DUTCH
SAFETY BOARD

Take off without permission

Eindhoven Airport

Take off without permission

Eindhoven Airport, 11 October 2012

The Hague, July 2013

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Dutch Safety Board

The aim in the Netherlands is to reduce the risk of accidents and incidents as much as possible. If accidents or near-accidents nevertheless occur, a thorough investigation into the causes of the problem, irrespective of who is to blame for it, may help to prevent similar problems from occurring in the future. It is important to ensure that the investigation is carried out independently from the parties involved. This is why the Dutch Safety Board itself selects the issues it wishes to investigate, mindful of citizens' position of dependence with respect to public authorities and businesses. In some cases, the Dutch Safety Board is required by law to conduct an investigation[1].

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1 This report is published in Dutch and English. In the event of any discrepancy between these versions, the Dutch text shall prevail.

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GENERAL INFORMATION

Foto 1: EI-DLD, foto Helmut Schnichels, Planepictures.net

Identification number:	2012-105
Classification:	incident
Date, time[2] of occurrence:	11 October 2012, 14.50 hours
Location of occurrence:	Eindhoven Airport / Eindhoven Air Force Base
Registration:	EI-DLD
Aircraft type:	Boeing 737-800
Aircraft category:	Twin engine passenger aircraft
Type of flight:	carrier / commercial
Phase of operation:	taxi / take-off
Damage to aircraft:	none
Flight crew:	2 + 4
Passengers:	146
Injuries:	none
Other damage:	none
Light conditions:	Daylight

2 All times in this report are local times unless otherwise specified.

SUMMARY

The Boeing 737 taxied for IFR departure from runway 04, under control of Eindhoven Ground. The taxi route went from Eindhoven Airport Terminal via the main runway 04-22 (backtrack[3]) in a southerly direction. During taxiing, the crew was instructed to turn right at 'Foxtrot' intersection. At 'Foxtrot' the crew made a 180 degree turn to the right and took off from runway 04 without takeoff clearance from the Air Traffic Control. There was no damage or injury, nor was there a dangerous situation after takeoff.

FACTUAL INFORMATION

History of the flight

On 11 October 2012, around 14.50 local time, the crew of the Boeing started their engines after permission was obtained from Eindhoven Ground Control. They planned for takeoff and departure to London Stansted.

When the crew taxied in after the flight before, into Eindhoven Airport, they were under control of Tower Control until the aircraft came to a stop. When they started up the aircraft, the radio was on the Tower Control frequency and the crew had to switch to Ground Control to ask for start up and taxi clearance. Several minutes after start up, the crew contacted Eindhoven Ground Control on the radio, requesting taxi instructions. Eindhoven Ground Control initially cleared the crew for taxi and crossing of the active runway 22 at intersection 'Alpha'.

After several minutes, Eindhoven Ground Control re-cleared the crew for a *backtrack* of runway 04, ordering the crew to make a right turn at intersection 'Foxtrot'.

Approximately halfway down the runway, the crew requested and received the enroute clearance.[4] When the aircraft arrived at intersection 'Foxtrot', Eindhoven Ground Control instructed the crew "this one to the right, and for departure contact tower, 131,10, good flight". The crew then performed a right hand 180 degree turn on the runway and took off without take-off clearance.

Aircraft information

The aircraft was a Boeing 737-800. There was no damage to the aircraft. There was no dangerous situation after the takeoff of the aircraft.

3 Backtrack is the term used for taxiing via the active runway, normally in opposite direction of the current direction for takeoff and landing.

4 This clearance contains route, altitude and transponder code, and radiofrequencies of ATC after takeoff. The clearance does not contain the actual permission for takeoff. After request, Eindhoven Ground Control issued the enroute clearance, after which the crew continued the taxi to Foxtrot.

The crew

The Captain / Pilot In Command (PIC) was a 58 year old male. He held a valid ATPL(A) and Radio Telephone (RT) licence. His ATPL and RT licence were valid until 03 January 2017. The captain had type rating according to JAR-FCL-1.015(a)1, valid for Boeing 737, 747, 777 and Single Engine Land and Multi Engine Land aircraft. During the event the captain was acting as Pilot Flying.

Total flying hours	19650
Flying hours on aircraft type	5800
Flying hours on type during last 3 month	228
Flying hours on type during last 72 hours	8

Table 1: Pilot in Command experience

The First Officer (FO) was a 45 year old male. The FO held a valid ATPL(A) and RT licence. His ATPL and RT licence were valid until 31 August 2013. The FO had a type rating conform JAR-FCL 1.015(a)1 for Boeing 737 with a MPA (Multi pilot only) limitation on his IFR rating. During the event the FO was acting as Pilot Non Flying and handling the radio's.

Total flying hours	9500
Flying hours on aircraft type	4000
Flying hours on type during last 3 month	188
Flying hours on type during last 72 hours	15

Table 2: First Officer experience

The crew was well rested before they started their working day. The captain had just had his four day resting period, the co-pilot came back from a transition course. Both crew-members stated they felt healthy, rested and capable for the flight. They arrived on time in Eindhoven and were not hurried for their departure to London Stansted.

Air Traffic Controllers

Both air traffic controllers were recently trained and graduated by the Royal Netherlands Air Force and were qualified and current on their jobs in the control tower. The tower controller graduated half a year ago, the ground controller two years ago. The minimum duty requirement for tower and ground controllers are 175 hours per 12 months.

5 As per "Regeling certificering opleidingsinstellingen en goedkeuring opleidingenplannen luchtverkeersdienst-verlening en luchtvaartterreininformatieverstrekking" (national rules for training and certifying of ATC personnel), competence, paragraph 4.1., currency requirements for ATC personnel.

Date of certificate	21-6-2012
Total duty hours in 2012	1114 hours
Total duty hours per datum occurrence	±1000 hours
Minimum hours required[5]	175 hours per 12 months

Table 3: Experience tower controller

Date of certificate	5-11-2010
Total duty hours in 2012	1026 hours
Total duty hours per datum occurrence	± 850 hours
Minimum hours required	175 hours per 12 months

Table 4: Experience ground controller

The controllers were current and qualified for their jobs. Both controllers stated they were well rested and fit for the job.

Weather

According to the Dutch Weather Office (KNMI) weather report, the weather at Eindhoven during the event was good. The wind at the time was from direction 090 (East) with 7 knots. Visibility was more than 10 kilometres. The local atmospheric pressure (QNH) was 1008 hPa.

Situation

Eindhoven Airport is a joint civil and military airport with a single runway. Ground and air traffic control is provided by personnel of the Royal Netherlands Air force. The airport terminal is situated at the east side of the runway, the taxiway is situated at the north-west side of the runway. Because of the layout of the airport, whenever runway 04 is used for takeoff and landing, aircraft have to cross the runway for taxiing to the departure end of the runway via the parallel taxiway.

Because of maintenance work in progress, the taxiway was partly closed for aviation traffic. Maintenance was done in phases whereby a memo was sent to all airfield users before every change of phase.

On 27 September 2012 Head of Air Traffic Control of the air base sent a memo to Eindhoven Airport (civil) that phase 4 of taxiway maintenance had started. Eindhoven Airport distributed the memo to their customers (Airlines, see appendix B). Attached to the memo were the new taxi procedures for runway 04/22 during phase 4 maintenance. The memo requested Eindhoven Airport Operations Centre to inform all civilian operators of the new phase in maintenance and the taxi procedures to be used. On 1 October 2012 Eindhoven Airport transmitted a message to all civilian users including the memo with the taxi procedures for phase 4. This message was also sent to Flight Operations of the Operator.

Closure of the parallel taxiway was also noted in a NOTAM[6] regarding Work in Progress at the airport as well as in the half hourly ATIS[7] message that incoming crews receive when approaching the

The operator of EI-DLD is one of the regular users of Eindhoven Airport and makes use of the airfield several times a day. In its effort to be aware of any airport changes that may affect its operations, frequent requests are sent to Eindhoven Airport to inform the operator of any works. This information includes, but is not limited, to airport closures, changes in runway length, runway or taxiway closures, downgrading or decommissioning of Instrument Landing Systems (ILS), changes to or removal of navigational aids, approach lights or runway lights, reduction in the level of fire brigade readiness state, reduction in the level of Air Traffic Control capacity , changes to SIDS and/or STARS.

6 A Notice to Airmen (NOTAM or NoTAM) is a notice filed with an aviation authority to alert aircraft pilots of potential hazards along a flight route or at a location that could affect the safety of the flight

7 Automatic Terminal Information Service, or ATIS, is a continuous broadcast of recorded aeronautical information in busier terminal (i.e. airport) areas. ATIS broadcasts contain essential information, such as weather information, which runways are active, available approaches, and any other information required by the pilots,

When asked, the crew stated they were not informed about the content of the memo. According to them, information like this should be included in the pilots' flight information sheet (airfield brief). airport.

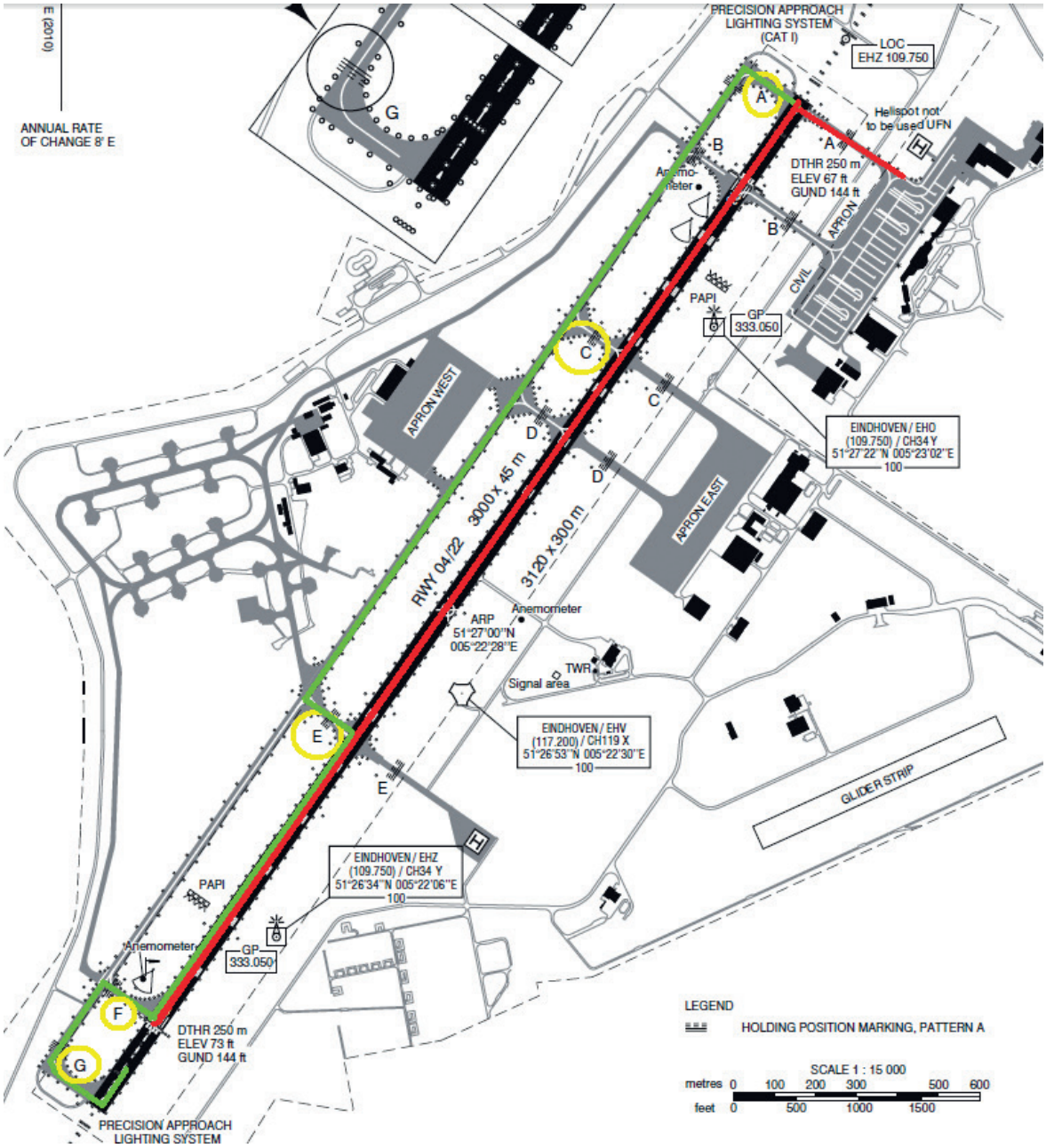
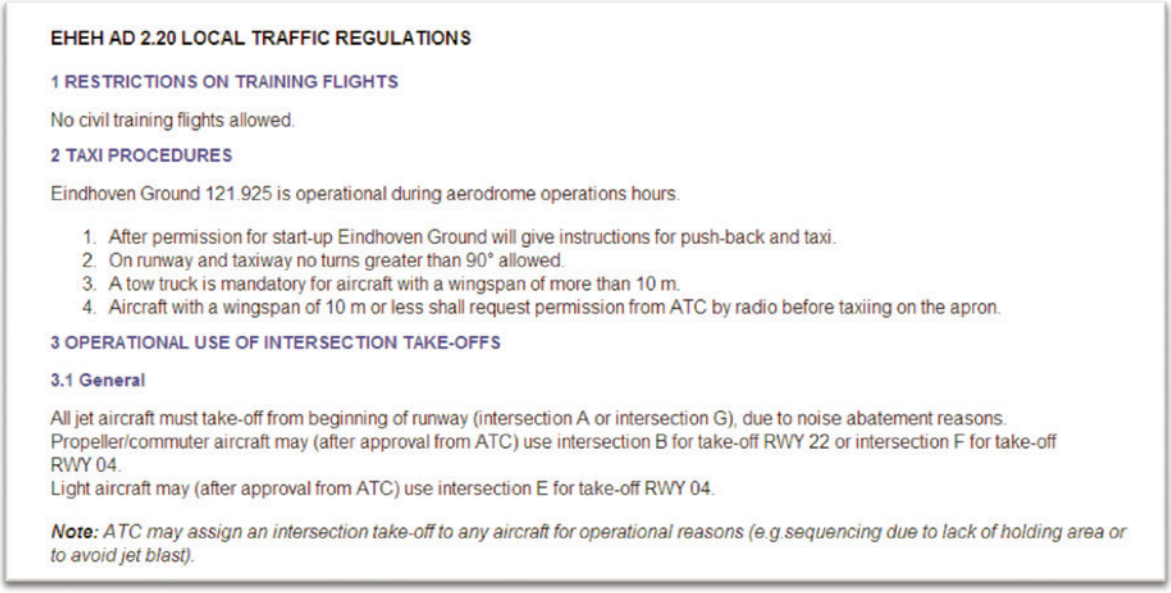


Figure 2: Overview of runway, taxiway and taxi route, standard route in green, followed in red, intersections marked in yellow

Procedures

All flying procedures in the Netherlands are laid down in the Aeronautical Information Publication (AIP) Netherlands. In part 'Aerodromes' of the AIP, a layout and description of procedures of all Dutch aerodromes is put down. Under the Eindhoven tab it is stated that Eindhoven Ground Control is operational during 'operations hours' of the air base. The following further information is given:



EHEH AD 2.20 LOCAL TRAFFIC REGULATIONS

1 RESTRICTIONS ON TRAINING FLIGHTS

No civil training flights allowed.

2 TAXI PROCEDURES

Eindhoven Ground 121.925 is operational during aerodrome operations hours.

1. After permission for start-up Eindhoven Ground will give instructions for push-back and taxi.
2. On runway and taxiway no turns greater than 90° allowed.
3. A tow truck is mandatory for aircraft with a wingspan of more than 10 m.
4. Aircraft with a wingspan of 10 m or less shall request permission from ATC by radio before taxiing on the apron.

3 OPERATIONAL USE OF INTERSECTION TAKE-OFFS

3.1 General

All jet aircraft must take-off from beginning of runway (intersection A or intersection G), due to noise abatement reasons.
Propeller/commuter aircraft may (after approval from ATC) use intersection B for take-off RWY 22 or intersection F for take-off RWY 04.
Light aircraft may (after approval from ATC) use intersection E for take-off RWY 04.

Note: *ATC may assign an intersection take-off to any aircraft for operational reasons (e.g.sequencing due to lack of holding area or to avoid jet blast).*

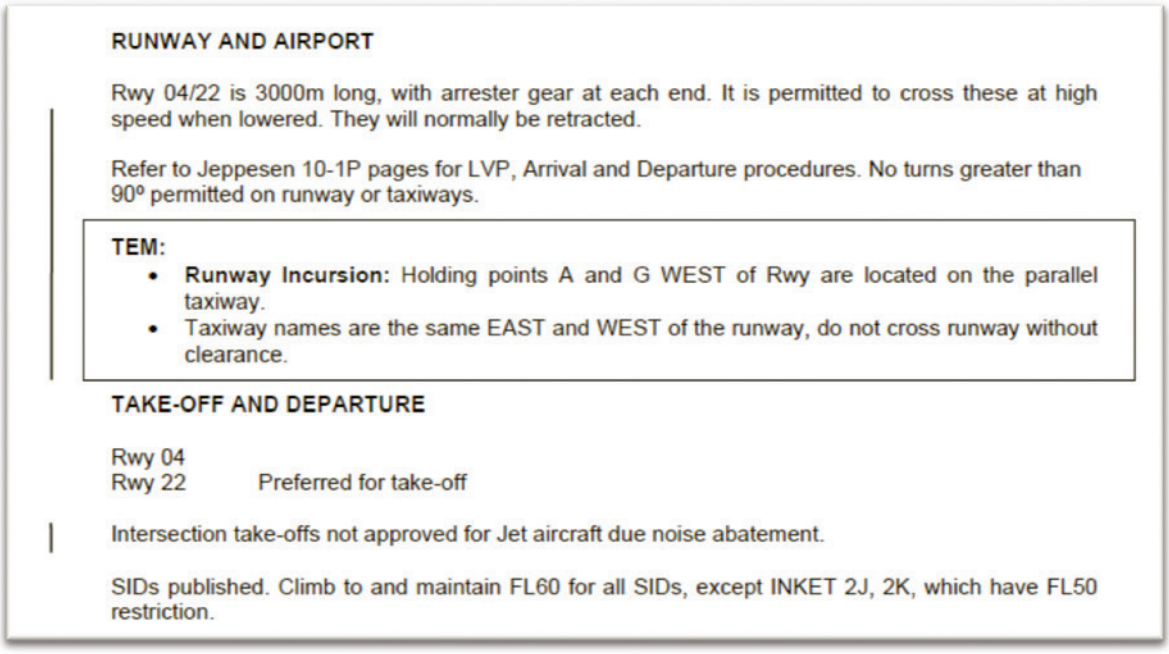
Figure 3: AIP restrictions for Eindhoven Airport

The crew is given an airport information handout (operations manual part C – airfield brief) by the operator before each flight. The information in the airfield brief is gathered by the company and data is mostly based on data from Jeppesen.[8] The above mentioned information laid down in the AIP was partly in the pilots' airfield brief for Eindhoven Airport, but written in small print and not very obvious. Therefore, the crew did not see the information provided and as a result was unaware of the limitations for taxi as written down in the AIP. On several destinations the company flies to, 180 degree turns are common procedure and in some cases part of standard operation.

The part under paragraph 3.1 (figure 3) with the limitation for takeoffs due to noise abatement was not part of the airfield brief, and thus unknown to the pilots. The brief did however state that intersection take-offs always require ATC approval.

During the investigation the company changed their airfield brief for Eindhoven Airport and published it. The restrictions for the airfield are written down more obvious.

8 Jeppesen (also known as Jeppesen Sanderson) is an American company that specializes in navigational information, operations management and optimization solutions, crew and fleet management solutions and flight training products and services. Airlines and private pilots, airline operations centres, military teams, ship operators and boaters, as well as railway companies use Jeppesen charts and data for navigation, operations management tools to plan and optimize flights, missions and voyages, crew and fleet pairing and scheduling and overall to optimize their operations.



RUNWAY AND AIRPORT

Rwy 04/22 is 3000m long, with arrester gear at each end. It is permitted to cross these at high speed when lowered. They will normally be retracted.

Refer to Jeppesen 10-1P pages for LVP, Arrival and Departure procedures. No turns greater than 90º permitted on runway or taxiways.

TEM:

- **Runway Incursion:** Holding points A and G WEST of Rwy are located on the parallel taxiway.
- Taxiway names are the same EAST and WEST of the runway, do not cross runway without clearance.

TAKE-OFF AND DEPARTURE

Rwy 04
Rwy 22 Preferred for take-off

Intersection take-offs not approved for Jet aircraft due noise abatement.

SIDs published. Climb to and maintain FL60 for all SIDs, except INKET 2J, 2K, which have FL50 restriction.

Figure 4: Amended company airfield brief for Eindhoven Airport

ATC and radio procedures for the Royal Netherlands Air Force are written down in the Air Traffic Control Procedures handbook for the Royal Netherlands Air Force (locally known as LVV). Procedures are based upon civilian procedures as guided by the International Civil Aviation Organisation, (ICAO), national regulations and Standard NATO Agreements (STANAGs). It is emphasised in the LVV that procedures should be used as strict as possible, making use of published phraseology as much as practicable. Because this is not always possible, deviation from procedures is sometimes unavoidable, or in some cases wishful. According to the LVV, constant attention should be put to short, clear and correct use of standard phraseology.

Radio communication should be done using the English language. Dutch language may be used as an alternative in case this is required for clarity or safety. During this event the English language was used by all involved.

The term 'cleared (to) . .' is used for various clearances. All clearances using 'cleared to . .' should be read back. '*Cleared to*' is also used for giving permission for takeoff ('*cleared for takeoff*'), however, never in combination with other clearances. When giving permission for crossing or entering of runways, the term 'approved' is used, for leaving runways the term 'vacate' should be used. The term 'take-off' is only used for the actual takeoff, not for departures.[9] For departures the term 'departure' is used.

9 Take-off is basically the part from where power is applied and the take-off run commenced, until reaching a certain height above the runway. From here it's called the climb phase. Adding power with the intention to takeoff signifies the end of the planning phase. A departure is basically the whole operation from off-block until the plane is settled in the enroute climb. Usually, this procedure will have a name if it's a Standard Instrument Departure (SID) and be a part of the Departure Clearance given by ATC before take-off.

Permission to enter an active runway should, according to ICAO and European guidelines[10], be given by Tower Control / Runway Controller of that runway. It is not the responsibility of Ground Control. When the crew taxied in after their flight into Eindhoven Airport, they were under control of Tower Control until the aircraft came to a stop. Normally taxi back is done under Ground Control and the radio is then tuned to Ground Control at start-up. When they started up the aircraft, the radio was still on the Tower Control frequency and the crew had to switch to Ground Control to ask for taxi clearance. This switching between frequencies subconsciously misled them to thinking they were under Tower Control. The fact they were given clearance to backtrack, normally given by Tower Control, added to this feeling.

The AIP states that all jet aircraft must take-off from beginning of the runway (intersection A or intersection G), due to noise abatement reasons. On more than one occasion however takeoffs are performed from F, not only by the company involved, but also by others. Usually, takeoff from this position is allowed by ATC, therefore, it can be expected that crews, and companies, understand that takeoffs from 'Foxtrot' are normal. Furthermore, after the crew received taxi clearance for backtrack to 'Foxtrot', the read back by the crew included the phrase 'for departure . . oke, . . '. This was not corrected by ATC, giving the crew the perception that takeoff could be started from intersection 'Foxtrot'.

Investigation of digital data
For the investigation the Cockpit Voice Recorder (CVR) of the aircraft, and the Voice Logging System (VLS) of the air base were used. CVR data contains all audio and spoken information from the flight deck . It holds information from all used radiofrequencies, both inbound and outbound, as well as the conversations between the crew in the cockpit and from the crew to the cabin. VLS registers all radiofrequencies from the Air Traffic Control Tower, Ground Control, telephone conversations and all spoken conversations between persons in the control tower.

In the first clearance from Eindhoven Ground Control where EI-DLD was instructed to leave the runway at intersection Foxtrot, Eindhoven Ground Control did not use the term 'vacate'. Instead the phrase 'intersection Foxtrot to the right' was used. The intention of the ground controller was that EI-DLD would leave the runway, taxi to 'Golf' according to interim taxi procedures, and then enter the runway again at 'Golf' and perform the takeoff from there. Later, when EI-DLD was in the vicinity of intersection 'Foxtrot', Eindhoven Ground Control states "this one to the right, and for departure contact tower 131.0, good flight, bye bye". Despite the fact that non-standard phraseology is used, no permission was given for the actual takeoff, and the crew had to switch to tower frequency to obtain takeoff clearance from the Tower Control Officer. In the mind of the crew however, they were already on tower frequency, due to the fact that they were taxiing on an active runway. The fact that Ground Control wished them a good flight strengthened their belief.

10 (Appendix A to Eurocontrol Action Plan for the Prevention of Runway Incursions v 2.0, Communications Guidance), and ICAO DOC 4444 – Procedures for Air Navigation Services, Air Traffic Management

Data on the CVR reveals that the last clearance from Eindhoven Ground Control to leave the runway and contact tower for departure, was falsely interpreted by the crew as a clearance for takeoff. The notion of getting a 'good flight bye bye' greeting from the controller may have give the crew the wrong impression. When the captain challenged the first officer in an attempt to confirm the alleged takeoff clearance, the first officer confirmed the takeoff clearance was given. His exact wording, with some hesitation, were: 'we are cleared takeoff, yeah, it's after airborne contact tower in the air, I think that was it'. Despite the words 'I think that was it', there was no trigger to ask Eindhoven Ground Control or Eindhoven Tower for confirmation of the alleged clearance given.

CONCLUSIONS

The intention of ATC was for the aircraft to backtrack the runway and vacate at intersection Foxtrot.

In contrast to ICAO and European guidelines, permission for backtracking the active runway was given by Ground Control, not by Tower Control.

The Ground Controller of Eindhoven ATC made use of non-standard RT phraseology for taxi and for instructions to vacate the runway.

Limitations for airport use that are written down in the AIP were part of the pilots' airfield brief for Eindhoven Airport, but were written in small print, and were therefore not very obvious. These limitations include the mandatory takeoff from the beginning of the runway by jet aircraft, and the restriction on 180 degree turns on runways and taxiways. During the investigation the airfield brief for Eindhoven Airport was changed by the company, making the restrictions more obvious.

The crew were aware of work in progress at the airfield, they were not aware of the content of the memo sent by Eindhoven Airport Authorities to all operators with the details about interim taxi procedures.

Because the crew taxied in under tower control after landing, and were given clearance to backtrack the active runway, the crew were subconsciously under the impression they were under tower control.

The use of non standard phraseology by ATC during taxi, led to some ambiguity, and was misinterpreted by the crew. The crew wrongly interpreted given clearances as having takeoff clearance received.

Despite some uncertainty expressed, the crew did not ask for confirmation from ATC.

The taxiway at Eindhoven Airport is situated parallel and at the far side of the runway, coming from the apron. Taxiing traffic should, according to the rules, switch from ground control to tower control and back when crossing the runway. This causes extra workload and radio traffic for the crew and ATC. It is therefore understandable that traffic crossing the active runway when taxiing stay on Ground Control frequency. However, Dutch Safety Board finds that traffic taxiing over the main runway (backtrack), should be under control of Tower Control, according to procedures.

MEMO REGARDING PHASE 4 IN MAINTENANCE

EindhovenAirport

Memo

Aan	:	Airlines operating at EIN
Van	:	M. van den Bogaard
Datum	:	1 oktober 2012
Betreft	:	Renovation Taxitrack at EIN

Dear all,

I hereby want to inform you that Fase 4 has started this weekend and corresponding taxiprocedures apply.

Fase 4 between intersection Echo and intersection Foxtrot closed

Runway 22 in use
Take-off: Normal procedure trough intersection Alfa or Bravo, be aware of incoming A/C trough Bravo
Landing: Leave runway at intersection Golf. From intersection Foxtrot backtracking runway until intersection Echo. By taxitrack to intersection Bravo or Alfa, cross runway at Alfa or Bravo.

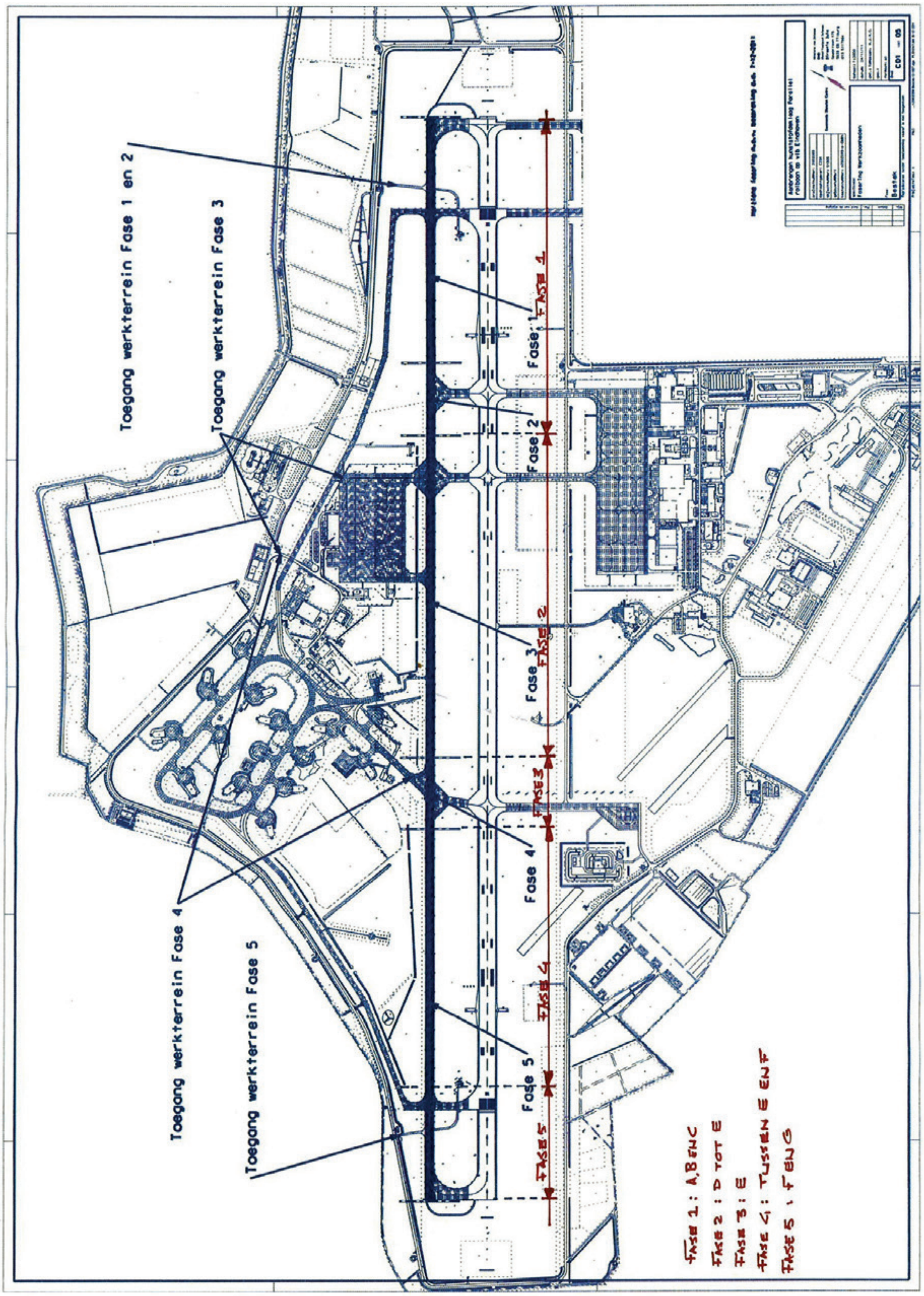
Runway 04 in use
Take-off: Preferred taxi-out trough intersection Bravo, cross the runway and follow taxitrack to intersection Echo. From intersection Echo backtracking to intersection Foxtrot. By taxitrack to intersection Golf.
Landing: Normal procedure, depending on traffic taxi-in trough Alfa or Bravo.

Please be aware of the following:
You need to make a right-angle turn at Foxtrot going to/coming from the taxitrack. Temporary measures are taken to make this possible, but please follow-up instructions from ATC closely.

Fase 4 is expected to be finished in 26 days.

Kind regards,

Mirjam van den Bogaard
Operations Director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Fase 1
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Fase 4
Fase 5
FASE 1
FASE 2
FASE 3
FASE 4
FASE 5
FASE 1: A, B EN C
FASE 2: D TOT E
FASE 3: E
FASE 4: TUSSEN E EN F
FASE 5: F EN G

TRANSCRIPT OF COCKPIT VOICE RECORDER

P1 – Pilot Flying (Captain)
P2 – Pilot NON flying (co-pilot)
ic – intercom
GND – Eindhoven Ground Control
TWR – Eindhoven Tower Control / Runway Controller

P1 ic	flight controls . . . .
	Had this . . . . yeah . . . . before taxi checklist please
P2 ic	before taxi . . . . checklist

Crew performs before taxi checklist

P2	RA 1YG require taxi
GND	Roger 1YR, cleared taxi rwy 04, crossing the runway 22 at A is approved
P1 ic	OK
P2	cleared to taxi, ... rwy 04, and we are also cleared to cross, holding point runway 22 via A, RA 1YG
P2 ic	it's clear right
P1 ic	all right, ... confirm we cleared to cross runway 22
P2 ic	I confirm
GND	OK, 1YG, ATC clearance is available
P2	Standby sir
P2 ic	I'll wait untill ..
P1 ic	yeah yeah
P2 ic	get on it taxi dura . . . . quit a long taxi anyway
P1 ic	OK
P2 ic	right is clear . . . . and strobe is on, it's clear on the approach, sorry on your right
P1 ic	it's clear left
GND	1YG, ehh, correction on your taxi clearance, emm, backtrack runway 04 approved, and eh, intersection F to the right
P1 ic	OK
P2	right, we are cleared to enter, backtrack runway 04, and eh, you say intersection F?
GND	affirm
P2	for departure . . . ., OK, wilco
P2 ic	right. In that case ehh, I guess I can copy clearance
P1 ic	yes please, yeah
P2	RA 1YG is ready to copy clearance then

GND RA 1YG, cleared to destination LONDON STANSTED via RAPSO 2 JULIET departure, and initially FL 060, squawk 7342
P2 cleared to destination LONDON STANSTED on . . . . unclear) departure, initially climb and maintain FL 60 to squawk 7342, RA 1YG
GND RA 1YG, read back correct
P2 ic right .. 7342, 6000 feet, sorry, 60, FL 60
P1 ic FL 60 yeah
P2 ic right . . . .
P1 ic good
P2 ic so . . . . ehm
P1 ic before takeoff checks
P2 ic before takeoff checklist complete
P1 ic checked

Crew performs pre takeoff checks and checks initial enroute information

P1 ic did we do performance from F . . . .
P2 ic we did
P1 ic we did eh, we did, thanks, grand
P2 ic allright, ehm, below the line
P1 ic yeah
P2 ic MCP
P1 ic 1-2, weather radar on my side, terrain on your side, set
P2 ic transponder
P1 ic TA / RA
P2 ic landing lights
P1 ic are on
P2 ic+ . . . . crew takeoff seats for departure please . . . .
P2 ic OK, crew are seated, just eh, yeah
P1 ic so this is eh . .
P2 ic this is E
P1 ic this is E eh, isn't it, so I am carrying on . . . . . (humming)
P1 ic I can see the arrester wires . . . . . .(humming)
P1 ic . . . . so this is F . . . . is F
P2 ic . . . . , this is Fox .
P1 ic yeah, this one with the piano keys on
P2 ic yes, it is F
P1 ic yeah it is, OK . . . . just make sure (laughing)
P2 ic you're absolutely right
GND 1YG, this one to right, and for departure contact tower, 131.0, good flight, bye bye
P2 121.0, thank you for your help sir, RA 1YG
P1 ic and . . the retracts . . . . we are clear takeoff, aren't we ?
P2 ic we are cleared takeoff yeah . . . . it's after airborne contact tower in the air . . . I think that was it
P2 ic OK, retracts and checks complete, we're cleared takeoff
P1 ic OK
P2 ic and eh,

Crew takes off
Other traffic checks in on GND frequency, crew proceeds with takeoff . . . .
One minute later tower comes on frequency 131.0

TWR	RA 1YG, Eindhoven tower
P2	RA 1YG, go ahead
TWR	yeah, sir, you didn't check in with me, you depart without a clearance, and GND also ordered you to vacate F to the right to depart via intersection G
P2	ehm, I'm not s..
TWR	You didn't get my takeoff clearance, so you depart without the clearance, and you didn't even check in with me
P2	my understanding it's eh . . GND cleared us for takeoff and to contact you after departure
TWR	negative sir, you were on the frequency of GND control, and he ordered you to switch to the tower frequency, but, GND control is not allowed to give a takeoff clearance
P1	1YG, that's copied, apologies, we'll file a report when we arrive
TWR	Roger, and for your information, we will also have to make a report of this, because you departed without a clearance, and eh, you were also ordered to vacate F to the right to start from the beginning of runway 04 sir
P1	yeah, it was a sort of confusing taxi clearance, eh, he said at F, eh, didn't note to say vacate at F, but eh, ok, apologies again, like I said, again, we will file a report
TWR	Roger sir, now continue with Dutch Mill 128350
P2	128350, RA 1YG
TWR	bye, bye

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