S2 Position Overview

October 2025

1. Position Overview

Sofia Tower (TWR) is responsible for managing all aircraft movements on the runways at LBSF, including take-offs, landings, and runway crossings. The controller ensures proper sequencing and separation between departing and arriving aircraft, maintaining safety and efficiency within the aerodrome traffic circuit and the Sofia Control Zone (CTR), which extends from the surface up to 8500 feet AMSL. Tower also provides clearances and instructions for aircraft holding short of the runway and coordinates closely with Delivery and Approach (Sofia Control in case Approach is offline) controllers to maintain a continuous traffic flow.

Tower decides which runways are active based on wind, NOTAMs, and operational conditions. Runway 09 is the preferred departure runway, while Runway 27 is preferred for arrivals; however, during calm or light tailwind conditions (up to 5 knots), Runway 27 may be used in both directions due to its favorable approach configuration.

Coordination with Approach is mandatory before issuing line-up or take-off clearance to ensure proper departure separation and compatibility with ongoing arrivals. If Tower determines that arriving aircraft spacing is insufficient, the controller must instruct the

following aircraft to go around and execute the published missed approach procedure. Departing aircraft are handed over to Sofia Approach (123.700) once airborne.

Within the Sofia CTR, Tower also provides control and traffic information services to VFR aircraft, including those not departing from or arriving at LBSF. VFR flights must remain below 8500 feet AMSL and may not enter the overlying TMA without specific clearance from Approach. Tower is responsible for ensuring that VFR traffic receives QNH, active runway information, traffic advisories, and for coordinating entry and exit clearances as required. Aircraft leaving the CTR are transferred to Sofia Control on 131.225 or Sofia Approach on 123.700, depending on the adjacent airspace classification and routing.
The primary objective of Sofia Tower is to maintain the highest level of safety and efficiency within the aerodrome and control zone. The controller must remain fully aware of runway occupancy, ensure correct sequencing of arriving and departing aircraft, apply wake turbulence separation standards, and coordinate effectively with other ATC units.

2. Duties and Procedures

When coming online as Tower on VATSIM, select the active runway(s) from the “Active airport/runway selector dialog” in Euroscope.

The controller must not forget about coordination with Approach before takeoff. A Tower Controller cannot line-up aircraft without coordination because it is possible to receive an instruction from approach which the aircraft is not able to comply with, causing the runway to be blocked. The holding point is the line before entering the runway which ensures the safety distance between aircraft. No aircraft should be cleared to land or depart before the other aircraft has fully vacated the holding point line (red line).

Image 1.1 Holding points E1 and F1 at LBSF

Departing aircraft will contact Tower for start-up clearance once they have received their IFR clearance from Delivery. If Delivery is offline, Tower assumes responsibility for IFR clearance as well. Start-up clearances must include the current QNH and, when applicable, pushback approval. The standard format is:

Pilot: Sofia Tower, LZB972, ready for pushback and start-up.
ATC: LZB972, QNH 1013, pushback and start-up approved, face east.
Pilot: QNH1013, pushback and start-up approved, face east, LZB972.

Tower must verify that the apron area behind the aircraft is clear of other traffic before approving pushback!

Once the pilot reports ready for taxi, Tower issues taxi instructions to the assigned departure runway using the most efficient routing available while maintaining safe spacing between aircraft. The standard format is:

Pilot: Sofia Tower, LZB972, ready for taxi.
ATC: LZB972, taxi to holding point runway 09 via N, J, and H.
Pilot: Taxi to holding point runway 09 via N, J, and H, LZB972.

Taxi instructions must be clear and concise, and the controller must monitor all aircraft movements to prevent conflicts, particularly near runway crossings and intersections, also known as “Hotspots” (HS). Tower may issue additional instructions such as “hold position,” “give way to traffic,” or “continue taxi via …” as required to maintain separation.

These Hotspots are clearly labeled on the ground chart with a circle, and each one is also explained in detail. The chart and aforementioned HS can be seen below:

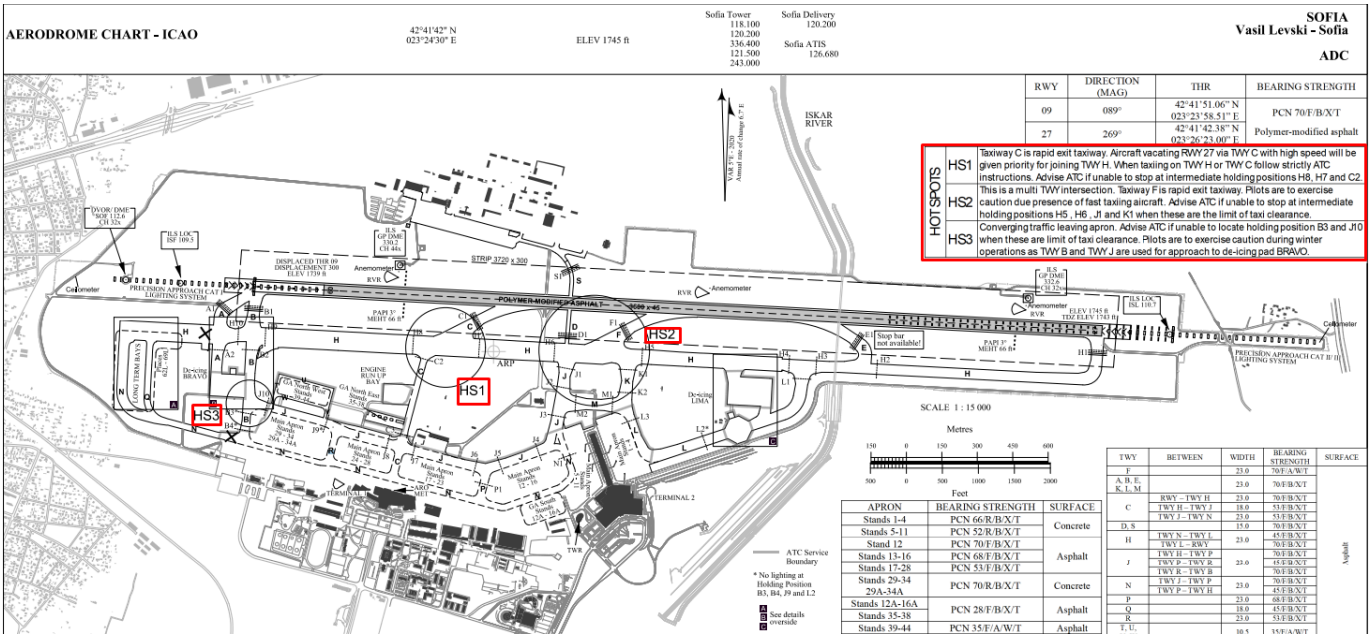


Image 2.1 Aerodrome Chart of LBSF, highlighting the HotSpots (HS)

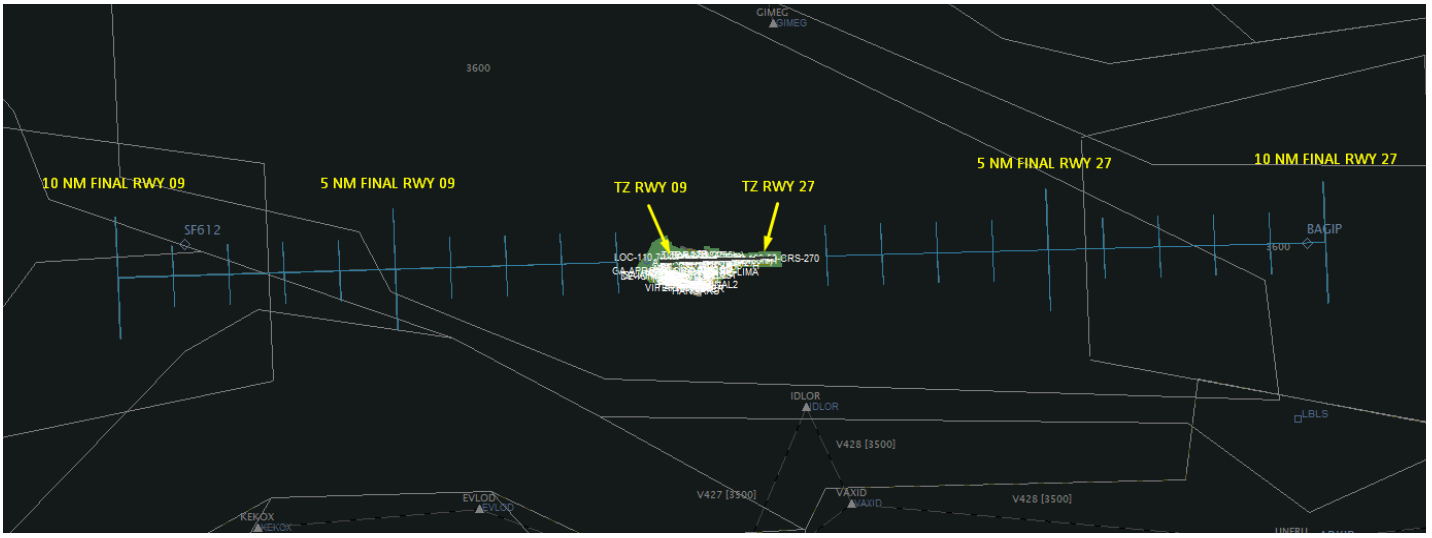
At the holding point, aircraft will report ready for departure. Before granting line-up or take-off clearance, Tower must ensure that the runway and final approach path are clear and that coordination with Approach has been completed. If Approach assigns any post-departure restrictions such as heading, climb level, or radar vectors, Tower must relay these to the departing aircraft before it enters the runway. When cleared for take-off, Tower provides wind information and the frequency for Approach:

Pilot: Sofia Tower, LZB972, fully ready for departure.
ATC: LZB972, wind 080 degrees 5 knots, runway 09 line-up and cleared for take-off, when airborne contact Sofia Approach 123.700.
Pilot: Cleared for takeoff runway 09, when airborne contact Sofia Approach 123.700, LZB972

*Important note: The word "**take-off**" is only used in the **clearance for take-off**, in all other cases it is to be referred to as "**departure**"*

Wake turbulence separation must always be applied between successive departures. The minimum time separation between a light or medium aircraft departing behind a heavy is two minutes, and between a light aircraft behind a medium is also two minutes. If the departing

aircraft are of the same wake category, a minimum spacing of 4 NM is required; 5 NM when the leading aircraft is one category higher, and 6 NM when two categories higher.



Arriving aircraft will contact Tower when established on final approach, typically after being handed off from Approach. The Tower controller must monitor spacing on final and ensure that the runway is clear before issuing a landing clearance. The standard format is:

ATC: BUC1820, wind 050 degrees 4 knots, runway 27 cleared to land.

If the runway is still occupied or a safe landing clearance cannot be given, Tower instructs the aircraft to “continue approach” and later clears to land when appropriate. If necessary, Tower can give the aircraft the instruction to “reduce to minimum approach speed”. When issuing a landing clearance is not possible (due to traffic, etc.), the Tower must instruct an aircraft to go around using the standard ICAO phraseology:

ATC: BUC1820, go around, I say again go around, standard missed approach procedures, contact Sofia Approach 123.700.

After landing, Tower provides taxi instructions to the stand and may assign an exit taxiway if traffic conditions require it. **The controller must ensure that the aircraft has fully vacated the runway before clearing another aircraft for take-off or landing.**

3. VFR Traffic

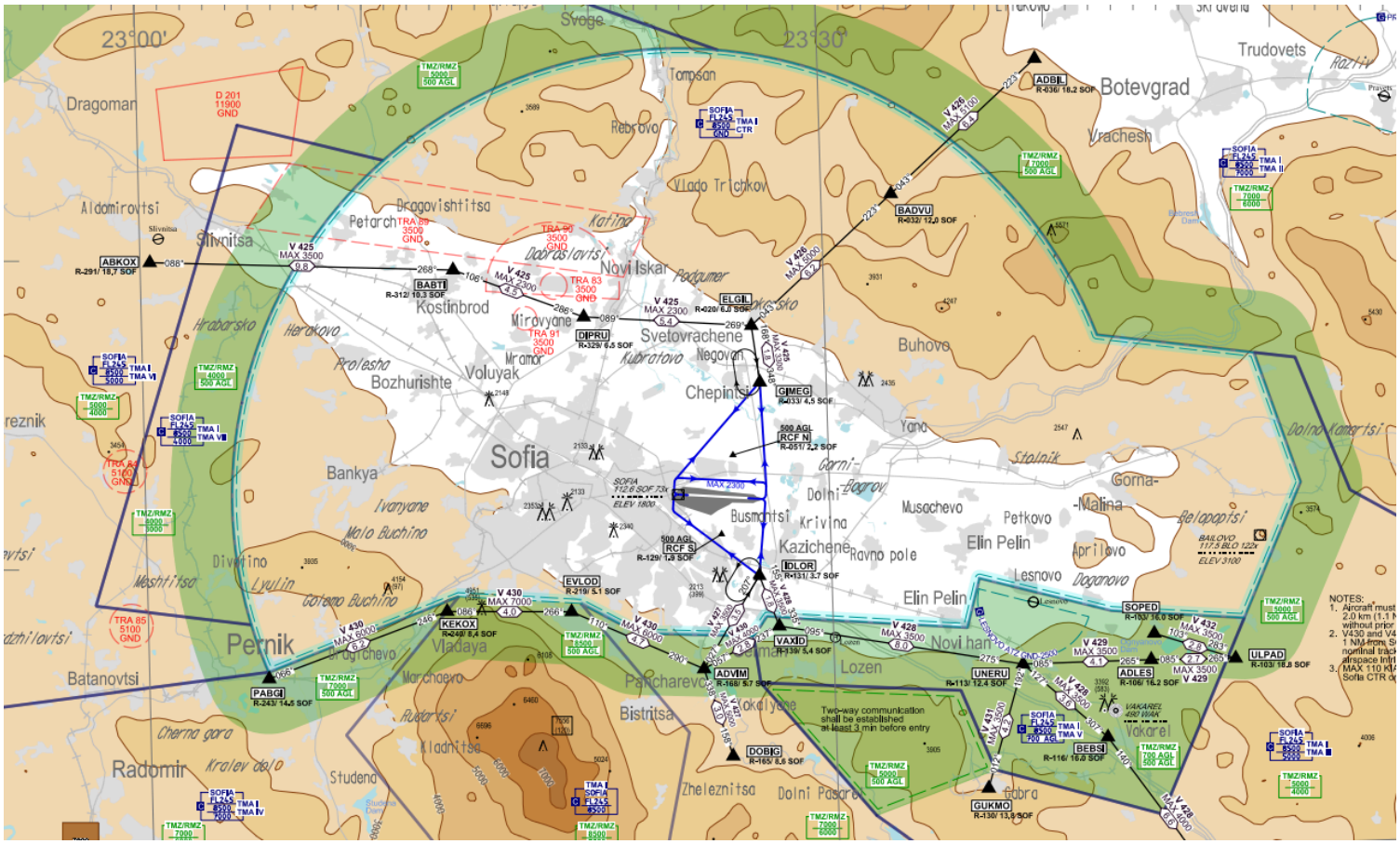
Sofia Tower is responsible for all VFR traffic operating within the Sofia Control Zone (CTR), which extends from the surface to 8500 feet AMSL. This includes aircraft departing from or arriving at Sofia Airport, as well as aircraft transiting through the CTR between other aerodromes. All VFR flights must establish two-way communication with Sofia Tower before entering or while operating within the CTR and must obtain clearance to enter, leave, or transit the zone.

VFR departures from LBSF must first obtain start-up clearance if required, which includes the QNH and pushback approval when applicable.

At the holding point, Tower issues the VFR departure clearance, which must specify the exit route, altitude restriction, and assigned squawk code. For example:

ATC: LZ-KPR, cleared to leave Sofia Control Zone via IDLOR, V428 airway, not above 3500ft, squawk 0201.

When airborne, the pilot remains on the Tower frequency until leaving the CTR, after which the aircraft is instructed to contact Sofia Approach or monitor advisory depending on its route and altitude.



Aircraft entering the Sofia CTR must request clearance prior to entry. The clearance includes the entry route, altitude restriction, QNH, and expected joining instructions. A standard example is:

ATC: LZ-KPR, cleared to enter the Sofia Control Zone via V429 airway, not above 3500ft, QNH 1023, expect left-hand base runway 27.

All VFR traffic within the CTR must remain below 8500 feet AMSL to avoid penetrating the overlying Sofia TMA, which is Class C airspace. The Tower controller must ensure that pilots are aware of this limitation and must not issue clearances that would cause a conflict with IFR arrivals or departures. Traffic information shall be provided to all aircraft as necessary, identifying other traffic by distance and clock position.

The visual traffic circuit at LBSF is located north of the aerodrome. For Runway 09, the circuit is left-hand, and for Runway 27, it is right-hand. The circuit altitude is 2300 feet AMSL or below. Aircraft conducting circuit training or pattern work will receive their traffic pattern clearance at the holding point:

ATC: LZ-KPR, cleared for right-hand traffic pattern, runway 27, not above 2300ft, squawk 0207.

Pilots are expected to report first on downwind and then on final, indicating their intentions (full stop, touch-and-go, low approach, etc.). If circuit traffic needs to be held, the Tower may issue instructions such as “extend downwind” or “enter left/right orbit.”

VFR aircraft leaving the CTR must be advised to report passing the leaving point of the CTR zone and will then be instructed to contact Sofia Approach on 123.700 or Sofia Control on 131.225.