

# South Korea Airspace Risk Update

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## Key Points

- **There are no official airspace warnings for South Korea, but the risk situation seems to be getting worse.**
- **Airspace safety is gradually deteriorating due to several factors: GPS Interference, North Korean space launches and missile tests, military drills and failed agreements with North Korea, and weird balloon incidents.**

If you're operating in the **RKRR/Incheon FIR**, it is important to stay up to date with airspace risk.

In stark comparison to North Korean airspace, which is rife with warnings and flight prohibitions, operations over South Korea continue with almost **no active advisories** to crew – save for the odd FIR Notam.

It is not so much a matter of disinformation, but a **lack of it** that can create complacency amongst pilots operating there.

The situation on the Korean Peninsula is unique. The two nations are not at war but remain in a state of **constant readiness** to engage in one. They live in what was once described as a 'reciprocal fear of surprise attack.'

This means South Korea's airspace is at constant risk of instability caused by some kind of political crisis. Things have potential to change quickly, and **without warning**.

It is therefore vital to monitor changes in airspace that is considered by most to be completely safe. Here is a review of what has been happening in the RKRR/Incheon FIR lately that may have subtly been **increasing risk** to civil aircraft.

## GPS Interference

The US FAA previously published a warning for GPS interference in South Korean airspace via a KICZ Notam - but this was cancelled back in 2018. The signs are that this advice may need to be re-visited.

On March 11, the RKRR/Incheon FIR issued a new warning advising **extreme caution for GPS interference** including the vicinity of RKSI/Incheon, Seoul. The nature of the interference wasn't specified but was likely to have included spoofing.

RKRR Z0558/24 - CAUTIONARY INFO FOR ACFT OPERATING IN INCHEON FIR :  
PILOTS HAVE REPORTED THAT GPS SIGNALS ARE UNRELIABLE OR LOST  
INTERMITTENTLY IN INCHEON FIR(AROUND INCHEON AND SEOUL AREA).  
EXERCISE EXTREME CAUTION WHEN USING GPS.  
10 JUN 05:51 2024 UNTIL 17 JUN 15:00 2024.  
CREATED: 10 JUN 05:51 2024

The source of the interference was suspected to be North Korea attempting to interfere with military drills in the area.

This was followed by an **OPSGROUP member report** of GPS interference during an approach to RKSS/Seoul on May 16:

*"GPS spoofing into RKSS/Seoul [while] on approach to RWY 32R. We disabled hybrid and deselected GPS after seeing the risk reported on ATIS..."*

Any kind of GPS interference, especially when operating in and out of Seoul, is cause for concern. It's 20nm from the North Korean border and a bunch of prohibited areas which carry chart warnings that say in very clear language that **you may get shot at** if you inadvertently enter.



### North Korea's Race to Space

Late last year, North Korea surprised the world by launching a satellite into space creating a potential **debris field** in the Yellow Sea between South Korea and China. The launch prompted a missile warning in Southern Japan.



Unannounced North Korean space launches create airspace risks on a much wider scale than conventional missile tests.

Unlike conventional missile tests, space launches create hazards to aviation that **extend far beyond the ZKKP/Pyongyang FIR** rendering existing airspace warnings arguably inadequate. Here is an example of a warning hurriedly issued for large portions of the RKRR Incheon FIR following a previously attempted space launch.

Q) RKRR/QWMLW/IV/BO/W/000/999/3535N12700E999  
A) RKRR B) 2305301500 C) 2306101500  
E) ROCKET LAUNCHED FROM NORTH KOREA. IN THE  
INTEREST OF AVIATION SAFETY, WI INCHEON FIR ALL  
ACFT ARE STRONGLY ADVISED TO KEEP LISTENING TO THE  
FREQUENCY AND FOLLOW THE INSTRUCTION OF ATC.

EXPECT FALLING AREAS ARE AS BLW :

1. 360656N 1233307E-352431N 1232247E-352001N  
1234837E-360226N  
1235911E
2. 340554N 1230159E-332328N 1225153E-331632N  
1232940E-335858N  
1234004E
3. 145410N 1284006E-111918N 1291050E-112649N  
1295408E-150142N  
1292403E

Then just weeks ago, North Korea attempted to launch another (with no prior warning) which failed spectacularly in a mid-air explosion. This prompted South Korea to conduct **air drills** with over twenty military fighter jets near the demilitarised border zone.

North Korea have since announced to Japan their intention to try again with another **potential debris field** near the Korean Peninsula, and the Philippines Island of Luzon. The original target was June 4 but we're still waiting.

Behind this persistence to have satellites in space is Pyongyang's ability to gather intelligence on South Korea should a conflict escalate - **it seems that risk to civil aviation is an afterthought.**

### **Ballooning Tensions**

Earlier this month, North Korea sent at least three and a half thousand balloons across the border into South Korea carrying animal excrement, garbage and scrap paper. Some landed in Seoul.

No flight disruptions were reported, but images circulating in the media show that the balloons were not small and could easily cause **low level hazards** to aircraft operating in South Korean airspace near the border.



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### **Failed Pact**

On June 4, Seoul axed a six-year old agreement with Pyongyang that was designed to calm things down between the two countries. It hoped to achieve this by prohibiting provocative military drills or carrying out psychological warfare near the border.

Just two days later, joint drills with the US were carried out using a long-range bomber to drop **precision-guided bombs** over the Korean Peninsula. It was the first time this has happened in seven years.

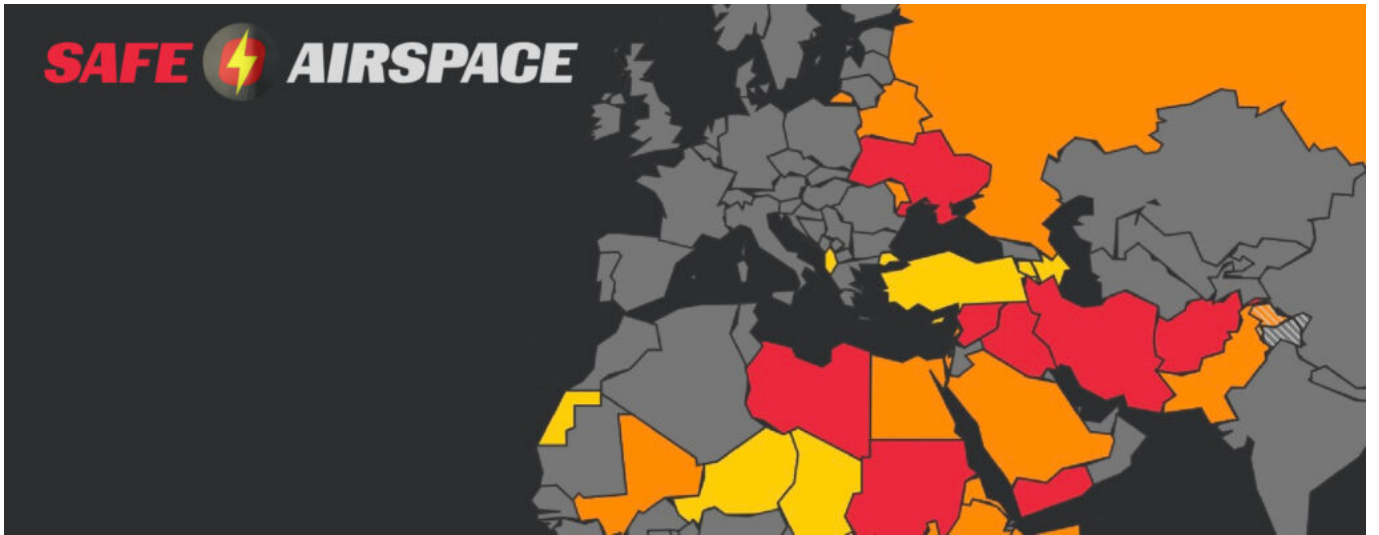
### **Existing Airspace Warnings for South Korea**

**They're extremely limited.** The Incheon FIR routinely issues temporary ones by Notam, under the RKRR designator but these can be easily missed in briefing packages. There are no other state issued warnings or advisories to report.

### **Safe Airspace**

Perhaps more concerning to airspace safety than a single large event (such as the outbreak of war) are situations where risk **gradually deteriorates** in open and busy airspace.

This is arguably what we are seeing right now over South Korea. All of these changes are reported on [safeairspace.net](http://safeairspace.net) - our conflict zone and risk database.



If you have more information to add to this briefing, we'd love to hear from you. You can reach us on [team@ops.group](mailto:team@ops.group).