

18th October 2018

Runway Incursion TAP Perspective

Rui Alves
rmalves@tap.pt

A STAR ALLIANCE MEMBER 



TAP
AIR PORTUGAL



TAP AIR PORTUGAL

TAP from Lisbon to the World

1º Half 2018



43 121 flights

Narrow Body – 36988 flights

Wide Body – 6133 flights

Leading airline to Brazil – Daily connections to São Paulo and Rio

Expanding destinations in USA – EWR, JFK, MIA, BOS

Connections to all major European capitals

Regular flights to North Africa, Angola and Mozambique

TAP Safety figures overview

1º Half 2018



Flight Data

98.1% Monitored flights
62 074 Events registered



Reporting

929 forms Pilots
912 forms Cabin Crew
302 forms Ground Operations
20 forms Corporate
147 forms Fatigue
75 forms Human Factors



Monitoring

Monthly Management Reports
Operational Risks Assessments
Hazard Log



Survey

Cabin Safety Concerns

Are Runway Incursions an issue?

2017 – 2018 YTD

No!

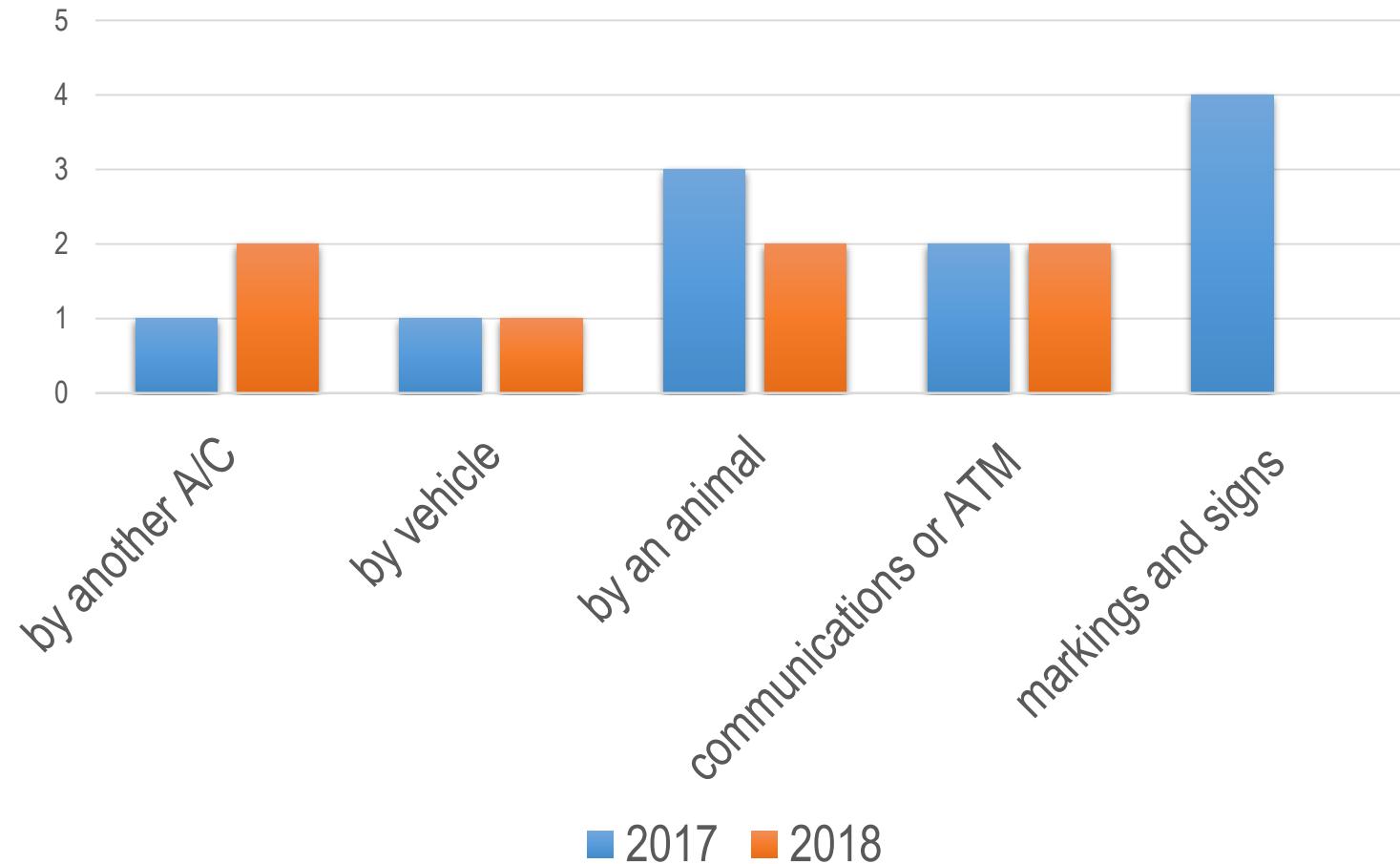
Being one of the “Significant Seven” we should know better...
Nevertheless, why not start by checking our Reporting data base.



18

Are Runway Incursions an issue?

2017 – 2018 YTD



Are Runway Incursions an issue?

No major consequences

By another A/C, vehicle or animal

Normally this type of occurrence ends up with TAP having to perform a go-around manoeuvre or having to abort take-off.

The manoeuvres are always coordinated with ATC. Normal operations afterwards.

Beware of dogs on runway when flying to/from Lisbon airport.

Communications or ATM

Low risk. Typically misunderstanding of clearance, the use of non standard phraseology or ear/readback occurrences.

Markings and signs

Somehow, the same location keeps popping out on the data base?! We must dig further...

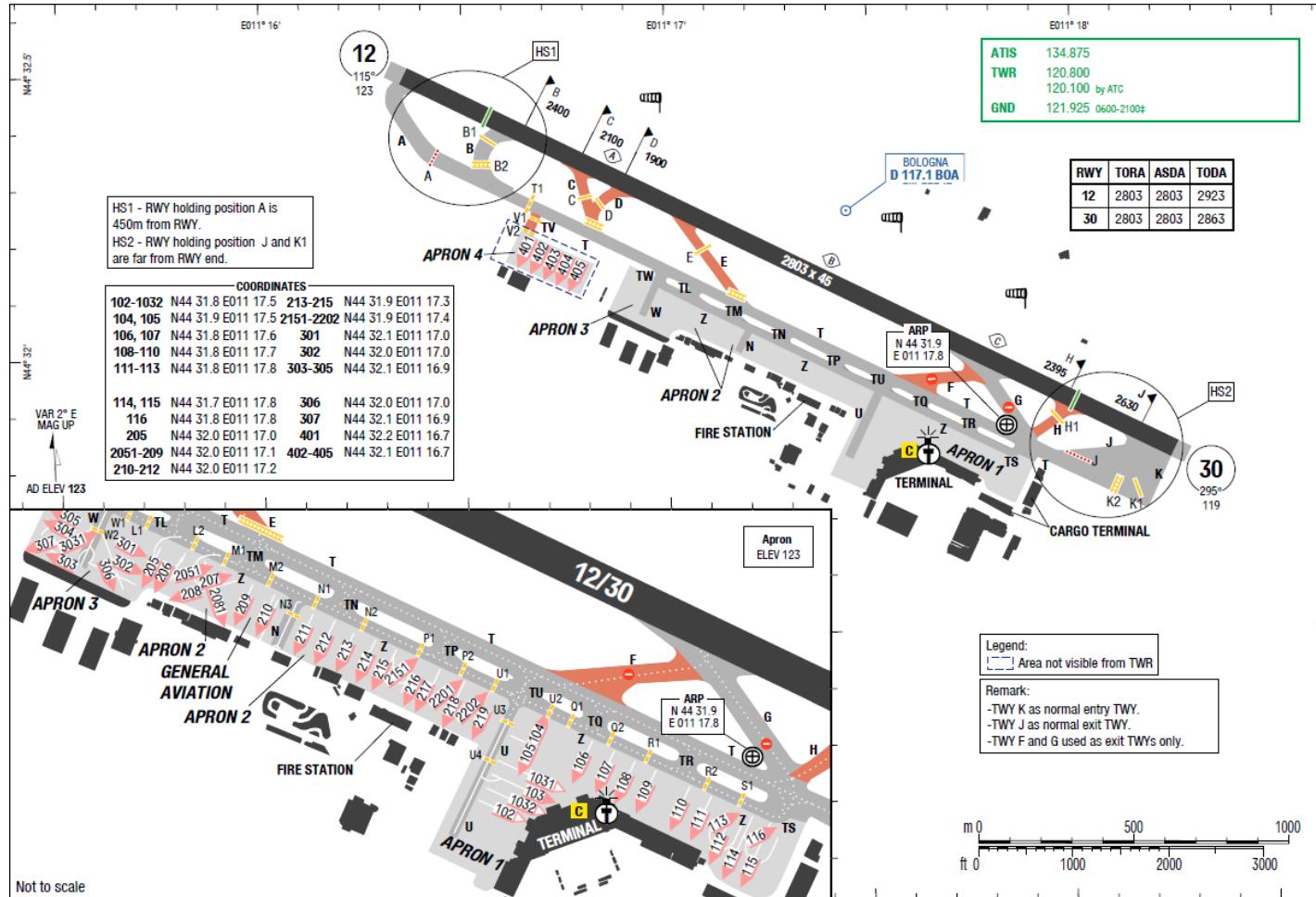
BLQ – Bologna (Italy)

When? How? Why?



BLQ – Bologna (Italy)

When? How? Why?



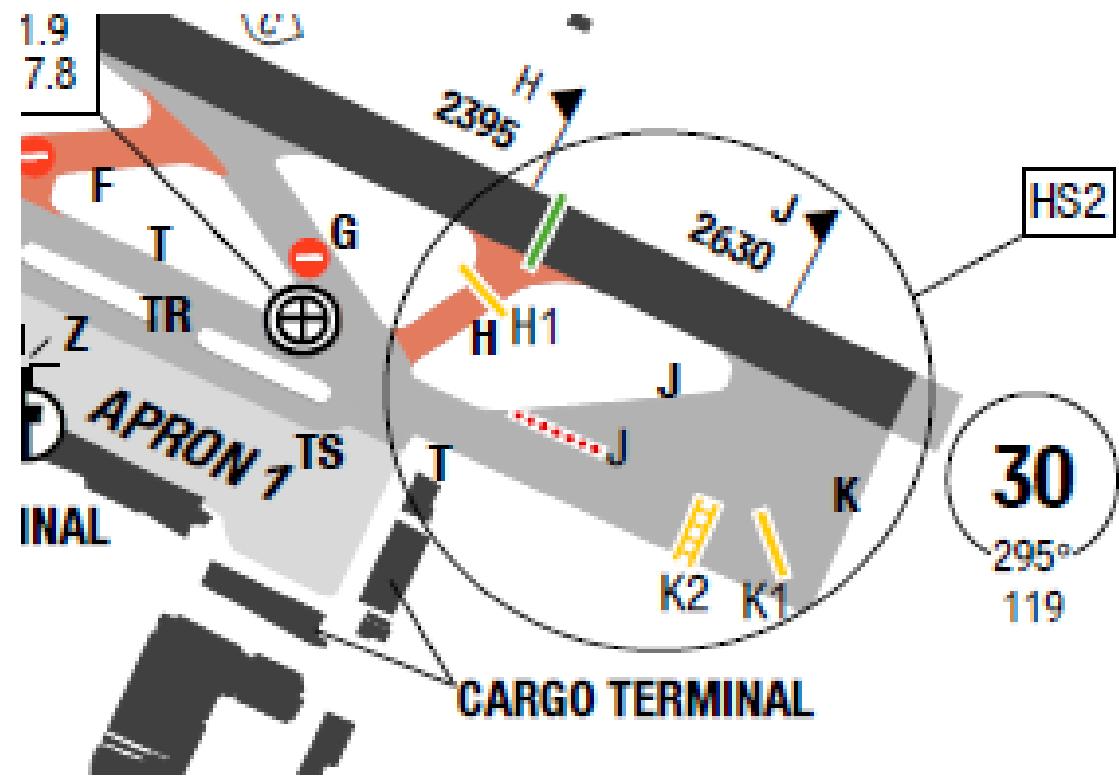
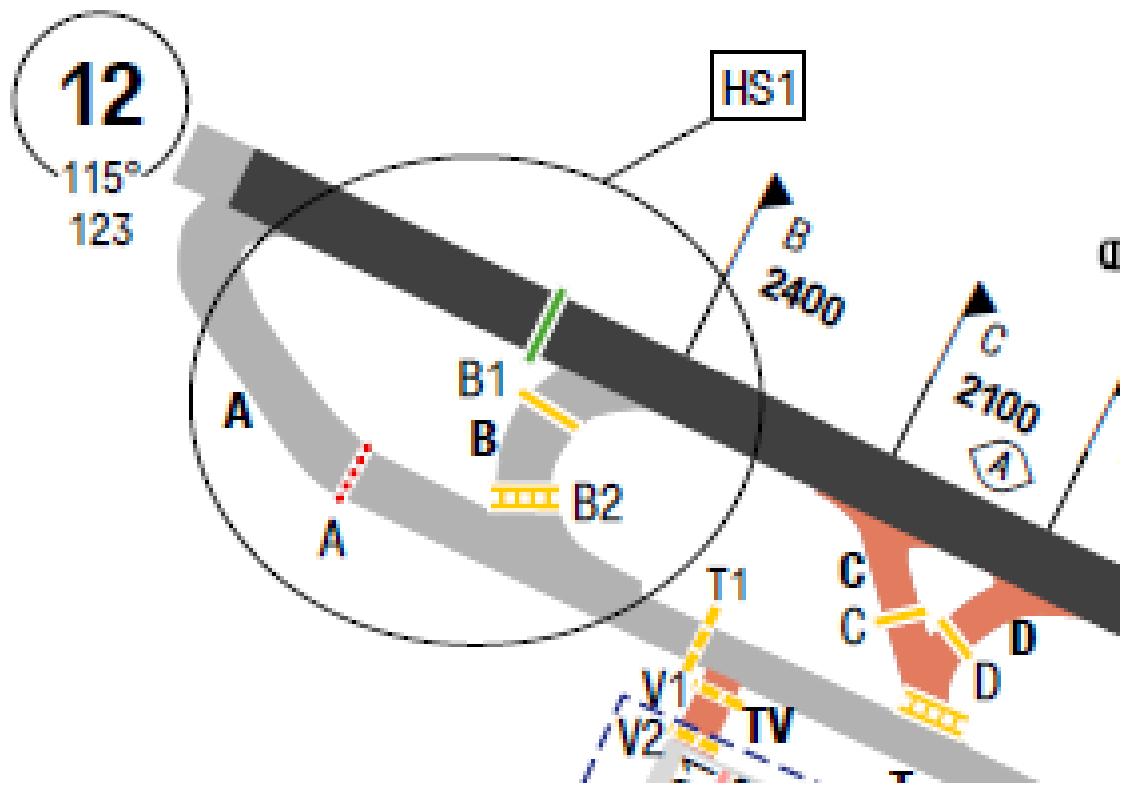
March 2017

HS1 - RWY holding position A is 450m from RWY.
HS2 - RWY holding position J and K1 are far from RWY end.

BLQ – Bologna (Italy)

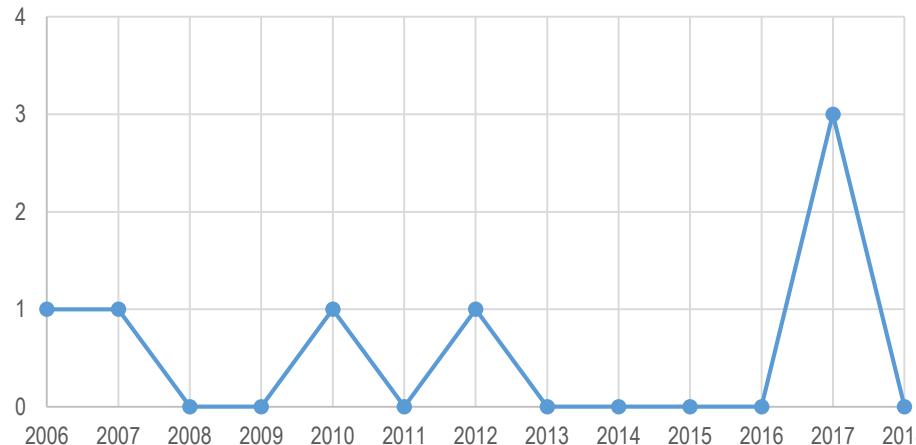
When? How? Why?

March 2017



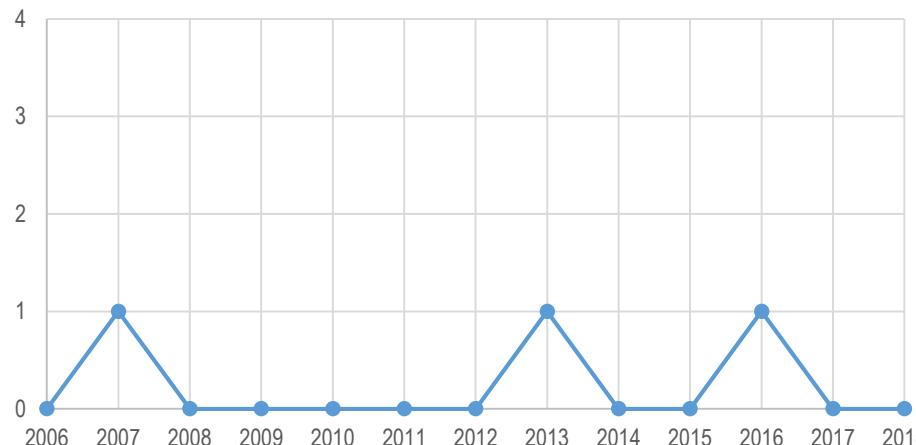
BLQ – Holding point A

Holding point A to RWY 12



BLQ – Holding point K1

Holding point K1 to RWY 30



BLQ – Holding point A

ASR - July 2017

Crew was instructed to taxi to holding point A RWY 12.

We were taxiing very slowly. During the FLT CTL check we noticed that we were reaching the holding point and brake, even so we passed the holding point about 10 to 15m. We reported it to the tower and they replied that there was no problem because there was no traffic at the moment. We stayed on that position until instructed to line up.

BLQ – Holding point A

ASR - August 2017

Runway 12 incursion via taxiway A. After major delay, airport closure for departures due WX, flight was cleared for taxi to Runway 12 via T to holding point A1 and contact tower. Heavy workload on flightdeck because of runway change, performance computations, second engine to be started and all the normal checks to be performed for the new runway. Flight crew overshot position A1 without clearance. Tower was called and flight was instructed to vacate runway.

BLQ – Holding point A

ATC Analysis - August 2017

Heavy thunderstorms, moving eastbound from airport, have hindered departures and arrivals for a while.

When final RWY 12 appears to be clear of clouds, arrivals for RWY 12 and departures for RWY 30 become available.

3 departing traffic are cleared to taxi via HP K1 RWY 30.

As weather situation quickly evolves with thunderstorm moving away, Bologna GND asks TAP873 if they accept RWY 12 for departure providing the crew with updated met info and TAP873 accepts.

Taxi clearance to HP A is correct and read back too. ASR is consistent with our recordings.

BLQ – Holding point A

ASR - Novembre 2017

When holding point "A" RWY12 TWR asked if the crew had visual with traffic on short final. With traffic insight crew were cleared to expedite to line up and wait and due the long distance between holding point and RWY12, crew started taxing and pass about 3m beyond holding point before the landing aircraft passes over TDZ. There was no impact in Safety.

BLQ – Bologna (Italy)

Mitigation Measures – Self Briefing

SELF BRIEFING (CREW ALERT) to all flights with destination LIPE (BLQ):

Several runway incursions had been reported at this aerodrome. Flight Crews should be aware of two hotspot areas located at the holding positions for both runways:

- HS1: bear in mind that holding position A is located 450m from the runway.
- HS2: bear in mind that holding positions J, K1 and K2 are also located at a considerable distance from the runway.

BLQ – Bologna (Italy)

Mitigation Measures - Crew Company Information

CREW THREAT INFORMATION

- Due to altitude restrictions, ATC has a tendency to leave the aircraft above the normal descent profile. Unstabilized approaches and glide slope interception from above is not uncommon. Expect radar vectors;
- Instrument approaches for runway 30 with 3.5° descent angle; PAPI's also calibrated for 3.5°;
- Approach distance references include DME information from more than one DME source;
- Several runway incursions had been reported at this aerodrome. Flight Crews should be aware of two hotspot areas located at the holding positions for both runways:
 - HS1: bear in mind that holding position A is located 450m from the runway.
 - HS2: bear in mind that holding positions J, K1 and K2 are also located at a considerable distance from the runway.
- Laser beam emissions have been reported in the vicinity of the aerodrome. Pilots should exercise caution during late evening turn around flights.

BLQ – Holding point A

Sensitive Area Limits

AIP Italia

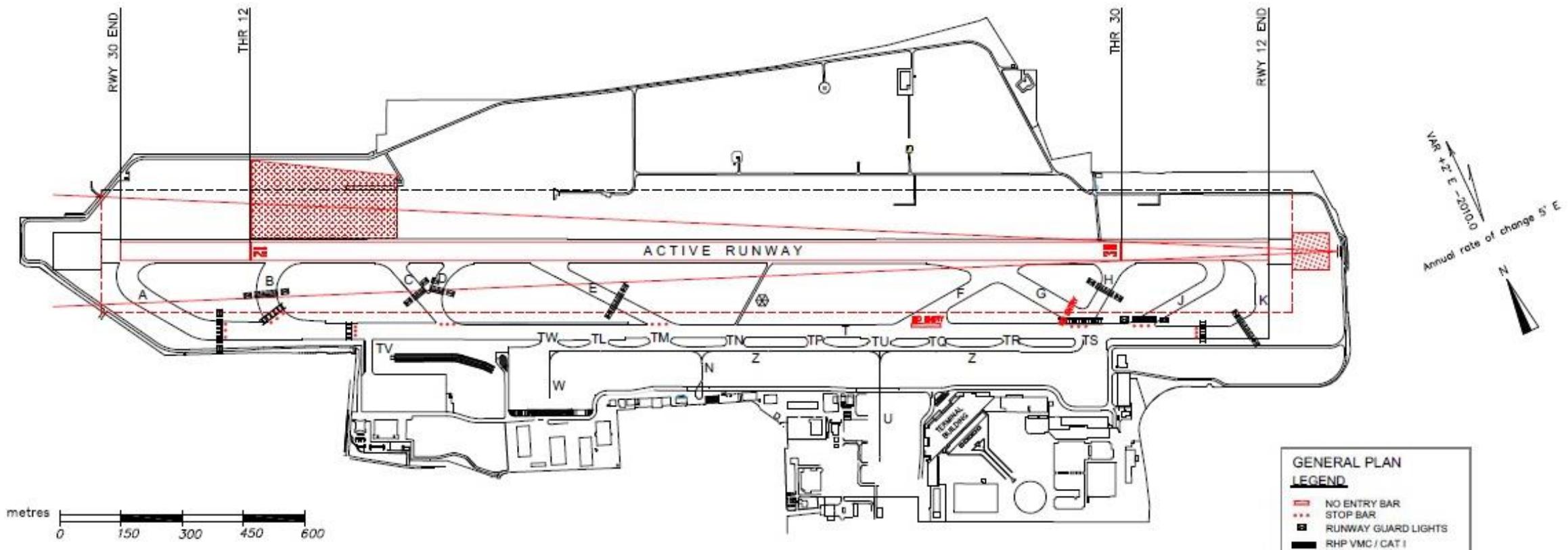
ATC SERVICES	
TWR	GND
120.800	121.925

LOW VISIBILITY PROCEDURES CHART

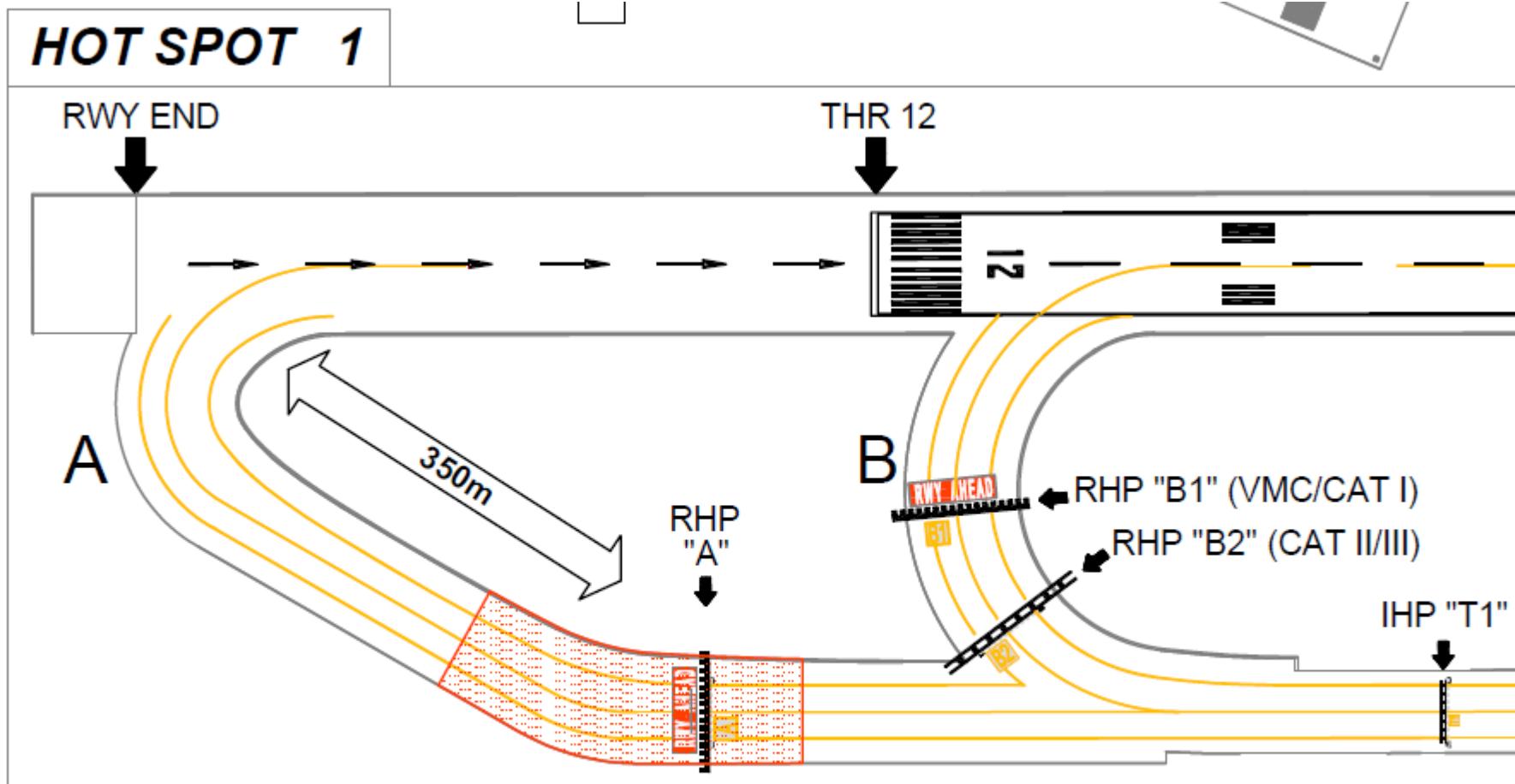
AD 2 LIPE 2-5

BOLOGNA / BORGO PANIGALE

L I P E 44°31'51" N 011°17'49" E



BLQ – Holding point A

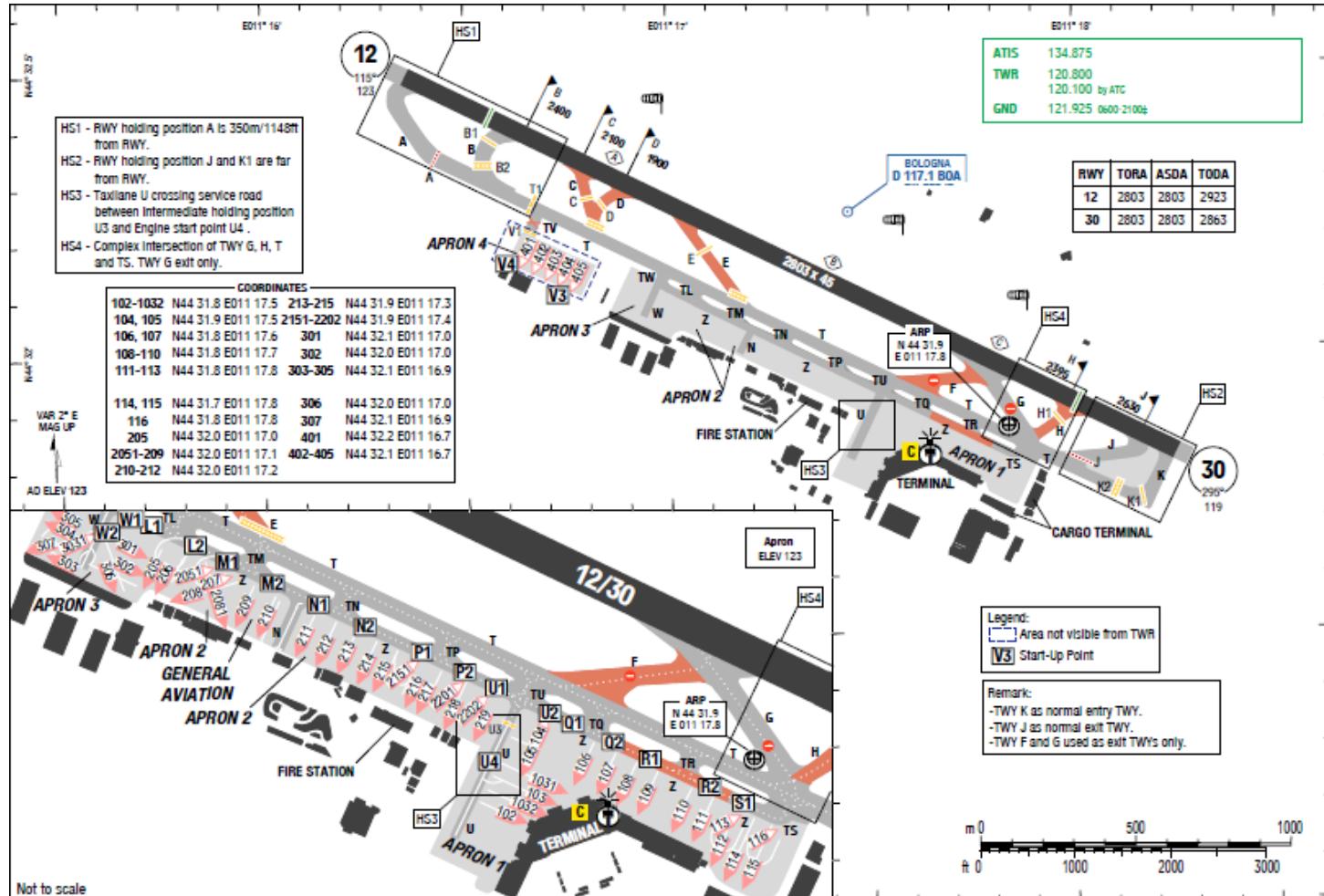


RHP A is about 350 m from runway end.

NOTE RHP A has to be used in all weather conditions.

BLQ – Bologna (Italy)

Actual – Updated chart information



October 2018

HS1 - RWY holding position A is 350m/1148ft from RWY.
 HS2 - RWY holding position J and K1 are far from RWY.
 HS3 - Taxilane U crossing service road between Intermediate holding position U3 and Engine start point U4 .
 HS4 - Complex intersection of TWY G, H, T and TS. TWY G exit only.

BLQ – Bologna (Italy)

Actual - Updated Crew Company Information

CREW THREAT INFORMATION

- Due to altitude restrictions, ATC has a tendency to leave the aircraft above the normal descent profile. Unstabilized approaches and glide slope interception from above is not uncommon. Expect radar vectors;
- Instrument approaches for runway 30 with 3.5° descent angle; PAPI's also calibrated for 3.5°;
- The standard of English used by Italian ATC can at times be erratic. Flight crews shall be vigilant if a clearance doesn't seem appropriate;
- Approach distance references include DME information from more than one DME source;
- VOR and ADF with the same identifier (BOA);
- Several runway incursions had been reported at this aerodrome. Flight Crews should be aware of two hotspot areas located at the holding positions for both runways:
 - HS1: bear in mind that holding position A is located 350m from the runway.
 - HS2: bear in mind that holding positions J, K1 and K2 are also located at a considerable distance from the runway.
- Laser beam emissions have been reported in the vicinity of the aerodrome. Pilots should exercise caution during late evening turn around flights.

Lesson Learned

The Safety II approach

Things that go right and things that go wrong happen in the same way.

So...

We should be looking at what goes right rather than looking at what goes wrong.