LOW-VISIBILITY OPERATIONS AT FAE – ROUTINELY DOABLE?

In preparations for our Embraer ERJ-145 flight into the Faroe Islands airport Vágar (FAE) 2015 March 20 Friday morning for the total solar eclipse, I will be asking the FAE authorities whether there are low-visibility operating guidelines which are specific to their airport. Then as a layperson checking, I will ask our ERJ-145 pilots to make sure they are up-to-date on any such, so as to optimize the likelihood we can fly in and out twice without difficulty. Also I'll ask the FAE authorities for statistics if available on delays/cancellations at FAE, since I have been unable to find any on the internet.

Overall I'm quite optimistic because since last November (of 2013) I've been watching the three Vágar airport tower webcams at...

http://www.fae.fo/DesktopModules/WebCam/PopUpWebCam.aspx?mid=17060&pageId=12580

http://www.fae.fo/DesktopModules/WebCam/PopUpWebCam.aspx?mid=17061&pageId=12580

http://www.fae.fo/DesktopModules/WebCam/PopUpWebCam.aspx?mid=17062&pageId=12580

...quite regularly and have not seen any outright foggy periods at all. Of course there may have been some I missed but they certainly don't appear common. The worst I've seen was 2014 March 12 yet on that day the regularly-scheduled Atlantic Airways flights operated normally, see below – thus seeming, at least, to inspire confidence the odds of not being able to fly in on eclipse morning are quite low.

So as a comparison, here's what FAE looked like in good weather on the morning of 2014 February 18 exactly at solar eclipse time, 0941, as seen from the three control tower webcams:

Vága Floghavn - www.floghavn.fo

Vága Floghavn - www.floghavn.fo

Vága Floghavn - www.floghavn.fo

Whereas here's what it looked like on 2014 March 12 at 1319 1320 and 1322 in very-poor-visibility weather as seen from the same respective three webcams:

Vága Floghavn - www.floghavn.fo

Vága Floghavn - www.floghavn.fo

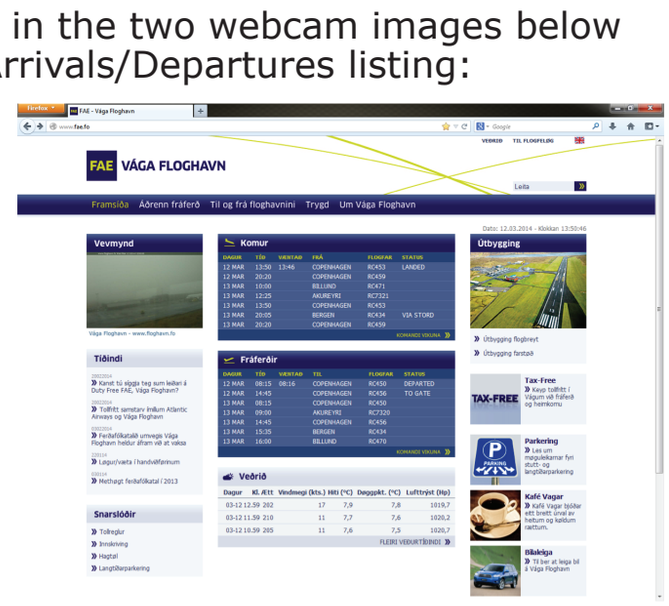
Vága Floghavn - www.floghavn.fo

At the time I made the screenshots of these three low-visibility images, Atlantic Airways' daily Airbus A319 flight RC453 was en route from Copenhagen (CPH) to Vágar, with arrival scheduled to be at 1350. Therefore I was keen to see: would he have to turn back because of difficult conditions for landing at FAE?

Well...he didn't have to turn back...he landed evidently normally! As seen in the two webcam images below at 1342 and 1345 showing passengers disembarking, and also the website Arrivals/Departures listing:

Vága Floghavn - www.floghavn.fo

Vága Floghavn - www.floghavn.fo



Seeing this online, and having observed that another flight, RC450, in the same aircraft had departed for CPH in similar weather earlier that morning at 0816, I for one was quite impressed – and amazed actually – that it seemed to be a ho-hum ordinary day of comings and goings at FAE despite the murk. It may have a lot to do with the Faroese having recently extended the runway length from 1250 meters to 1799 meters, and acquired Airbus A319's while retiring their older Avro's, a new terminal scheduled for completion by May 2014 plus other facilities improvements, and in particular, upgrading their navigational systems to state-of-the-art ...see photo and description from 2014 Vágar Airport Fact Sheet...

FAE VAGAR AIRPORT

INSTRUMENT - ILS & RNP AR 0.1

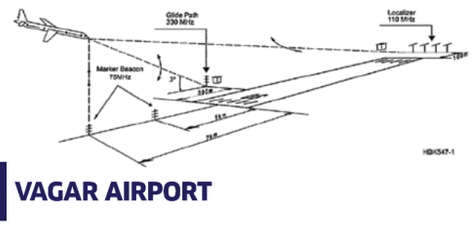
As part of the recent expansion of the airport FAE has invested in systems and procedures to improve flight regularity. A complete Instrument Landing System has been implemented and Vagar Airport is the first airport in Europe in which an airline has approved Required Navigation Performance procedures for approach and departure.

ILS

A complete Instrument Landing System comprises:

- A LOCALIZER SYSTEM, producing a radio course to furnish lateral guidance to the airport runway
- A GLIDE PATH SYSTEM, producing a radio course to furnish vertical guidance down the correct descent angle to the runway
- MARKER BEACONS, to provide accurate radio fixes along the approuach course.

The layout of a typical ILS airport installation is shown below.



RNP

Required Navigation Performance (RNP) is a type of performance-based navigation (PBN) that allows an aircraft to fly a specific path between two 3-dimensionally defined points in space. RNP approaches with RNP values currently down to 0.1 allow aircraft to follow precise 3 dimensional curved flight paths through congested airspace, around noise sensitive areas, or through difficult terrain.

RNP procedures for approach and departures allow for better utilization of aircraft payload as climb gradient at engine loss is not equally vital and saves fuel through more precise route planning.

FAE VAGAR AIRPORT

....so I felt at least initially encouraged, pending further research to come during the run-up to TSE 2015, that we'll have quite a bit of leeway flying in and out on eclipse morning. See accompanying FAE fact sheet 2014.pdf and FAE upgrades 2014 March.pdf.