



Rannsóknarnefnd samgönguslysa

## LOKAÐ MEÐ BÓKUN

- Case nr.: **17-140F025**
- Date: **13. september 2017**
- Location: During climb through FL240, 170 NM east of Keflavik Airport
- Description: Fire in cabin bag from electronic cigarette

The flight crew of airplane HA-LPK (Airbus 320) flying from Keflavik Airport (BIKF), enroute to Wroclaw (EPWR) in Poland, declared an emergency at 19:24 due to fire. At this time the airplane was climbing through FL240 over the eastern part of the glacier of Mýrdalsjökull in Iceland.



The cabin crew had just started the service on board, when smoke was observed coming from the overhead bin over seat row 24 left. The nearest cabin crew member located a



BCF<sup>1</sup> fire bottle and ran with it towards the suspected fire, to be able to apply the relevant fire-fighting procedures. Another cabin crew member that had also noticed the smoke ran to the forward cabin to notify the rest of the crew.

Before the cabin crew member with the BCF reached the suspected fire, a passenger

<sup>1</sup> BromoChlorodiFluoromethane, or Halon

sitting in the aisle seat below the overhead bin where the smoke was observed, had stood up, opened the overhead bin, removed a backpack and put it on the aisle floor.

Fire was located in the backback's sidepocket, where an electronic cigarette was stored (vaper). The electronic cigarette was removed from the backpack and dropped onto the aisle floor. Attempt was made to estinguish the fire using water. When this was attempted the electronic cigarette burst open on the



floor. Flames did then re-burst from the electronic cigarette again a few times before the fire being completely extinguished using water. According to the cabin crew attendant, she



decided to use water instead of the BCF fire bottle due to the open area and the extensive smoke coming from the electronic cigarette. The flight crew was informed of the cabin fire, which declared an emergency and turned around towards Keflavik Airport. The cabin attendants cooled the electronic

cigarette with water, updated the flight crew of the situation and then applied the airline's relevant procedures to isolate the electronic cigarette from the passenger cabin. The electronic cigarette was put into an empty waste bin under the sink in the aft left toilet for the remainder of the flight. The lavatory waste bin is made out of metal and on top of it, below the sink, there is an automatic fire fighting system in case of fire in the waste bin. The airplane was returned to Keflavik Airport where it landed safely.

Analysis of the electronic cigarette indicated that a knob used to activate the burner of the electronic cigarette was engaged while inside the backpack. It is believed that this continued engagement of the burner caused the electronic cigarette to overheat and catch fire. It is possible that the pressure from the backpack lying on top of the electronic cigarette could have caused this. The electronic cigarette was of the type VOD.

The Icelandic Transportation Safety Board (ITSB) decided not to write a formal report regarding this serious incident and closed the case during a board meeting on 4. October 2018.