Trainingsmanual Airside Driving (ABSAL2)

Developed by: Robert Jense

Reviewed by: Mark Remmel

Approved by: Wil Berghmans

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Contents

1. Aim of this module

The aim of this module is to provide drivers of vehicles on the platforms and perimeter roads with training that gives them knowledge of the terrain and the applicable rules

1.1   Training and Authorization

Within MAA there are two driving authorization categories, Airside driving (ABSAL2) en Driving Manoeuvring Area (ABSAL1). Both categories have a theoretical and practical part.

- **Airside driving (ABSAL2)**

Airside driving is the authorization which drivers, who have an airport pass, require in order to drive autonomously a vehicle on the aprons and perimeter roads (airside) at Maastricht Aachen Airport.

- **Driving Manoeuvring Area (ABSAL1)**

Driving Manoeuvring area is the authorization which drivers require in order to drive autonomously in the manoeuvring area.

1.2   Prerequisites and validity

At MAA rules apply as laid down in the MAA Airport Regulations. Before following this training, you must familiarize yourself with the contents of these regulations.

A theory and practical exam is taken for the Airside driving license (ABSAL2).
All exams are conducted by or on behalf of Airport Operations.
The result of the exam / proficiency check will be stored at least during its validity.

The proficiency check takes place on the basis of the driving license category assigned to the candidate. To increase the driving license category, for example the Manoeuvring area category, the complete training for the relevant driving license category must always be followed.

If the candidate fails the exam/proficiency check, there is a possibility for a resit according to the schedule below:

Fail for	Authorisation for
Proficiency check	*First Retake*
First Retake	*Second Retake*
Second Retake	*Driving permit revoked; re-apply for driving permit (*) (full training course)*

NOTE: There is at least 24 hours between failing and a resit.

The module includes the requirements for Airside Driving License (ABSAL2):

- With this training programme, MAA meets the requirements set by EASA (European Aviation Safety Agency).

- To qualify for the "Driving Airside", possession of a valid driving license category B is a requirement. The airport determines who is eligible for this driving licence.

- Following this training program is only possible if one is in possession of an MAA airport pass.

- Third parties are required to submit a Human factor certificate.

The Airside driving license training (ABSAL2) and the required 2-yearly proficiency check can be requested from Airport Operations.

Contact details Airport Operations: Phone: 043-3589750
                                             E-mail: airportauthority@maa.nl

Validity

The driving license expires automatically when:

- your airport pass expires;
- your national driving license expires (category B);
- you do not conduct a proficiency check in time;
- you fail the second resit of the proficiency check.

Airport Operations also monitors order and safety and can take enforcement action on the basis of the provisions of the MAA Airport Regulations and can revoke the driving licence. Depending on the violation committed, sanctions may be imposed, laid down in the sanctioning regulations.

1.3   Documentation

Documentation to be consulted:

- Pocket book Safety & Security
- Aerodrome manual
- MAA Airport regulations

2. Responsibilities driver

2.1 Before entering airside

Your authorization
On airside you are only at locations for which you are authorized according to the driving license category assigned to you. Wearing high-visibility clothing on airside is mandatory (MAA Airport Regulations Art.5 Paragraph 5).

Your physical condition
When driving on airside, you may not be under the influence of alcohol or medication that could affect your driving skills. You should also ensure that you are not overtired, so that you can safely perform your task. It is also not allowed to smoke on airside. Consult the provisions of the airport regulations for this.

Vehicle check
Before you enter the airside with your vehicle, the following must be checked:
• sufficient fuel stock or sufficient charge of electric vehicle;
• check whether there are loose items in the cabin that could distract your attention while driving;
• there are no oil leaks or other defects on the vehicle;
• the vehicle must be suitable for the intended purpose.

Checking in and out at the security company
If you are arriving with a vehicle from outside the aerodrome, you must physically report to the security company and explain your intended activities. Before you enter the aerodrome, the vehicle will be subject to a vehicle check. You always sign out with the security company when you leave the Aerodrome.

2.2 Vehicle movements

Your driving style
As a driver on airside, you should disturb the traffic image of the tower controller and pilots as little as possible. Make sure that your driving behaviour is not a reason for a pilot to keep an extra eye on your movements. Rules for driving on the terrain are explained in more detail in Chapter 4.
Drive calmly, do not make unexpected manoeuvres, keep an appropriate distance from other traffic and anticipate the long braking distances of vehicles with a large mass.

Your working environment
Do not be distracted by any passengers on airside and do not use telephones while driving.

Logistic transports
Logistic transports on the airport grounds are only permitted:
• after prior permission from Airport Operations and
• accompanied by an Airport Operations employee or the security company.

For some transports, for example planned construction traffic, permission may already have been given on behalf of Airport Operations during a preparatory phase.

Escorts
Escort by an Airport Operations employee, in possession of the correct driving license category, is necessary for the movements of:
• drivers who do not meet the requirements;
• logistical transports;
• other mobile objects.

FOD
The meaning of the term FOD is Foreign Object Debris: all objects that do not belong in the landing area, such as plastic, packaging materials, tools, etc.

Due to the great risk associated with FOD, in particular when it comes to sucking up this waste by aircraft engines and possible breakdowns, every field officer must be alert to FOD risks and take appropriate measures in case of detection. This can be done by securing (cleaning up) the FOD or, if not possible, immediately informing Airport Operations.

Infrastructure malfunctions
Malfunctions of airport infrastructure must be reported to Airport Operations.

Irregularities
If you observe irregularities of any kind on airside, you must immediately report this to Airport Operations.

3. Vehicle requirements

3.1   Vehicle inspection

Vehicles entering the aerodrome must comply with:

• the national inspection requirements (for example, the National Road Traffic Agency (RDW) applies to the Netherlands);
• vehicles are provided with markings prescribed by the Operator;
• provided with company logo in accordance with the MAA Airport Regulations;
• be in good technical condition;

3.2   Vehicle check

As described in chapter 2, a vehicle check must be carried out in which attention must be paid to all points. If a vehicle does not meet the requirements, access to the aerodrome is not allowed.

4. MAA terminology and rules

4.1   Terminology

Aerodrome
The Maastricht Aerodrome, as determined in the Instructions, is located within the boundaries of which are indicated on a map, see Airport Regulations. (The area designated for the take-off and landing of aircraft.)

Airside
The portion of the aerodrome used for landing, take-off, taxiing, towing, parking and handling aircraft, including peripheral and service roads and unpaved areas.

Landing area
The landing area is the part of the aerodrome used for take-off, landing and taxiing of aircraft, including unpaved areas, excluding the aprons, service and perimeter roads.
Movement area
The so-called movement area is the area over which aircraft can move for take-off, landing and taxiing, including the aprons. In other words, manoeuvring area plus platforms.

Manoeuvring Area
The so-called manoeuvring area is the area over which aircraft can move for take-off, landing and taxiing, excluding the aprons. This boundary, where the manoeuvring area begins, is indicated by a 60 cm wide clearance line on the pavement (platforms). The red area schematically indicates the manoeuvring area.

Platform (Apron)
The paved area on airside with the exception of the landing area and perimeter and service roads. The place where planes are parked, unloaded, loaded and refueled and where passengers board.

Aircraft Stand (VOP)
A marked area on the apron intended for parking an aircraft.

Runway incursions
The landing area is an area where there is a high risk of damage, especially around runways. A runway incursion on a runway can have catastrophic consequences.

A runway incursion is defined according to ICAO as follows:
'Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.'

Maastricht Aachen Airport (MAA) pursues an active policy in collaboration with Air Traffic Control the Netherlands (LVNL) to prevent runway incursions.

4.2   General rules

- Always put your vehicle on the hand and/or parking brake when you get out.
- Never park, clean or repair vehicles outside designated areas.
- Turn off your engine when you get out or leave the vehicle unattended for several minutes or more. An exception applies to handling equipment that serves to supply parked aircraft with energy or air.
- Make sure that no objects fall off your vehicle or that it loses oil, fuel or other fluids.
- You are not allowed to drive tow or pushback vehicles without a towing permit.
- During Limited Visibility Operations (BZO) free movement on the service roads is permitted, reduce your speed if necessary.
- Take a good look around you when reversing and do not make any unexpected movements.
- Always stay on the paved areas.

4.3   Safe driving on airside

Maximum speed
The maximum speed on the perimeter roads of the aerodrome is 30 km/h.
A maximum speed of 15 km/h applies on the platforms.
Furthermore, in the vicinity of aircraft/Ground Service Equipment (GSE)/passengers on the aprons, people must drive at a walking pace.

The wide red clearance line
A continuous red line of 60cm wide is present on the border between platforms and manoeuvring area.
You may never cross this line with only the driving authorization ABSAL2.
This wide red clearance line indicates:

- seen from the platforms: the limit up to which drivers with driving authorization ABSAL2 are allowed to be;
- viewed from the landing area: the border of the area that falls under the control of LVNL.

The taxiways and the runway form the heart of the airport. The LVNL air traffic controllers are located in the control tower on MAA (call sign: "Toren"). Departing, landing and taxiing air traffic is coordinated from this location and the manoeuvring area is monitored. However, the manoeuvring area may not be entered without special training, radio communication and permission. It is therefore not allowed to cross the 60cm wide red clearance line!

Priority rules on airside
1. Departing or landing aircraft.
2. Emergency services vehicles with flashing lights and sirens.
3. Taxiing aircraft, including any accompanying vehicles.
4. Passengers escorted to and from aircraft on foot.
5. Towed aircraft
6. Other vehicles

Jet blast / Propwash & Pushback procedure
Be alert to the potentially strong airflow from (jet) engines (jet blast or propwash), especially when an aircraft is taxiing away from a standstill. The strength of the jet blast/propwash depends on various factors and is difficult to predict, so always keep a sufficient distance.

It is not allowed to cross an aircraft from behind (on the perimeter roads) if it has its red anti-collision light on. It is mandatory to stop at the stop lines indicated on the service roads/platforms.

Marshalling
During parking, a Marshaller indicates how the aircraft should move, so that the aircraft is safely parked in the correct position at the aircraft stand (VOP). This person is therefore important. Therefore, never obstruct the view between the Marshaller and the aircraft or pilot.
It is not permitted to enter an aircraft stand without a valid reason. It is also prohibited to park unnecessary equipment, vehicles or other objects on the aircraft stand.

Dangers during refuelling of aircraft

If an aircraft is being refuelled, always make sure that you never block it. A tanker must always be able to drive away from the aircraft freely. Also take into account the turning radius of the tankers and the width of the tankers if you encounter them on the platforms or perimeter roads.

Driving in the dark

Make sure that your vehicle's lighting works sufficiently according to legal requirements and use this lighting during darkness or poor visibility. Adjust your speed on the platforms and perimeter roads, especially in the vicinity of the VOP and with oncoming traffic.

Use of new service road between platform B and C

A new service road has been constructed between the B and C platforms that runs outside the safety area of the runway. Only use this new service road, the old one has been closed off and may no longer be used.

ADSB transponder

If your vehicle is equipped with an ADSB transponder, you are obliged to activate it before entering airside. The Airport Operations department can use the AGMDS system to check whether users adhere to the paved surfaces intended for them.

5. Infrastructure Inside the Landing Terrain

## 5.1 Infrastructure: Runway System

Runway System

Maastricht Aachen Airport has one runway for take-off and landing. The runway numbers are derived from their orientation relative to magnetic north (the orientation is the direction you are looking when you line up at the start of the runway facing take-off or landing).

The 360 compass rose is used, with 090 pointing clockwise to the east, 180 to the south, 270 to the west, and 360 to the north. To determine the runway number, first a rounding takes place to tens, then the last digit is dropped, for example:

Runway 03:   location on compass rose 032; rounded down: 030;
               the last digit is omitted: runway 03.

Runway 21:   location on compass rose 212; rounded down:210;
               the last digit is omitted: lane 21.

The intersections and taxiways that connect to the runway have a unique letter.

Taxibaan benamingen
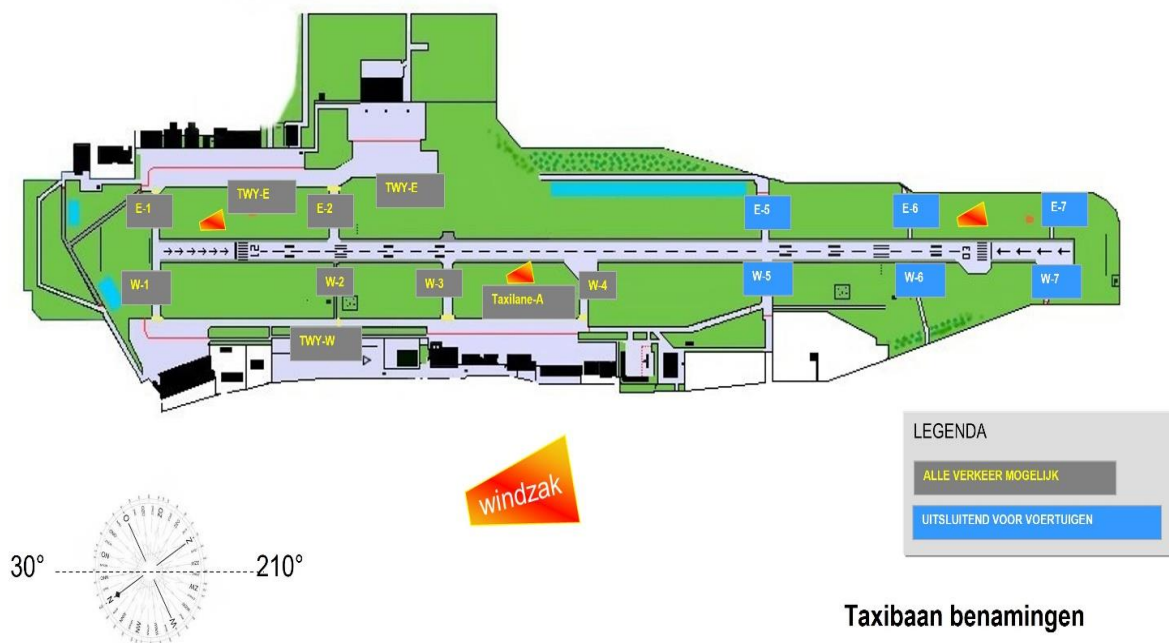
Runway Number Pronunciation

The runway numbers are pronounced as follows; always starting with the lowest runway number.

Runway	Pronunciation
03-21	'zero three two one'

90 meter area

The 90 meter area includes the area parallel to the runway, extending to:
• 90 meters from the track axis on both sides of the track;
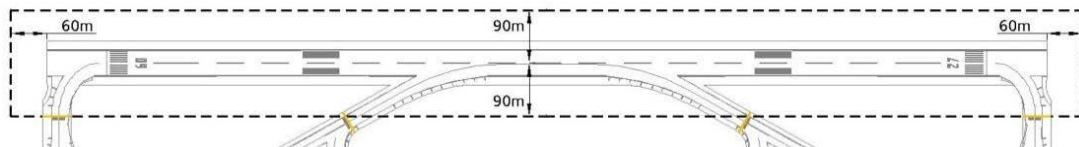• 60 meters before the hardening of both runway ends.

Figure: Demarcation of the 90-metre zone.

The 90 meter area is the area that serves to protect a runway, an obstacle limitation area [1], the ILS CAT1 critical/sensitive area [2], for which taxiing aircraft and vehicles must stop unless clearance is obtained from the tower.

[1] An obstacle limit plane is a spatial plane within which height restrictions apply.
[2] See "ILS: critical area" and "ILS: sensitive area" in this chapter.

The boundary of the 90 meter area is indicated along service roads and, at a large distance from each other in unpaved terrain, by the following signs:

The areas above may never be autonomously accessed by employees with a driving permit Airside (ABSAL2)

Unpaved areas

The authorized driver prevents damage to the unpaved areas in the form of tire tracks and potholes by not cutting corners and driving routes.
The consequences of damage to unpaved areas include the attraction of birds due to puddles forming in the pits created.
This negatively affects one of the objectives of fauna management, keeping the landing area unfriendly to birds, and therefore also flight safety. Moreover, repair work involves high costs.

ILS

The antennas of the ILS (Instrument Landing System) are located in the unpaved area around runway 03-21: the localizer and glidepath antenna.

The ILS antennas transmit a signal to correctly guide the aircraft to the runway. To prevent disturbances of the ILS signals, critical and sensitive areas have been established within which restrictions for vehicle movements apply. However, these do not apply to the driving permit Airside (ABSAL2).

6.   Specific Airside Locations

Test Run Area
The test run area is a paved location next to the materials shed where aircraft engines can be tested at maximum capacity.

If an aircraft is parked for the purpose of testing the engines, it is not permitted to be on the test run site, unless you:

• are involved in the test run process;
• are performing supervisory duties.

Airport Operations is in contact with crew inside the aircraft.

C-platform
The perimeter roads form the connection between the various aprons. Basically all of airside is SRA-CP protected area, the exceptions being the Charlie Platform, and the Alfa South Platform these are Demarcated Area. The Charlie platform is equipped with a traffic light to regulate access. Always wait for the red traffic light before proceeding and entering the platform. Then there are 2 options:

1   Crossing the area without leaving the vehicle. As soon as you have passed the next traffic light and have therefore left Apron C (also indicated with a red dotted line on the ground), this restriction will be lifted.
2   Perform work within this area. As soon as you have finished your work and want to leave Apron C again, please contact security (043-3589974). They will then send a security guard and check you and your vehicle, after which you can continue.

On the service roads of the Charlie apron, as everywhere at the airport, a speed limit of 30 km/h applies, with the exception of the part of the service road that is located in front of the SAMCO hangar. This is also indicated by a traffic sign with the maximum speed on it. Furthermore, the 15 km/h and walking pace regulations apply on the platform, as described in the general rules (Chapter 4).

7. Specific Airside Situations

7.1   Specific Airside Situations

Alarms

For aviation-related incidents and calamities, various forms of alarm can be issued by Airport Operations.

Emergency services for source control must be on site quickly and not be hindered by other vehicles on airside.

Disorientation

If you become disoriented while on the aerodrome:
• if possible position yourself in such a way that you do not pose a danger to other traffic;
• ask Airport Operations for assistance.

Broken down vehicle

If your vehicle breaks down while you are at the aerodrome:
• if possible, position your vehicle in such a way that it does not pose a danger to other traffic;
• inform Airport Operations and discuss next steps.
• In the event of an emergency situation (fire, dangerous situation, etc.), please contact Airport Operations immediately.

Accidents

In the event of an unexpected situation, such as:
• Accident (with another vehicle);
• Accident/collision with aircraft and vehicle;
• fire;
• Airplane accident;
• Personal accident;

Always ensure your personal safety first and then immediately contact Airport Operations. They will take action and possibly direct the emergency services

8. Background Information

8.1   Airside Entrance Gates

Airside entrance gates

The airside entrance gates can be found on the map of the terrain layout of Maastricht Aachen Airport. The table below shows a number of specific fences in the landing area:

Gate Number	Note
1	Main gate
2	Underground fresh water storage Service gate
3	Emergency gate -Ambulance
4	Service gate
5	Service gate
5A	Service gate
6	Service gate
6A	Gate next to Cargo East
7	Service gate
8	Service gate
9	Service gate
10	Access for LVNL TD, LOC 21
11	Service gate
12	Service gate
13	Emergency gate – Fire brigade
14	Service gate for materials shed
14A	Service gate GAM hangar
15	Aircraft Fuel Delivery

Opening and Closing Gates

The security company is responsible for opening and closing the gates.

9. Appendices

9.1 Infrastructure (Pavement) for Aircraft Manoeuvring

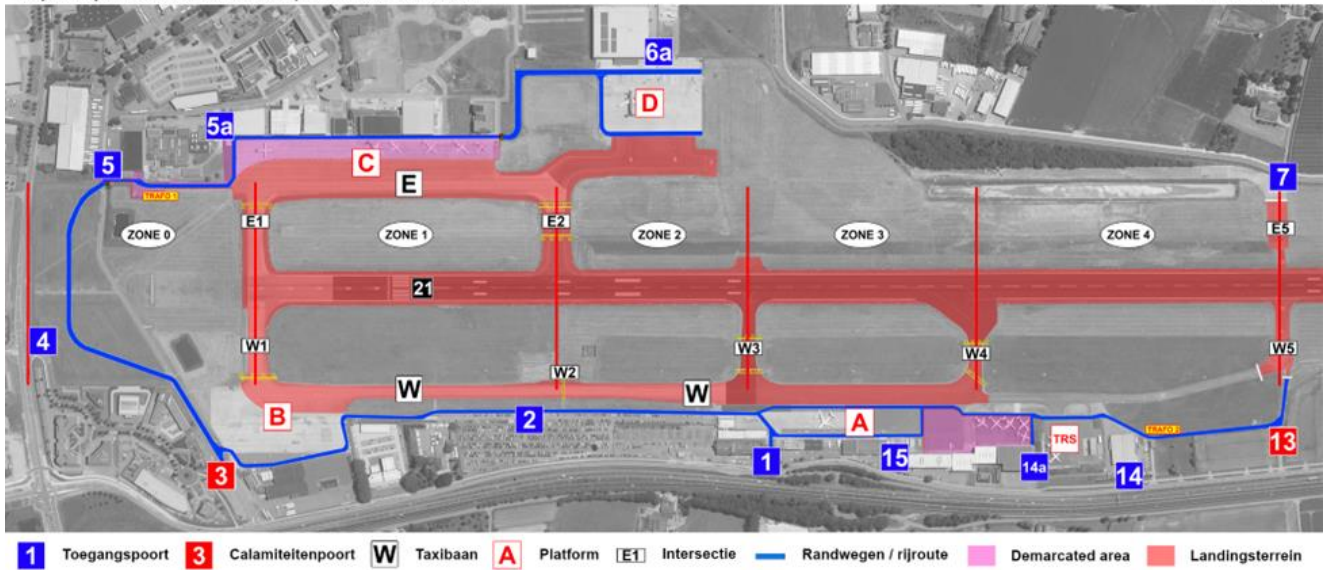| Term	Definition
Airside	The area of the aerodrome used for landing, take-off, taxiing, towing, parking and handling of aircraft, including perimeter and service roads and unpaved areas.
Movement area	The movement area is the part of the aerodrome used for take-off, landing and taxiing of aircraft, including unpaved areas, excluding aprons, service and perimeter roads.
Runway	The part of the pavement that is used for the take-off and landing of aircraft. A runway is part of the 90 -150 meter area.
Taxiway	The part of the pavement used for taxiing to and from the runway and to and from the aprons.
Instrument runway	Runway equipped with an ILS (Instrument Landing System) and therefore suitable for landings in poor visibility conditions (e.g. during LVO).
Apron	That part of the airport that is intended for the parking and handling of aircraft. On MAA, the aprons are separated from the taxiways by the 60 centimetre wide red clearance line.
Perimeter road	Road on airside, located along the aprons, taxiways and runway.
Runway holding point	A designated position intended to protect a runway, obstacle mitigation surface or ILS/MLS critical/sensitive area where taxiing aircraft and vehicles must hold, unless otherwise instructed by the aerodrome control tower.

9.2   Infrastructure (Pavement) for Vehicle Manoeuvring

Plattegrond Rijbevoegdheid (ABSAL2)

> Nooit een rode klaringslijn kruisen zonder toestemming van Airport Operations
> Bij enige twijfel wachten en contact opnemen met Airport Operations
> Maximum snelheid op randwegen is 30 km/u, op platformen 15 km/u

Airport Operations: 043-3589750 | NOOD: 043-3589900

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9.3 Low Visibility Conditions

Term	Definition
LVC *'Low Visibility Conditions'*	Procedures that take effect whenever horizontal visibility measured in runway visual range (RVR) metres is below 2,000 metres and/or the cloud base is lower than 300 feet. • LVC is divided into four phases: A, B, C and D. • During LVC, access to the landing terrain is restricted. *See BHB 1.5.6.1.*
Active Control	For traffic under *active control*, route clearance is granted by the tower; this means permission to move through the runway system to a specific location following a route specified by the tower. The driver must always initiate the process of obtaining *active control*.
Passive Control	The way in which drivers separate themselves from other traffic in the landing terrain when no active control is required.
Closed Work Zone	Work zone that is closed off by means of operational barricades; e.g. folding signs.
Isolated Work Zone	Work zone that is closed off from the landing terrain by means of a continuous fence.