Ground

Stuttgart Ground is responsible for all ground movements at the airport (including pushback).

Parking positions

Stands are automatically assigned according to airline and aircraft type. Cargo and US military aircraft (other military aircraft park at an appropriate stand in the North, usually at the GAT if they are small enough) are parked in the Southern part of the airport.

Stands 40 - 56 are **taxi out positions**, so no pushback is required. Stands **61 - 64** are **available for taxi out if the opposite stand is not occupied**. If necessary, aircraft may taxi through stands 40 - 56. Only stands 9 - 16 have jetways.

Relocated stands

During construction works, stands 40 - 48 were relocated. This means that, depending on their scenery, **pilots might take the wrong stand**. The automatic stand assignment is based on the current real world layout.

Pushback

Distance between simultaneous pushbacks

At least two stands have to be between two simultaneously pushing aircraft. This can be reduced to one or even no stand by issuing special pushback instructions. The following example will explains these special pushback instructions.
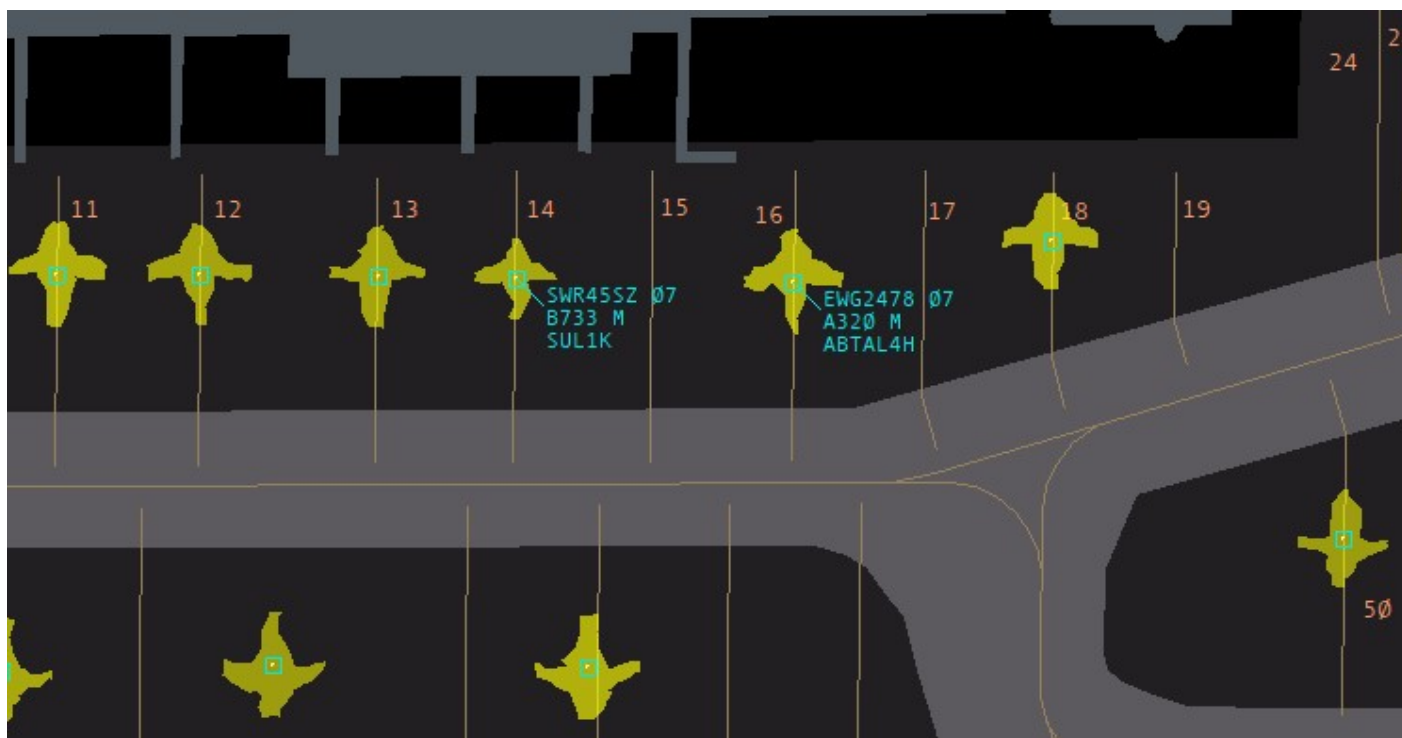
SWR45SZ and EWG2478 have both requested pushback but there is only one stand between them

Assuming both aircraft shall push back facing east, the following pushback instructions will allow for simultaneous pushback.

if SWR45SZ pushes first	SWR45SZ is instructed to make a long pushback once SWR45SZ is aligned with the taxiway, EWG2478 is instructed to make a normal pushback
if EWG2478 pushes first	EWG2478 is instructed to make a short pushback once EWG2478 has finished pushing back, SWR45SZ is instructed to make a normal pushback

If there is no stand between the two aircraft, a simultaneous pushback is **only possible with the scenario in which SWR45SZ pushes first**; EWG2478 then has to also make a short pushback.

Orange line

The orange line at stands 71-75 allows pushback of aircraft with a **maximum wingspan of 36m** to allow simultaneous taxi operations of aircraft with a maximum wingspan of 36m on N. For pushbacks on this orange line, there are **mandatory pushback directions** according to the table below (pushbacks onto N can still face both directions).

- **71 and 72:** facing west
- **73:** facing west or east
- **74 and 75:** facing east

When stands 71A or 74A are occupied, the orange line is not available for pushbacks. Additionally, orange line pushbacks are **not available for stands 71A and 74A**.

Taxi

Taxiway N is always used opposite to the direction of the active runway. In 25 configuration, N is therefore used for departing traffic, in 07 configuration for arriving traffic. Taxiway S is always used opposite to N.

General Aviation aircraft are usually sent to intersection C (25 operations) or G (07 operations).

Vacating Traffic

Tower will give the initial turn onto N or S after vacating according to the current standard taxi direction. The handoff will take place thereafter.

Runway Crossing

Runway crossings can only be conducted between K and Y. Traffic can either be sent to Tower for the crossing or remain on Ground frequency, depending on the traffic situation (during high traffic, it may be easier to send the aircraft to Tower for a more efficient crossing).

If the aircraft remains on Ground frequency, **Tower has to release the crossing** and Ground has to inform Tower once the runway is clear again. The following communication helps to keep Tower informed on the status of the crossing.

> *Traffic is cleared to cross:*
> **Ground (to Tower):** Crossing in progress.
>
> *Traffic is clear of the runway:*
> **Ground (to Tower):** Crossing complete.

Taxiway Z

Taxiway Z west of taxiway Y **should only be used for military aircraft**. Depending on the amount of traffic, deviations are possible. The **extended centerline** may only be crossed on Z under the following circumstances:

| 07 operations	crossings always have to be released by Tower
25 operations (CAT I)	**aircraft < 14m height** (*all Light and Medium aircraft*): Tower informed about crossing **aircraft ≥ 14m height**: crossing released by Tower
25 operations (LVP)	**aircraft < 6m height** (*most smaller business jets*): Tower informed about crossing **aircraft ≥ 6m height**: crossing released by Tower

Code F Aircraft

Due to wingspan restrictions on most parts of the Northern apron, **special taxi procedures are necessary for code F aircraft**.

During **07 operations**, outbound traffic can simply depart via intersection K or Y, but inbound traffic requires a **special routing via S**. Due to wingspan restrictions on other exits, these aircraft will have to vacate via B or A. They can't turn immediately onto S from those intersections, but instead need to first taxi via N and then switch to S at D.
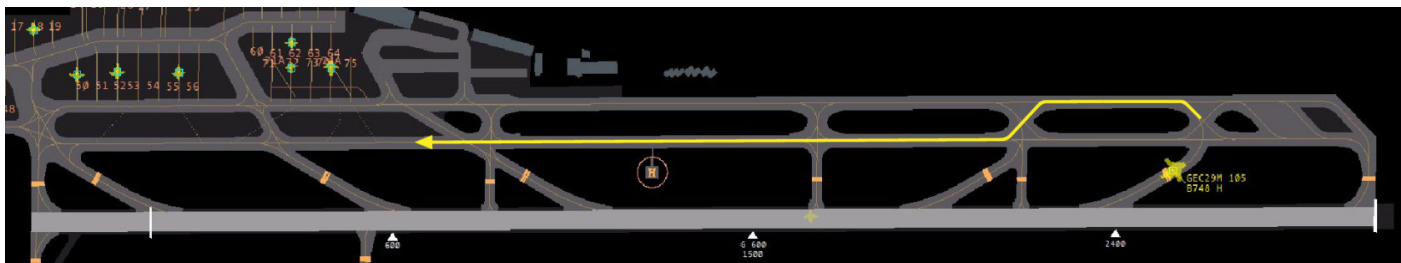
During **25 operations**, outbound traffic has to **taxi via S, opposite to the standard direction** and switch to N at D. This means that inbound traffic can't be sent left onto S by Tower - there are multiple possible solutions to this, but the easiest one is for the Tower controller to hand off inbounds holding short of S if there could be a conflict.
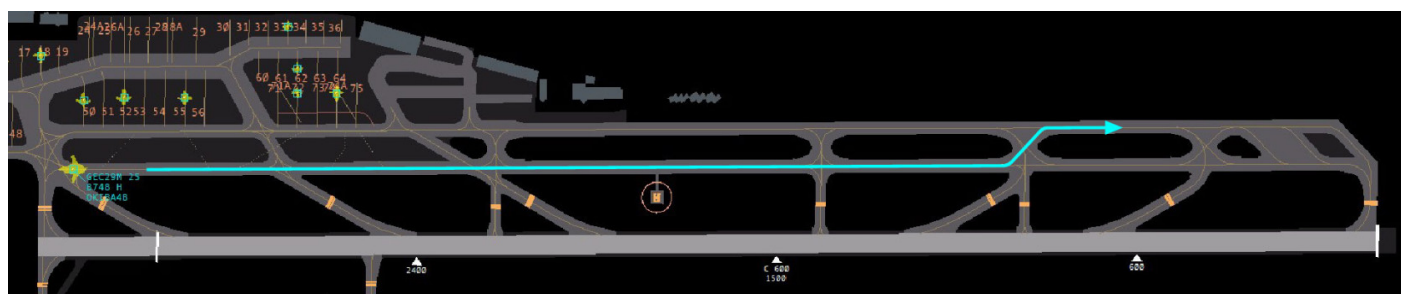
The **handling of an inbound code F aircraft during 25 operations depends on the current traffic**. During periods of low traffic, the aircraft can be allowed to vacate the runway via Y, but during periods of high traffic it might make more sense to instruct the aircraft to vacate to the right via F or H and later cross the runway at K.

Code F aircraft can be parked on the Northern apron despite the wingspan restrictions. The available parking positions on the Northern apron for these aircraft types are **71A and 74A**. Inbound aircraft have to taxi into the stand directly from S while outbound aircraft have to be pushed onto S.

Cargo Traffic

Cargo traffic should primary taxi to the cargo positions via Y. **Inbounds from runway 25** can vacate via W (depending on wingspan) or Y, while **inbounds from runway 07** need to taxi via N or S and K to cross runway 07. During **high traffic 07 operations**, a crossing on Z might be more efficient.

Ground Movement Strategies

While the **best strategy always depends on the individual situation**, the following paragraphs give an overview over the most useful strategies which are also regularly used in the real world.

Roundabout

During **07 operations**, inbound traffic usually switches from N to M via H, so that L2 and L3 can be used for outbound traffic. Whether traffic pushing back from stands 9-19 should push back facing east- or westbound depends highly on the traffic situation. However, during high traffic situations it **usually makes more sense make all pushbacks facing west** to keep all traffic on M moving in the same direction.
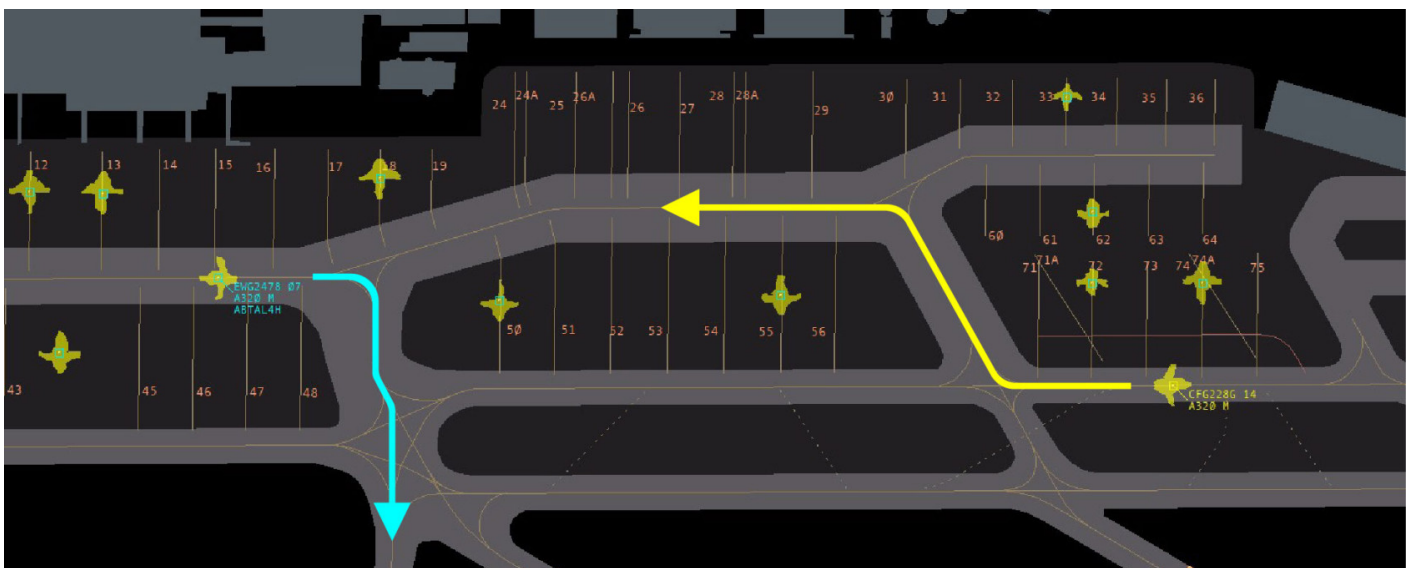
CFG228G (inbound for stand 14) is instructed to taxi via H and M, while EWG2478 (outbound from stand 16) taxis via L2 and K

As the **apron can get crowded really quickly during 07 operations**, it can make sense to move outbounds from the Northern apron to the holding point via Z and Y. Keep in mind that crossings on Z always need a release from Tower during 07 operations!

During **25 operations**, outbound traffic often switches from M to N via H so that L2 and L3 can be used for inbounds. If there is a lot of outbound traffic, it **might make sense to also use L2 for outbounds**; keep in mind that you will then have to merge the traffic streams again at H, though.

Outbound Sequencing at K

During high outbound traffic situations with 07 operations, it is **good practice to only send aircraft through to the holding point once they have reported ready for departure**. A good strategy for ensuring this is to **instruct aircraft to hold short of K** (if coming from O, N, or S) **or of N** (if coming from L2). Then, once a pilot has reported ready, they are instructed to continue to the holding point and to contact Tower.

> **ATC**: EZY47RJ, taxi via N, hold short of K, report ready for departure.
> **Pilot**: Taxi via N, hold short of K, wilco, EZY47RJ.
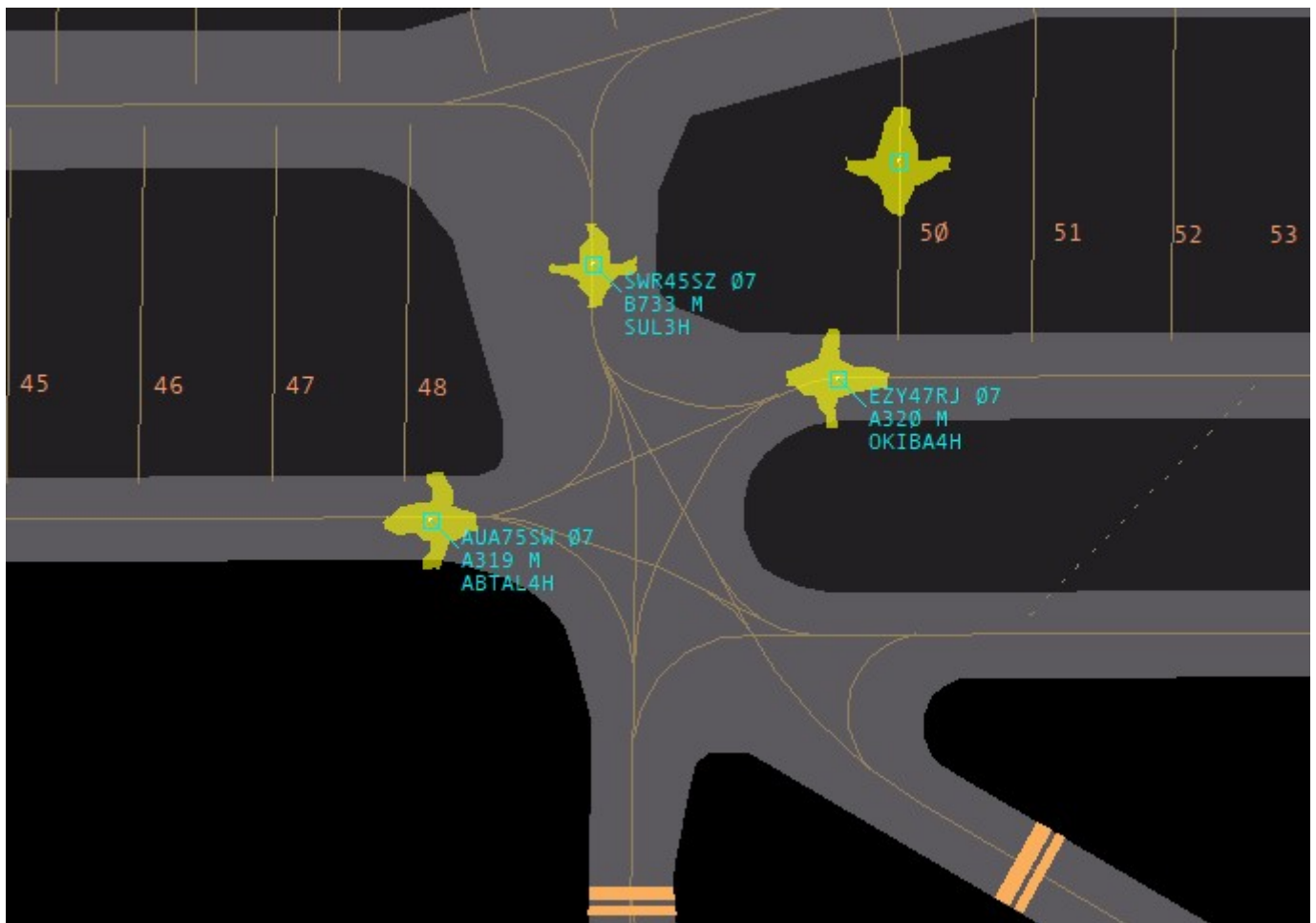
three aircraft holding short of K/N

> **Pilot**: SWR45SZ, ready for departure.
> **ATC**: SWR45SZ, taxi to holding point runway 07 via K and contact Tower 118.805.
> **Pilot**: SWR45SZ, taxi to holding point runway 07 via K and contacting Tower 118.805.
>
> *SWR45SZ taxis forward to the holding point and switches to Tower.*
>
> **Pilot**: EZY47RJ, also ready for departure.
> **ATC**: EZY47RJ, taxi to holding point runway 07 via K and contact Tower 118.805.
> **Pilot**: Taxi to holding point runway 07 via K and contact Tower 118.805, EZY47RJ.
>
> *EZY47RJ taxis forward to the holding point and switches to Tower.*

As there are no further aircraft currently taxiing towards the holding point, there is **no need to wait for AUA75SW to report ready for departure to Ground** once SWR45SZ and EZY47RJ have been moved to the holding point.

De-Icing

Stuttgart has four deicing pads. **Deicing operations are only conducted on those deicing pads**. Aircraft always have to **enter the deicing pad from N**. For exiting the deicing pad, the procedures are as follows:

- **DP1**: westbound via S
- **DP2**: eastbound via S
- **DP3**: westbound via S
- **DP4**: eastbound via S

During 25 operations, it is also possible to allow aircraft that have been deiced on DP2 to make a sharp left turn and join N by crossing H. There are guidance lights for the pilots to follow, but there is **no dedicated taxiway**. If you want to use this procedure, you should give a very detailed instruction on how to leave the deicing pad in order to **make sure pilots understand how the procedure works**.

> **ATC**: DLH123, make a left turn, cross taxiway H to join N, thereafter taxi to holding point runway 25 via N and A.

Restrictions

Each deicing pad has a **maximum wingspan limit** according to the table below.

Deicing Pad	Wingspan limit
DP1	Code E (max. 65 m) except B747 and AN124 *(e.g. A359)*
DP2	Code F (max. 80 m) *(e.g. A388)*

DP3	Code C (max. 36 m) *(e.g. B738)*
DP4	Code C (max. 36 m) *(e.g. B738)*

During deicing operations, the **relevant sections of taxiway S are closed for taxi operations**:

- **DP1/DP2**: between I and H
- **DP3/DP4**: between H and F

Additionally, depending on the length of aircraft on the deicing pads, the **relevant sections of N have different wingspan restrictions** according to the table below.

Length of aircraft on deicing pad	Wingspan restriction on N
< 50 m *(e.g. A310)*	max. 60 m *(e.g. B742)*
50 - 60 m *(e.g. A332)*	Code D (max. 52 m) *(e.g. B788)*
60 - 65 m *(e.g. A339)*	max. 42 m *(e.g. B701)*
65 - 70 m *(e.g. A124)*	Code C (max. 36 m) *(e.g. B738)*
> 70 m *(e.g. B748)*	max. 24 m *(e.g. CRJ7)*

General Aviation Terminal (GAT)

The GAT itself is uncontrolled. Ground only assigns the GAT exits.

Exit 1 can be used for aircraft with a wingspan up to **22 m** while **Exits 2 and 3** can be used for aircraft with a wingspan up to **29 m**. **Multi-engine aircraft and jets** shall always use **Exit 2 or 3**. Aircraft parked at the **Southern stands on Apron GA3** can also taxi directly onto N.

Apron GA2 is only available for aircraft with a **MTOW of 2000 kg** or below (D-Mxxx, D-Exxx and D-Gxxx). **Apron GA3** can be used for every aircraft with a maximum **wingspan of 29 m** and a **length of 30.3 m**.
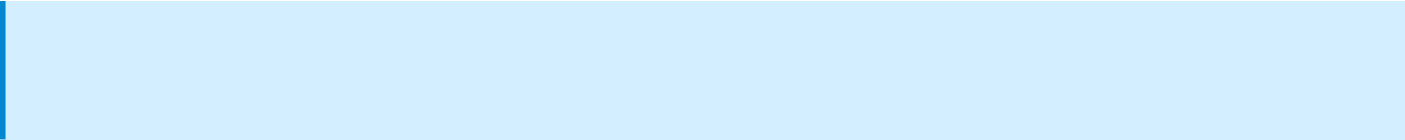
During recent real world construction work in the GAT area, the Exits have been renamed and repositioned. While these changes are now complete and the new names are available in the latest charts, **most pilots will not have up to date sceneries**. Due to this, both Ground ASRs will use the old layout but with updated Exit names.
Keep in mind that **some pilots may not be able to use Exit 3 due to their scenery**, so it is good practice to ask them if they are able before assigning it.

Revision #15
Created 2 September 2022 14:16:40
Updated 2 October 2024 21:29:46 by 1627359