Stop bary jako sposób zapobiegania Runway Incursion

Aktualny stan na lotniskach w Polsce

Różnice w sposobach korzystania

Znacząca liczba incydentów Runway Incursion w Europie oraz na świecie.
Nie tylko kolizje ale również wypadki śmiertelne.
Analiza dostępnych danych ujawniła, że dziennie dochodzi do więcej niż jednego incydentu RI.
W związku z tym postanowiono skupić się na tym ważnym aspekcie bezpieczeństwa.
The European Action Plan for the Prevention of Runway Incursions – 2003 przez European Runway Safety Initiative (ERSI).

- 2011 – wprowadzono kolejne rekomendacje oraz materiały przewodnie
- 2017 – najnowsza wersja

Network Manager
nominated by
the European Commission

EUROCONTROL

European Action Plan for the Prevention of Runway Incursions

EAPPRI V3.0 – Released Issue

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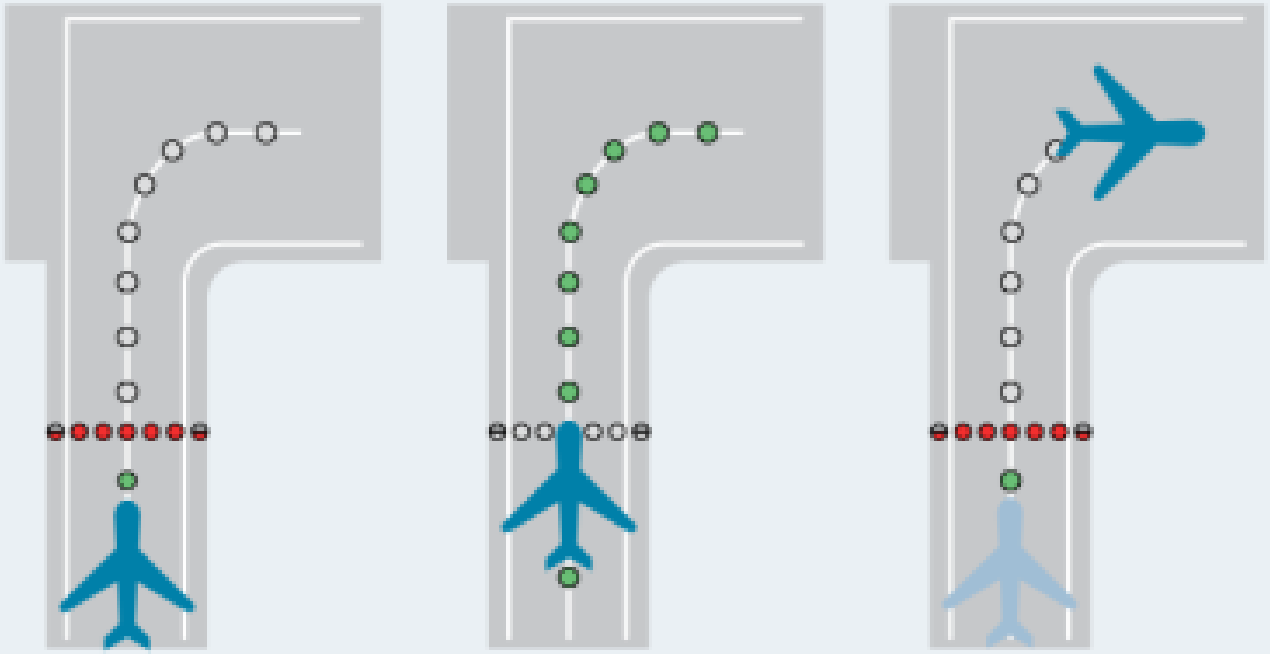
EAPPRI

- European Action Plan for the Prevention of Runway Incursions
- https://www.eurocontrol.int/publication/european-action-plan-prevention-runway-incursions-eappri
- Zawiera rekomendacje dotyczące wykorzystania przez 24h/dobę stop-barów w celu poprawy bezpieczeństwa i zapobiegania zdarzeniom typu runway incursion

Simple Sequence in Stop Bar Concept



Stop bar lights on Lead-on lights off	Stop bar lights off Lead-on lights on	Stop bar lights on Lead-on lights off
Aircraft stops and holds	Aircraft proceeds	Next aircraft stops and holds

Note: Operated by air traffic control, stop bars are one element of an airport surface movement guidance and control system also used by vehicles.

Source: International Civil Aviation Organization

Operational safety studies continue to show that the H24 use of stop bars can be a powerful runway incursion prevention barrier. Previous editions of EAPPRI included H24 stop bar use in Guidance Material but in this version the practice is elevated to Recommendation status for aerodrome operators and air navigation service providers to consider.

Safety studies have demonstrated that the use of H24 stop bars can be an effective RI prevention barrier. Therefore, Aerodrome Operator should, with ANSPs, consider the implementation of H24 stop bars at all runway holding points or other lighting systems providing an equivalent level of safety (e.g. Autonomous Runway Incursion Warning Systems (ARIWS)) at all runway holding positions.

Why Stop Bars?

The provision of stop bars at all Runway Holding Positions and their use at night and in all visibility conditions can form part of effective runway incursion prevention measures. Stop bars are installed to provide protection at runways and reduce the risk of runway incursions through:

- Enhanced visibility of Runway Holding Positions.
- Reinforcing the control of aircraft and vehicles in the vicinity of the runways.
- Minimising the risk of aircraft or vehicle identification error.
- Minimising the risk of ATC clearances being misinterpreted.
- Enhancing safety during low visibility conditions. Pilots and vehicle operators are required to stop at the Runway Holding Positions and obtain clearance from ATC prior to entering a runway.

Ideally, stop bars would be installed at all Runway Holding Positions and used H24 irrespective of weather and/or environmental conditions. There are, however, various reasons why an airport, where stop bar are already installed, do no use them H24. The main concern isd:

- Air traffic controllers' workload: The use of stop bars requires ATC manual actions through the lighting control interface in the control tower, these actions are sometimes considered as additional workload to the normal ATC procedures, particularly where the lighting control interface has not been designed efficiently. The solution is an effective interface where stop bars that protect the runway should be individually selectable with a single input by the runway controller at his/her own working position.

Mapa polskich portów lotniczych

Zainstalowane stop-bary

- EPBY
- EPGD
- EPKK
- EPKT
- EPLB
- EPMO (częściowo)
- EPPO
- EPRZ
- EPWA
- EPWR

Brak stop-barów

- EPLL
- EPSC
- EPSY
- EPZG

Brak stop barów:

- EPLL – brak w planach portu
- EPSC – planowane przez port w latach 2021-2023
- EPSY – planowane podczas rozbudowy do CAT II
- EPZG – brak w planach portu

Lotniska ze stop-barami

Użycie ciągłe (24/7)

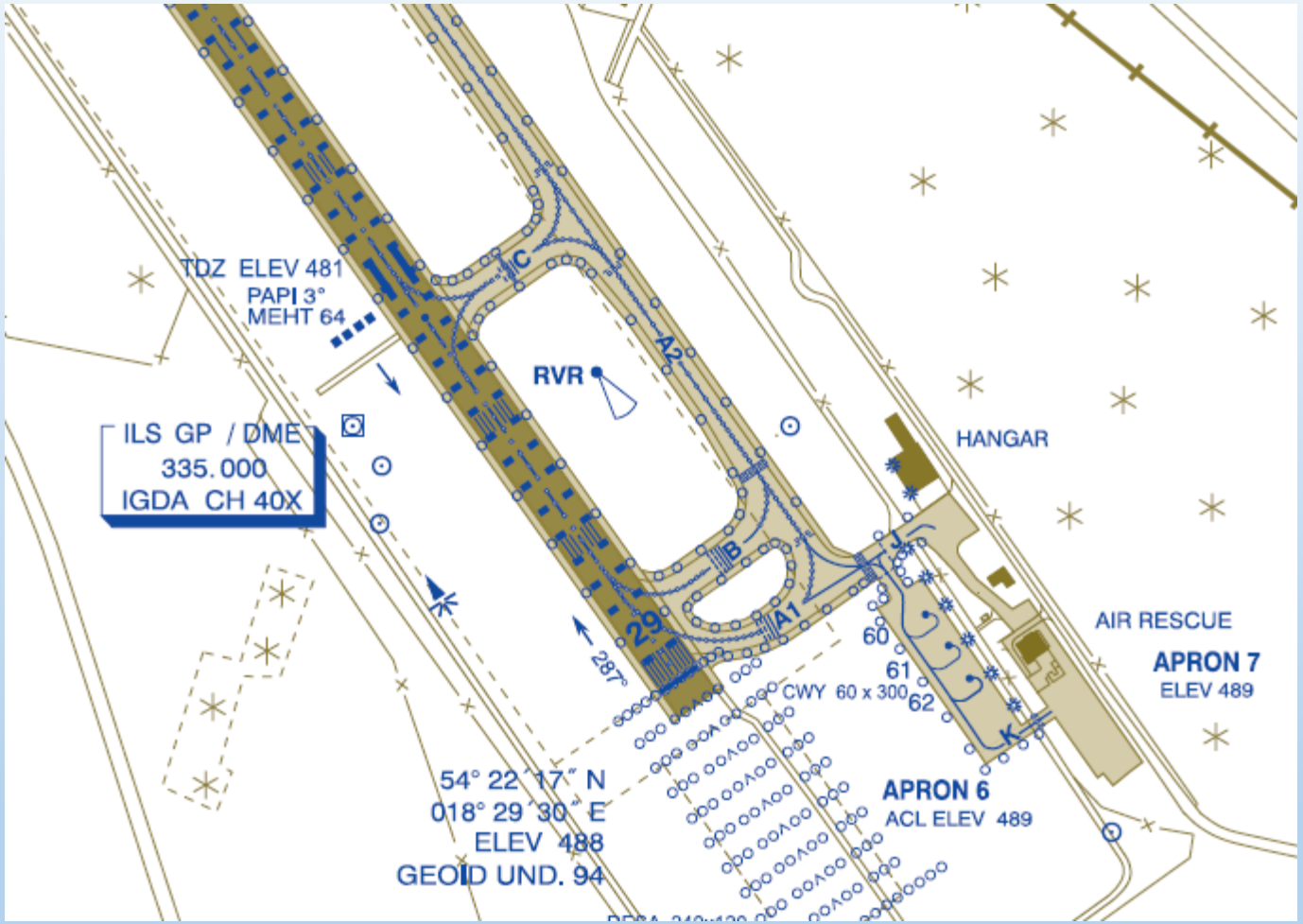
- EPBY*
- EPKK
- EPKT
- EPLB
- EPRZ

- Poza jedną drogą kołowania, która jest w strefie ochronnej ILS

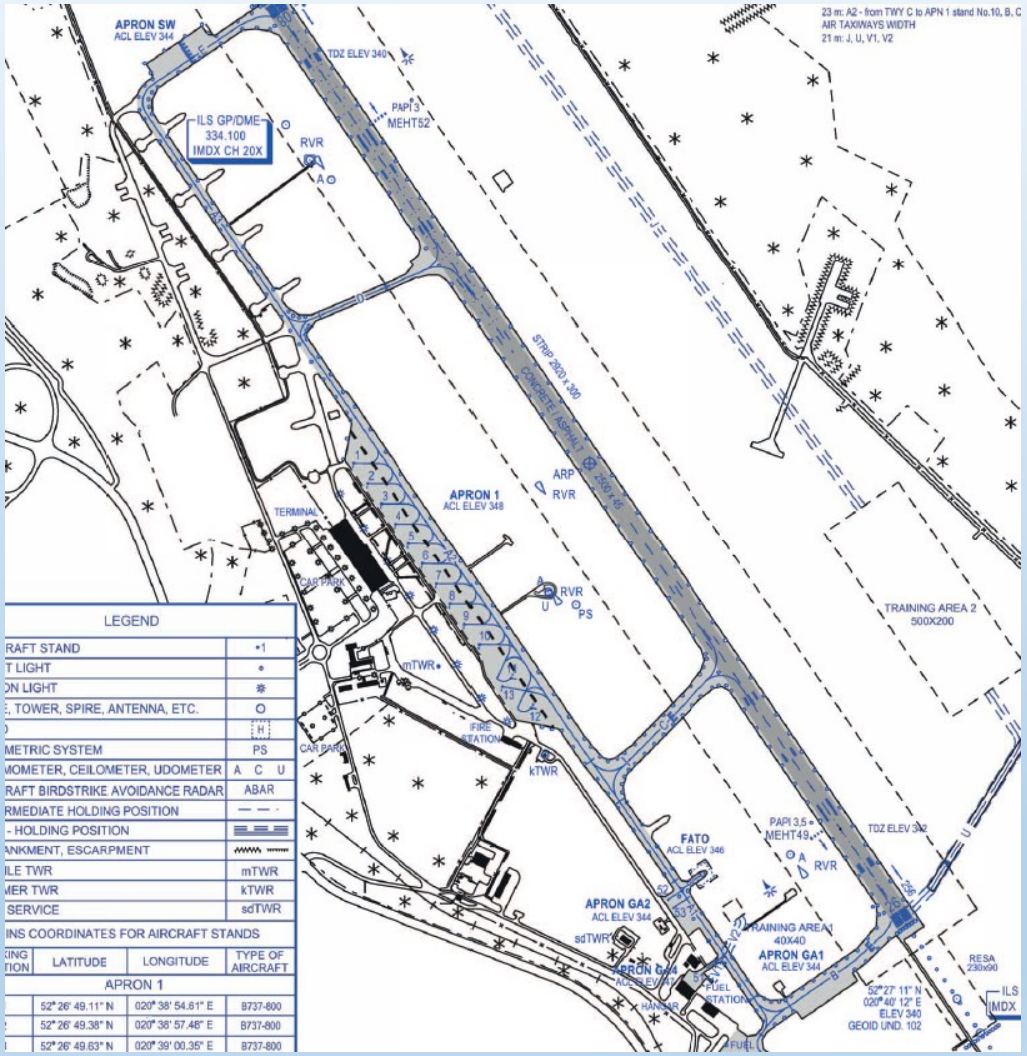
Użycie „nieciągłe”

- EPGD
- EPMO
- EPPO
- EPWA
- EPWR

EPGD – używany podczas LVP/CAT II.



EPMO – podczas LVP/CATII



EPPO – nie używane.
Zainstalowane na 5 z 6 DK prowadzących do RWY oraz dodatkowo na krzyżówkach dróg kołowania.

EPWA – podczas CATII i CATIII – wszystkie.
Poza tym tylko w miejscach „newralgicznych”

EPWR – podczas LVP/CATII

Wkrótce 24/7.