# FPS - Flight Progress Strips

## Introduction

This document outlines the procedures to be used at Sweden Live 2025 for ESGG AD positions (DEL, GND, TWR).

A **flight progress strip** (or *flight strip*) is a paper or electronic card showing planned and current flight-plan data for a given flight, helping controllers track, plan and coordinate flights.

The strip conveys essential flight info (callsign, aircraft type, departure/destination, transponder code, etc.) in a structured format. Strips may be annotated to indicate clearances, coordination etc.

## (Paper) Strip Management

- Strips are placed in plastic holders, arranged on a **flight progress board** (FPB) in zones corresponding to different flight phases (taxi, runway, approach, etc.).
- The movement of strips between strip bays acts as a visual reminder of flight status and indicated different progression states and clearances for a specific flight.
- Annotation normally uses abbreviated symbols and a shared notation system so all affected controllers can interpret it easily.

## Electronic Strips

- Developed to overcome limitations of paper: manual updates, handwriting errors, lack of system integration.
- Mimic the look of paper strips but allow dynamic updates, coordination, and system links (e.g. conflict alerts).

- Advantages: real-time updates, improved visibility, error checks, and sharing across sectors.
- Disadvantages: software dependence, possible power or system failures, less flexibility for freehand notes.

## Stripless / Integrated Systems

- Modern ATM is more and more moving toward **stripless systems** (such as TopSky), integrating flight data directly into the track labels and lists on the displays.
- Aim: reduce workload and improve efficiency.
- Paper strips often remain available as backup.

# Strip Layout

There are different colors of strip holders, used to indicate the direction of the traffic.

- **Blue** holders are for departing traffic.
- **Yellow** holders are for arriving traffic.
- **Red/Black** holders are for local and crossing traffic.

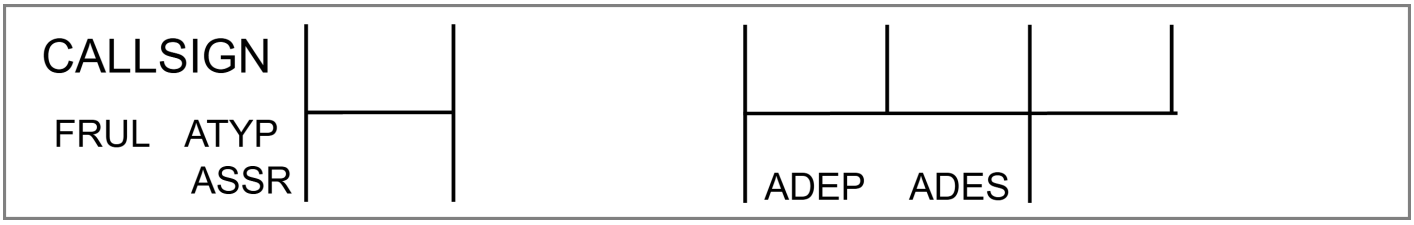
Depending on the kind of strip, different information is printed on the strip.

## GENERAL

The data shown below are common for all types of strips, the type specific (DEP/ARR) are shown in **bold text**.

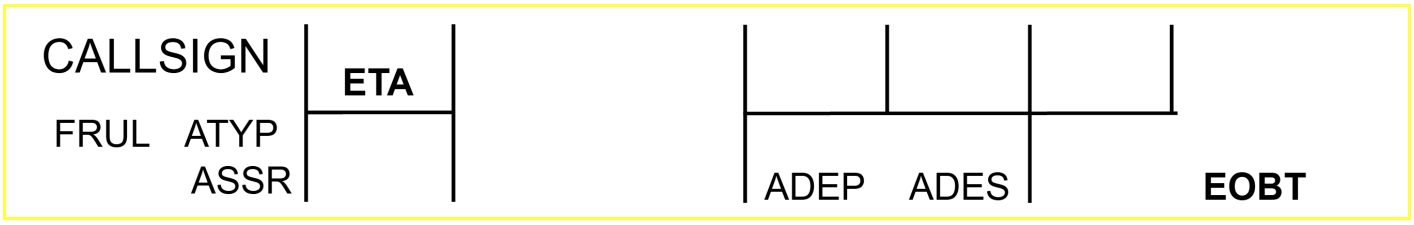
| Data Field | Description |
|---|---|
| CALLSIGN | Callsign |
| FRUL | Flight Rule<br>"I" if IFR<br>“V” if VFR<br>“Y” if first IFR and later VFR<br>“Z” if first VFR and later IFR |
| ATYP(+WTC) | Aircraft type code and wake turbulence category<br>XXXXY (XXXX=ATYP, Y=WTC; L, M, H or J) |

| Data Field | Description |
| --- | --- |
| ASSR | Assigned mode A code (squawk code)<br>Only shown if a code is set. |
| ADEP | Departure aerodrome |
| ADES | Destination aerodrome |
| EOBT | Estimated Off Block Time |
| SID | Filled or selected SID, autofilled by RWY in use from ATIS<br>Behavior coded to reflect EuroScope SID selection logic |
| RTE | Flight Planned Route |
| RFL | Requested Flight Level |
| EOBT | Estimated Off Block Time |



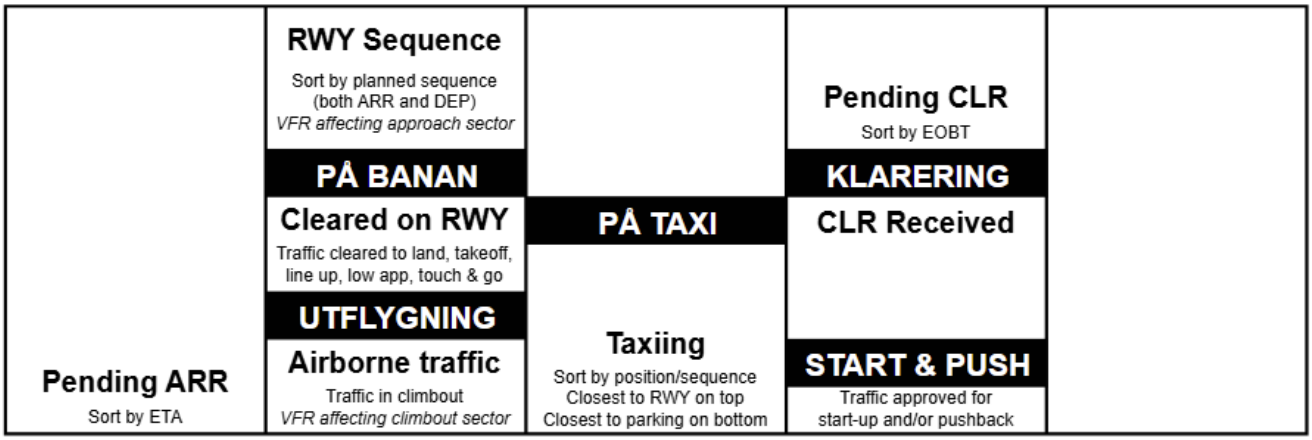

## DEPARTING IFR


## ARRIVING IFR




# FPB Layout

The FPB shall contain necessary strips to display and analyse the current traffic situation. To enable effective controlling of the traffic flow, the FBP contains different **headers**, splitting up the FPB in different **bays**, representing different phases in the progression of the flight.

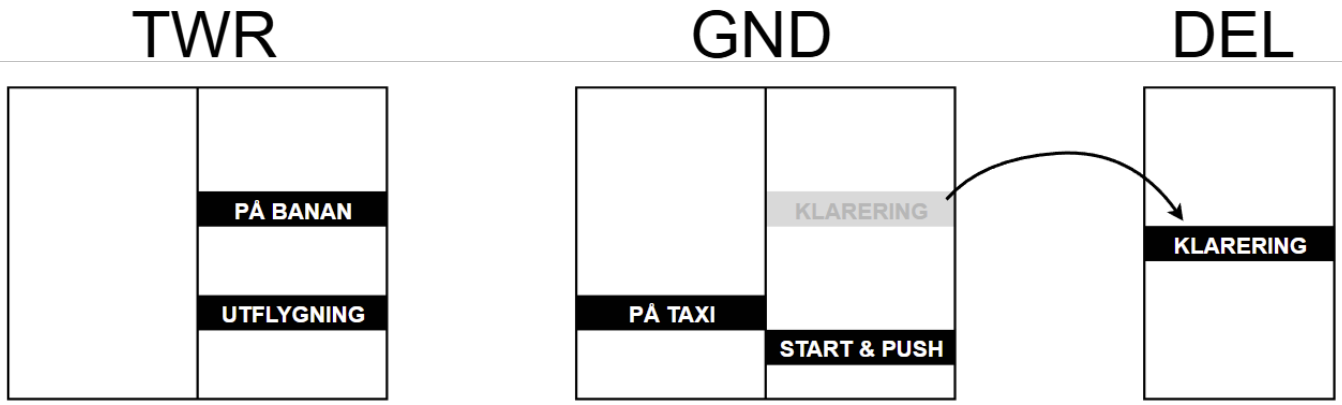



## Splitting Positions

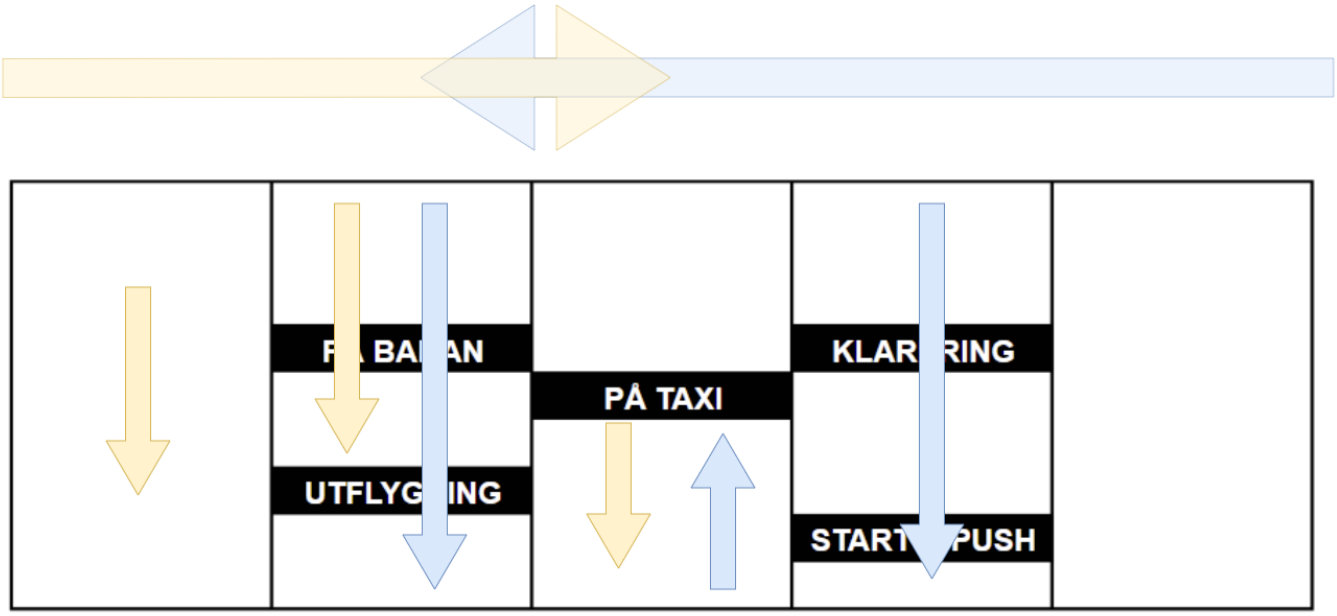
When splitting into several positions

- The FPB is physically divided, each position receives the indicated part.
- When DEL is separately manned, the `KLARERING` header is moved to the rightmost bay.

The strip progression remains roughly the same, the strips are physically handed between controllers when the transfer of communication takes place.




# FPB Flows




- The first aircraft in sequence is placed lowest in the FPB.
  - The only exception to this are departures under `PÅ TAXI`.

# Strip Progression and Marking

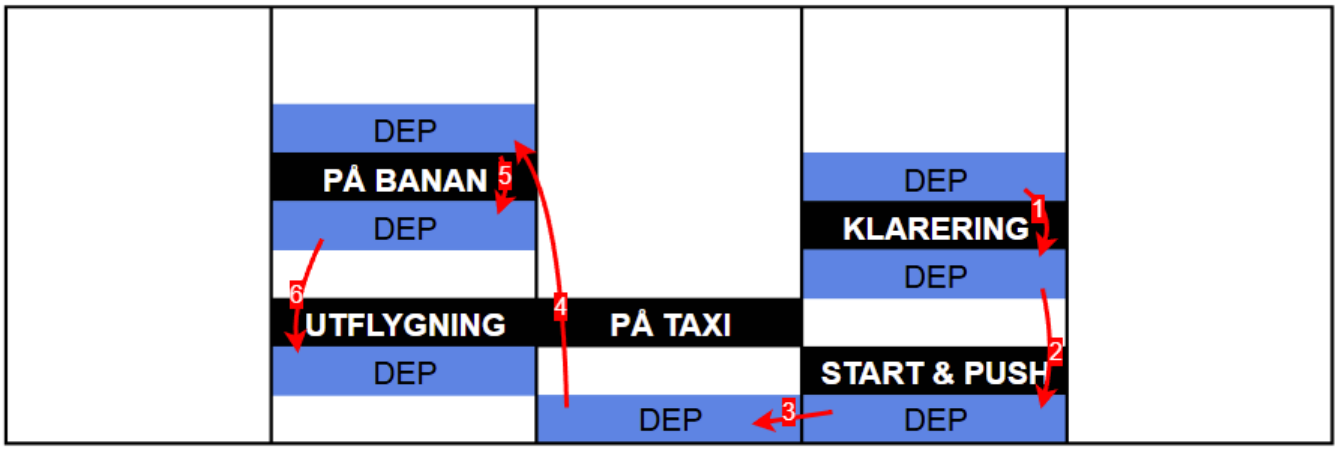
**Black** text is printed, **blue** and **red** are handwritten markings.

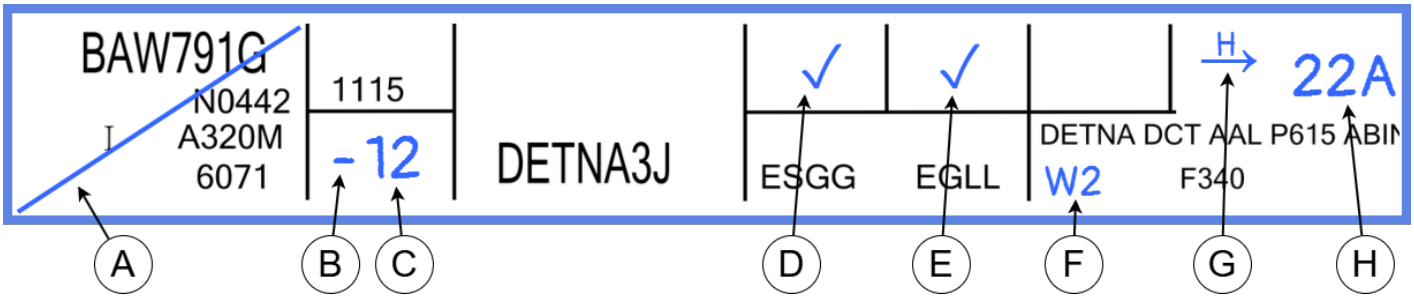
1. Blue is used for general markings
2. Red is used when something requires special attention, (WTC marking, CTOT/MDI/Slots etc)

- Strips shall be marked with relevant information that represents the current traffic situation.
- It is very important that all information on the strip is written clearly, to be unambiguous to understand and easy to read.

> No crossed-out characters, such as 7 or z, should be written with a line through the middle, as this is interpreted as them being crossed out.

## DEPARTING IFR

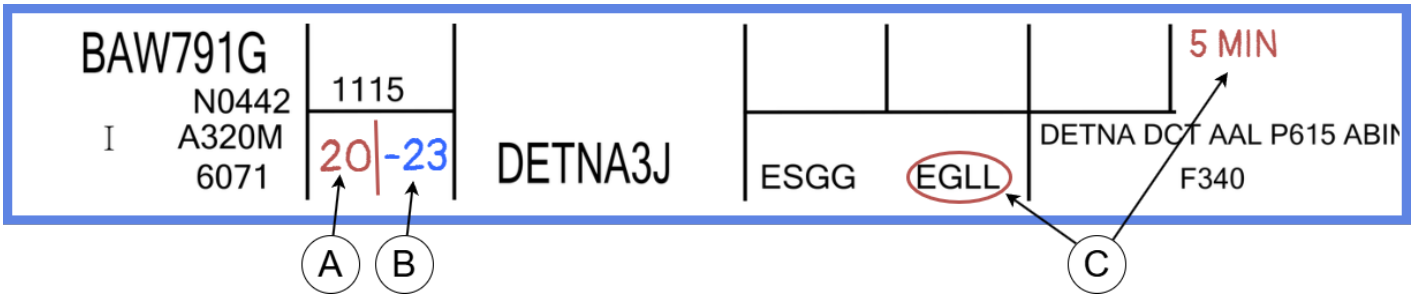



| Description | Strip Placement (White numbers with red arrows) | Strip Marking (Letters in circles) |
|---|---|---|
| Ready to print strip when flight plan is checked and a squawk code has been assigned | After printing, the strip is placed above `KLARERING`<br>Sort by EOBT (or slot time, if one exists). | **H** (A/C is parked at stand 22A)<br>Circle WTC in red if not WTC M |
| A/C calls up for IFR clearance | | **F** (*W2* = ATIS W valid, QNH ending with 2, e.g. 1012) |
| IFR clearance has been read to the A/C | | **D** (Clearance via DCL: **D** when DCL `SENT`) |
| IFR clearance has been read back correcly | **1** | **E** (Clearance via DCL: **E** when DCL `DONE`) |
| A/C has been given start-up and/or pushback approval. | **2** | If pushpack: **G**<br>Facing N: →<br>Facing S: ←<br>*H* (extend to taxi out via )<br>*12* (long push abeam stand 12) |

| Description | Strip Placement (White numbers with red arrows) | Strip Marking (Letters in circles) |
|---|---|---|
| A/C has been given taxi instructions | **3**<br>Aircraft closest to RWY is sorted at the top under `PÅ TAXI`, closest to parking on the bottom. | Taxi clearance limits may be entered in the box containing SID if desired. |
| A/C is instructed to contact TWR ***and/or*** Runway sequence is decided | **4**<br>Aircraft next in sequence to occupy RWY is placed at the bottom, closest to `PÅ BANAN`. | |
| A/C is cleared to enter the RWY | **5**<br>The aircraft that has priority on the RWY or is the first in the sequence, is placed lowest in the bay. | |
| A/C is given takeoff clearance | | **B** |
| A/C starts takeoff roll | | **C** (*12* = ATD XX:12) |
| A/C is airborne (passing far end of RWY) | **6** | |
| A/C is instructed to contact APP | | **A** |
| A/C is airborne (passing 5000 ft and longer a factor, such as wake turbulence separation etc.) | The strip is removed, as TWR:s responsibility for separation ends at 5000 ft. | |

## Slot times/flow measures




When flow measures are affecting traffic they can be marked **with a red pencil** as follows:

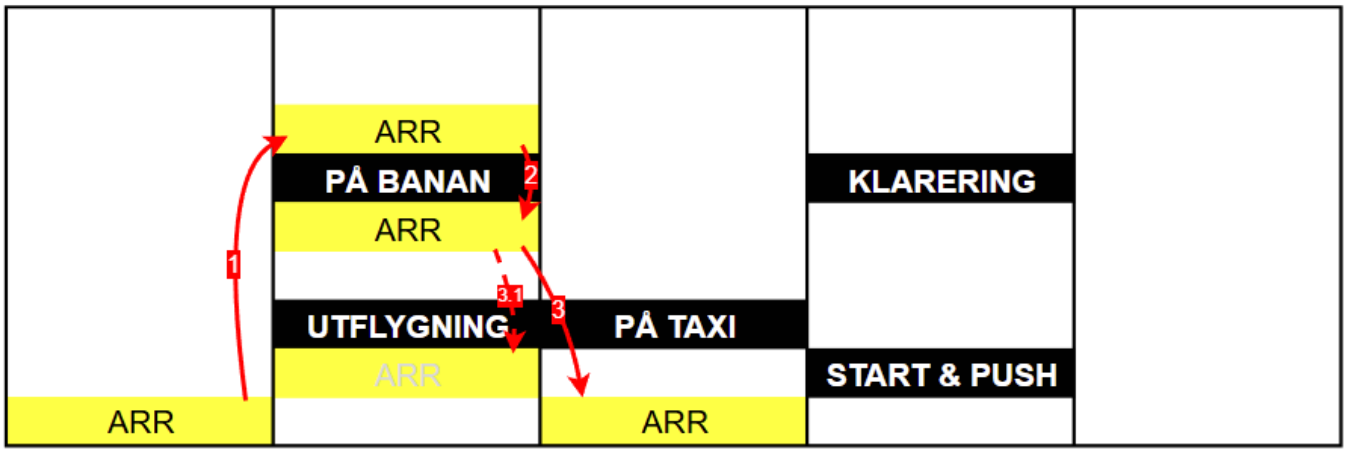
Start by splitting up the ATD/takeoff into two parts by drawing a vertical line through it.

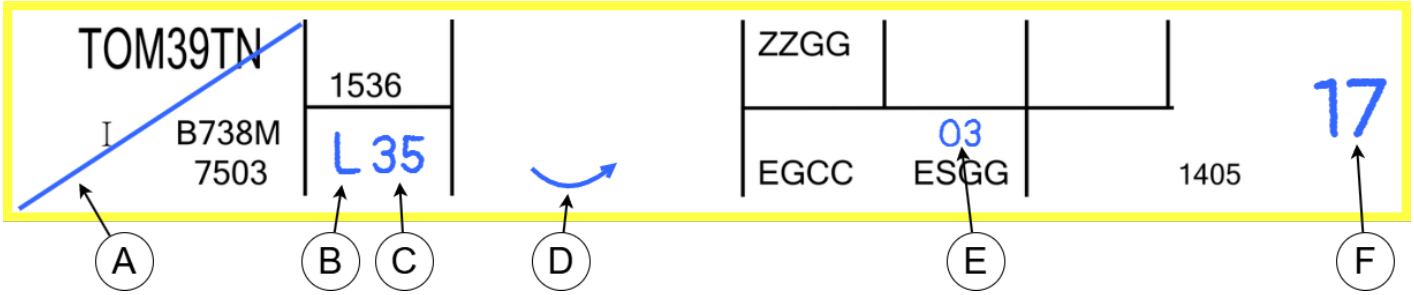
- **A:** Earliest allowed departure time (if a CTOT exists, CTOT -5, as CTOT windows is -5 to +10 minutes)
- **B:** Cleared for takeoff and ATD marker.
- **C:**
  1. Suitable flow measure note/MDI etc. (e.g. circling EGLL and writing 5 MIN), or, if applicable:
  2. CTOT (Calculated Take Off Time: Read more here), or pseudo-CTOT assigned by flow manager/planner.

If the flow measure/CTOT is cancelled/cleared, cross out the **C** marking, and **A**, if one exist.

> **Practical example**
> Assume there is a 5 min MDI in force for departures toward EGLL:
> 1. All strips affected by the MDI (ADES EGLL) is marked as per "**C** above, a vertical line is drawn in the ATD box.
> 2. Aircraft 1 departs, ATD is noted on the strip.
> 3. Aircraft 2 in the sequence gets marked in "**A**" with the earliest allowable departure time as per the MDI:
> *If ATD of aircraft 1 was :20, with an MDI of 5 minutes, mark 25, to indicate that aircraft 2 may depart no earlier than :25.*

## ARRIVING IFR






| Description | Strip Placement (White numbers with red arrows) | Strip Marking (Letters in circles) |
|---|---|---|
| ETA -30 minutes | After printing, the strip is placed in the leftmost bay<br>Sort by ETA. | **F** (planned parking stand, read from IRIS FLIGHT list)<br>**E** if other than RWY in use |
| Runway sequence is decided ***and/or*** A/C on APP contacts TWR | **1**<br>Aircraft next in sequence to occupy RWY is placed at the bottom, closest to `PÅ BANAN`. | |
| A/C is cleared to land<br>(or low APP / T&G) | **2** | **B** (*L* = Cleared to land) |
| A/C touches down | | **C** (*35* = ATA XX:35) |
| *If going around, see table below* | | |
| A/C has vacated RWY | **3** | Taxi clearance limits may be entered in the box above **D** if desired. |
| A/C has reached its parking position | The strip is removed | |

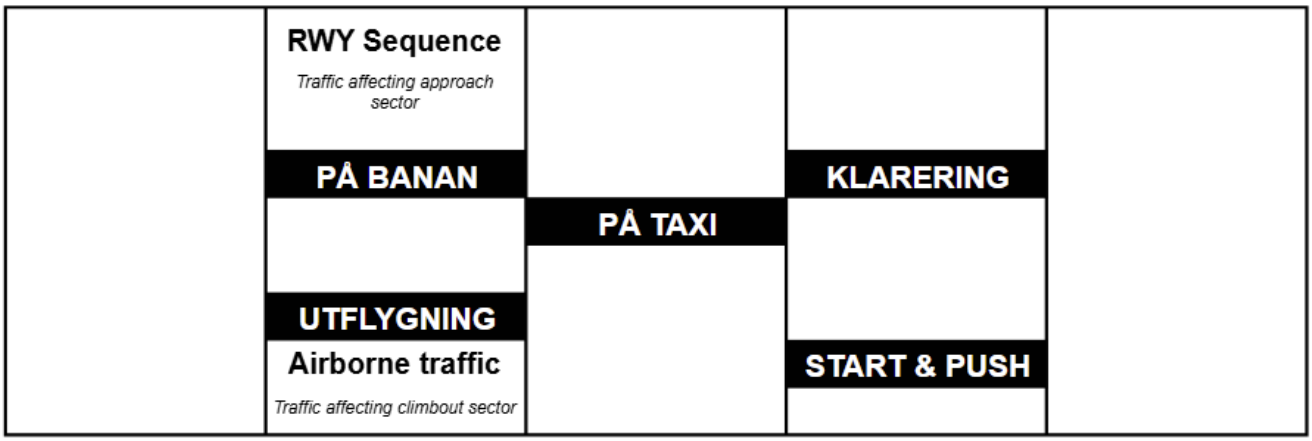
## Go-arounds

| Description | Strip Placement (White numbers with red arrows) | Strip Marking (Letters in circles) |
|---|---|---|
| A/C is going around | | **D** (remember "MISAP" manual alert in TopSky) |
| A/C is going around<br>(passing far end of RWY) | **3.1** | |
| A/C is instructed to contact APP | | **A** |

| Description | Strip Placement (White numbers with red arrows) | Strip Marking (Letters in circles) |
|---|---|---|
| A/C has cleared climbout sector | Remove strip and reprint a new one.<br>Restart the ARR strip flow. | |

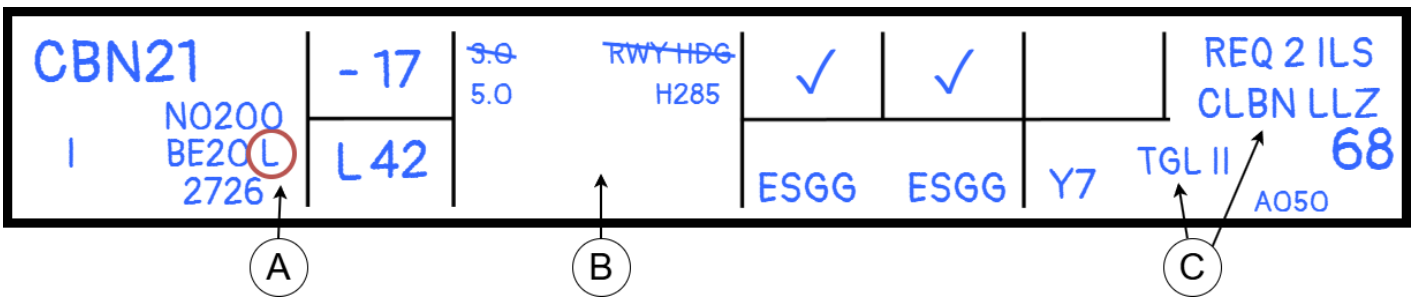
# LOCAL

Local strips do not necessarily have one set strip progression. When appropriate, a local strip can be replaced by one departure strip and one arrival strip.



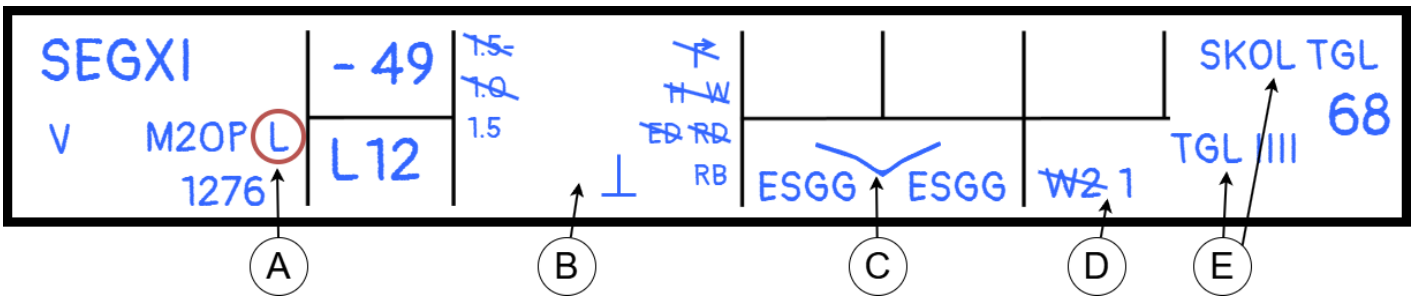

- VFR traffic in the CTR is generally placed either above `PÅ BANAN` or below `UTFLYGNING`, think of it as a geographical separation of north/south of the field
  - RWY 21 in use: `PÅ BANAN` is N of the field, `UTFLYGNING` is S of the field, and vice versa for RWY 03.
- Traffic cleared to land, takeoff, line up, low app, touch & go is placed under `PÅ BANAN`
- Strip flows on the ground are generally identical to the departure and arrival flows described above.

## Local IFR



- **A:** WTC other than M is circled to serve as a reminder of wake turbulence separation etc.
- **B:** Clearances - Write from top to bottom. Cross out items no longer valid/relevant
  - Altitudes/levels to the left
  - Headings/routes to the right
- **C:** Remarks/Intention
  - Requesting 2 ILS approaches to calibrate the LLZ (localizer)
  - Two touch-and-go landing performed (II), two requested

## Local VFR




- **A:** WTC other than M is circled to serve as a reminder of wake turbulence separation etc.
- **B:** Clearances - Write from top to bottom. Cross out items no longer valid/relevant
  - Prevous (crossed out) clearances:
    - 1.5- (1500 ft or below)
    - 1.0 (1000 ft)
    - ↱ (Right hand circuit)
    - H W (**H**olding **W**est)
    - RD (**R**ight **D**ownwind)
    - ED (**E**xtend **D**ownwind)
  - Current clearance
    - ⊥ (Join final) via RB (**R**ight **B**ase)
    - 1.5 (1500 ft)
- **C:** Crossing traffic marking (if only transiting CTR, when neither ADEP nor ADES is within AoR)
- **D:** A/C has been given QNH after QNH changed (New QNH ending with 1, e.g. 991)
- **E:** Remarks/Intention
  - SKOL TGL (School flight practicing touch-and-go:s)
  - Four touch-and-go landing performed (IIII)

# Printing strips using VatIRIS

Normally strips are printed from the `FLIGHT` list within IRIS by clicking the colored circles for each flight. Alternately strips can also be printed from the standalone FSP (Flight Strip Printer) site.

To print from within IRIS you must activate the FSP integration and insert a server URL set in the IRIS settings.

When FSP integration is activated, a printer icon appears in the IRIS menu bar, pressing it will open the FSP prompt, where you can print empty or custom strips (for flights not present in the flight list).

The color of the circles indicate the status of each flight, there are tooltips available for the circles indicatingh the respective status.

General Tips

- **Single click** = Ready to print (orange) or urgent (red).
- **Double click** = Reprint already printed strips (grey) or force print when not ready (blue-grey).
- The system tracks which strips you've printed across all connected clients.
- If flight plan data changes significantly, the button will turn red to alert you to reprint (new RFL, ASSR etc).

**Print if:** (single click to print)

- Button is **orange** - strip is ready to print
- Button is flashing **red** - strip should be printed ASAP.
  - Flight plan has been changed, or
  - Aircraft ETA is close but strip not yet printed

**Wait to print if:** (double click is needed to print)

- Button is **blue-grey** - aircraft hasn't received a squawk yet or is only prefiled
- Button is **grey** - you already have printed a strip for this aircraft

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Created 20 October 2025 12:13:48 by Max Kuhla (1157125)
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