



# Elevator Split Nextjet BAe ATP

PETER GULLBERG | DEPUTY CHIEF PILOT BAe ATP





# 5 Incidents with Elevator Split?

3 SE-LLO 2009-2010

2 SE-MAL 2010

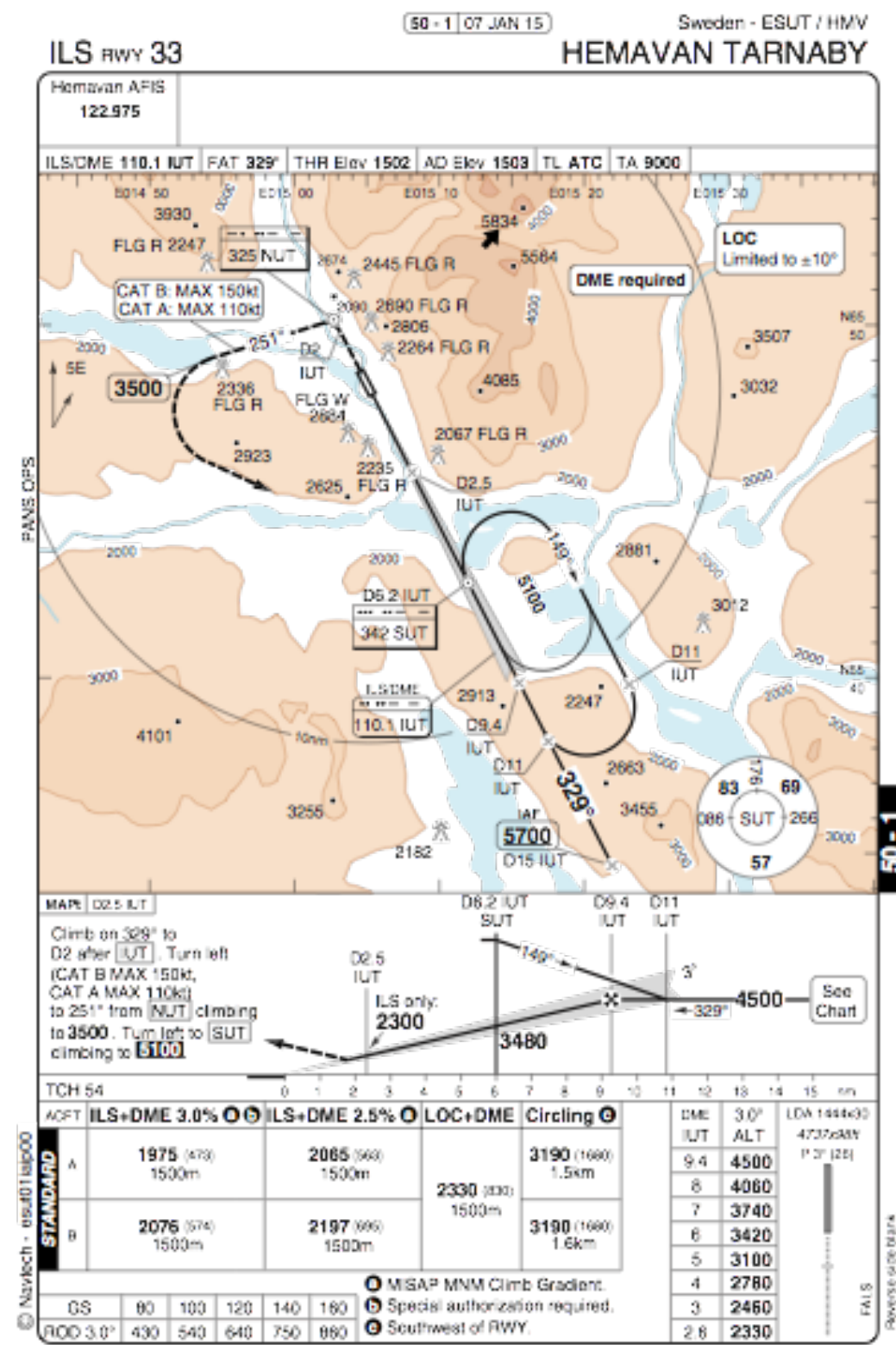
1 in Hemavan

Small RWY

4 in Arvidsjaur









## Elevator split Arvidsjaur ESNX

Due to stiff elevator, the commander decided to abort t/o after V1 due no liftoff.

The Commander started to close the power lever, at the same time the visual and audible warnings came on.

Suddenly the aircraft lifted off and t/o power was added again.

Because of really bad weather at departure aerodrome the crew decided do divert.



## Elevator split Hemavan ESUT SE-LLO

During rotation the visual and audible warnings came on. Elevator split + SCS engaged.

Scheduled to land in Vilhelmina (another small airport).

Diverted to Arvidsjaur instead (a close by airport where we have a maintenance base and a good runway).





Hemavan





## Elevator split Arvidsjaur ESNX SE-MAL

During rotation the visual and audible warnings came on. Elevator split + SCS engaged. Climbing out and back to NDB, for Rwy 30 to enter holding and do checklists. Very bad weather at the airport and BA decreasing to under 0.20. Have to wait for the Rwy to be cleared again. Landing after a while.

This same morning another t/o was attempted again after resetting the system in the hangar. Same problem but this time aborting t/o just after V1 (good performance calculated and long rwy left).





**NextJet**

**\*Description of Facts and Causes**

Right hand pilot was pilot flying on our third flight of the day, from Arvidsjaur to Stockholm Arlanda.

As passengers boarded, there was (heavy) snowfall which resulted in ordering the ground staff to de- & anti-ice the aircraft.

As we taxied to the runway the normal flows and checklists were performed, flight controls were checked as usual.

The first part of the take-off run was normal, but as we passed V1 (99 kts) and F/O pulled back on the control column, the aircraft didn't respond. When realizing nothing happened F/O pulled back on the control column even more.

Something was wrong. Speed was now past V1 (probably by 10-15 kts) but as the aircraft was not lifting off I decided to abort the take-off. As I started to close the power levers the attention getter started flashing and an audible warning sounded,

STANDBY CONTROLS illuminated on the Central Warning Panel. At the same time the aircraft lifted off.

I increased to take-off power and the aircraft climbed away normally. When we passed safe altitude we performed emergency checklist card 30 "Standby Controls Warning". On the standby flying control

indicators on the overhead panel we noticed the ELEVATOR SPLIT light was illuminated. F/O also noticed the elevator trim command indicator was illuminated and that the elevator out-of-trim indicator showed a large deflection.

We discussed the problem and what options we had. As weather was really bad at our departure aerodrome and the aircraft was now performing normally we decided to continue to our destination.

During cruise we once disconnected the auto-pilot and flew the aircraft manually, the aircraft responded normally. The approach and landing was normal, we decided to add 10 kts to our threshold speed as we didn't know how the aircraft would perform at low speed.

As we came to stand we advised the technician of what had happened. After he had examined the aircraft he told us one of the elevators had been jammed, probably due to snow or ice that had frozen. The technician then reset the elevators and the auto-split system and declared the aircraft fit to fly.





# CIS (crew information system)

First a recommendation and later a new CIS.



Page - 1 -

## CREW INFORMATION SYSTEM

The Crew Information System (CIS) is used by the Flight Operations Department when a flight safety matter concerning NextJet operations must be Highlighted.

Classification: **BLUE** - General information, **YELLOW** - Temporary Operational Matters, **RED** - Urgent Safety Matters

Concerning: **ATP**

Distribution: **FC / FO**

Effective From: **2011-02-09**

## RED-CIS 110209 / Elevator Split

### Elevator Split

The manufacturer of the BAe ATP has issued a (Notice To Aircrew) NTA for our ATP aircrafts. It is in effect as from Thursday the 25<sup>th</sup> of November.

Due to the recent incidents with stuck and/or split elevators during take-off, the manufacturer has applied restricted performance.

It is applicable to all runways with no tailwind, TORA/TODA of 2300 meters and less, following a two step de-icing including type II, III and/or IV de-icing fluids.

**Be aware of the fact that intersection take offs may be limited by the NTA.**

The following applies:

1. Only left seat take-off after a two step de-icing.
2. V1 must equal Vr
3. Only flap 7 take-off allowed
4. No tailwind take-off
5. Apply the special performance charts (Example below)  
For ATP operation within NextJet these will apply to GEV-KRF-LYC-VHM and HMV. Other destinations can be requested from Operation if needed.



**PETER GULLBERG | DEPUTY CHIEF PILOT BAe ATP**

Address: Box 123, 190 46 Stockholm-Arlanda

Cell phone: +46 707169192

Phone: +46 (0)8 NEXTJET (639 85 38)

E-mail: [peter.gullberg@nextjet.se](mailto:peter.gullberg@nextjet.se)