

REPORT

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REP: 53/2003
Date: 25. September 2003

All times given in this report is local time (UTC + 2 hrs), if not otherwise stated.

Aircraft

-type & reg.: BAE 146 Avro RJ1H, HB-IXM / Hawker 800 XP, OY-RAC
Radio call sign: CRX 3417 / OAC
Date and time: 18 October 2001, at 1745-1750 hrs
Location: 5 NM north of Oslo Airport Gardermoen (ENGM)
Type of occurrence: Air traffic incident, violation of separation minimums
Type of flight: Commercial, scheduled service/commercial, non scheduled
Weather cond.: ENGM METAR at 1750. Wind: vrb. 2 kt. Visibility:
10 km+. Clouds: few at 200 ft, scattered clouds at 3 500 ft,
broken at 20 000 ft. Temp./dewpoint: 7 °C/4 °C.
QNH: 1023 hPa.
Light cond.: Daylight
Flight cond.: VMC, both
Flight plan: IFR/IFR
No. of persons onb. : Not reported
Injuries: None
Aircraft damage: None
Other damage: None
Information sources: Report from the Commander on CRX 3417, report from
controllers on duty at ENGM and Oslo ATCC, report from
ATC at ENGM, report from Oslo ATCC and AAIB-N's own
investigations.

SUMMARY

The incident occurred in relation to two departures from runway 01L on Oslo Airport Gardermoen (ENGM) and involved CRX 3417, a RJ1H from Crossair flying from ENGM to Zürich Airport (LSZH) and OY-RAC, a Hawker 800 XP from Aviation Assistance AS flying from ENGM to Malaga Airport (LEMG).

Both flight crews was given departure clearances according to SID, SKI 2A. The crew of CRX 3417 got their take-off clearance at time 17:44:32, and immediately started their take-off. The crew on OY-RAC got their take-off clearance at 17:45:52, according to the communication transcript, and departed according to the clearance received. The duty

controller at ENGM TWR transferred both aircraft, control and communication wise, to Oslo APP TMA WEST shortly after departure.

The duty controller on Oslo TMA WEST immediately observed that the distance between the two aircraft was marginal, and that OY-RAC flew at a higher speed than CRX 3417 both vertically and horizontally. As there were good visual conditions, the controller asked the crew on OY-RAC if they had visual contact with the RJ1H. Due to other transmissions on the frequency, it took a while before he got an answer. The crew then confirmed that they had visual contact with the other aircraft. After a while, OY-RAC was in a position north of CRX 3417, which had started a left turn according to SID. Because of the high climb rate of OY-RAC, the controller decided to let OY-RAC continue to climb above CRX 3417. The crew of CRX 3417 got a TCAS Resolution Advisory, and reported this to the controller. The controller gave the crew traffic information about OY-RAC, and informed them that the crew of OY-RAC had visual contact.

The distance between the two aircraft was all the time below the minimum distance of 5 NM that was the separation minimum at the time of the incident. At the time the two aircraft passed through the same altitude, the horizontal distance between the two was slightly above 1 NM.

COMMENTS FROM THE ACCIDENT BOARD

AAIB-N is of the opinion that there was no actual risk of collision in this incident. Despite this fact it is not acceptable that the separation requirements between departing aircraft at ENGM are not fulfilled. AAIB-N has investigated several similar incidents, both at ENGM and earlier at Oslo Airport Fornebu. Whether it is the separation requirements that are not fulfilled or it is the difference in aircraft performance that is not taken into consideration, the result could easily be the same the same, a violation of separation minimums.

The “regional rules” for ENGM TWR, states:

“3.1.5 Gardermoen TWR shall:

b) establish separation between departing aircraft

3.1.7 The required separation should be established at the point of transfer of controlresponsibility/radarcontrolresponsibility

3.1.7.1 As long as there are requirements for radar separation, both the distance between aircraft and the aircraft speed should be such that the requirements for radar separation are fulfilled even after transfer of control responsibility (to Oslo ATCC/APP)

3.1.7.2 The distance between departing aircraft should be at least 5 NM at the time of transfer of control responsibility.”

AAIB-N is of the opinion that the “regional rules” were not followed at this incident. The duty controller on Oslo TMA WEST was put in a very difficult situation when the control responsibility was transferred without the required separation limits between the two aircraft.

AAIB-N has several times pointed out the importance of taking into consideration the difference in aircraft performance when establishing the required radar separation. It is important that ATC consider this problem seriously in order to increase the controllers’ awareness on these matters and to avoid incidents like this.

AAIB-N is investigating several similar incidents, which indicates that this is an area of great importance to flight safety.