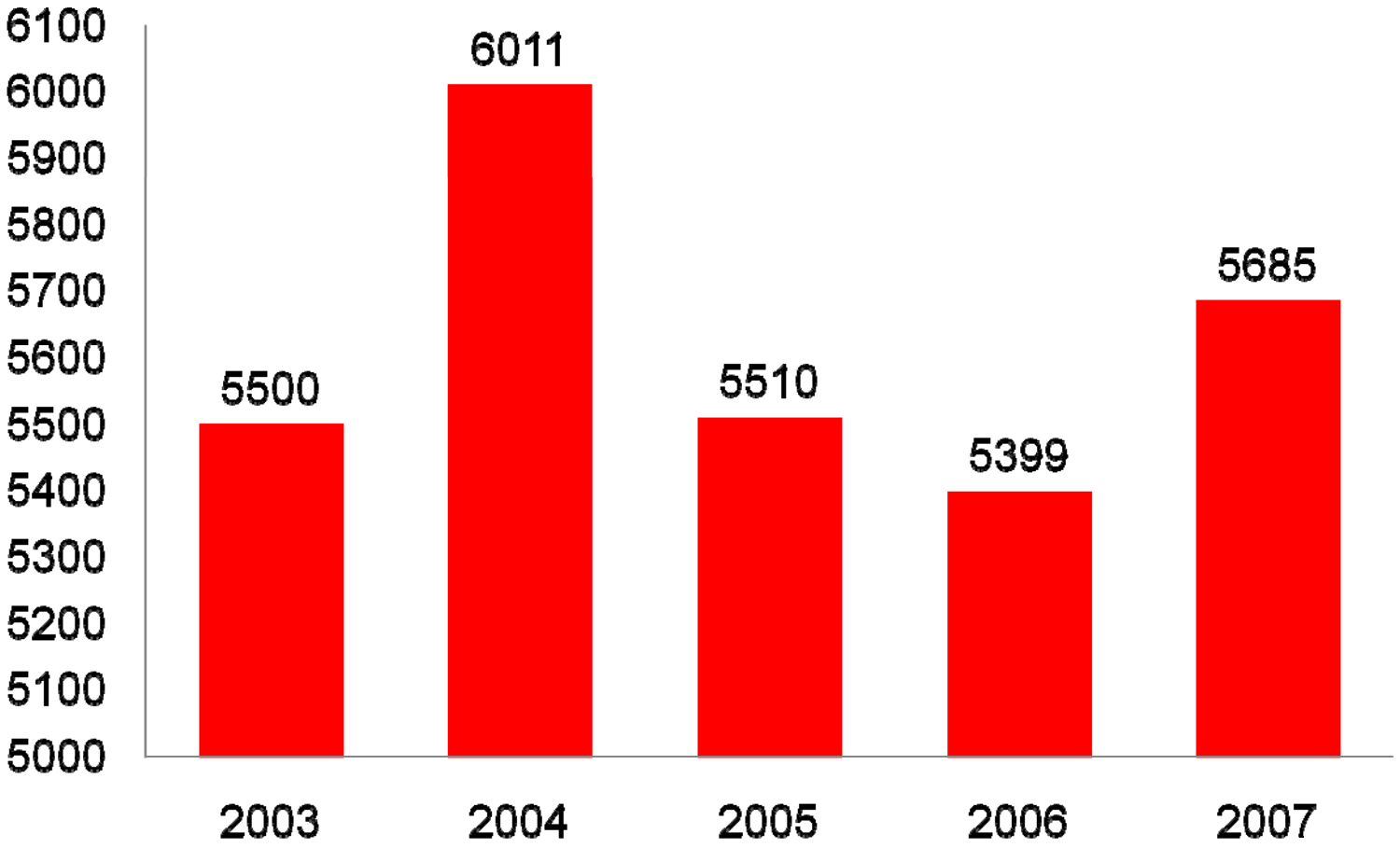
Number of HEMS flights



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Thank you for your attention.

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